TRUTH AND NON-EXISTENCE IN ARISTOTLE

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A Thesis Submitted to the School of Graduate Studies in Partial Fulfilment of the Requirements for

the Degree Doctorate of Philosophy

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McMaster University DOCTORATE OF PHILOSOPHY (2014) Hamilton, Ontario (Philosophy)

TITLE: Truth and Non-Existence in Aristotle

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NUMBER OF PAGES: v, 188

ABSTRACT

This work critically examines Aristotle's statements regarding truth in relation to what does not exist, and defends a cohesive interpretation of Aristotle on truth and non-existence against contemporary commentators. Aristotle speaks of what does not exist in various contexts within his works, and questions about things that don't exist arise at every level of the structure of reality Aristotle lays down in Chapter One of *De Interpretatione*. Aristotle refers to things, affections of the soul, and statements as truth-bearing. However, the ways in which each is said to be true or false suggests that Aristotle applied the notion of "truth" more strictly at some times than at others. In the following chapters I examine what Aristotle conceives of as non-existent; how it is possible to speak about these things; the apparent contradiction between the *Categories* and *De Interpretatione* regarding what is true to say of what does not exist; how fictional entities are conceived and to what exactly it is that words that signify the fictional refer; Aristotle's correspondence theory of truth with regard to what does not exist; the definition of truth as applied to non-standard truth-bearers (objects, perceptions and *phantasia*); and how Aristotle avoids the contemporary problem of "empty" terms. This work, as a whole, finds a great amount of complexity in Aristotle's concept of truth, evidenced by his accounting for what does not exist. What does not exist does not in fact cause much trouble for Aristotle, either with respect to how they are objects of thought, or with respect to the utterances that can be made about them, or with respect to the truth of those utterances.

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Introduction

At several points in Aristotle's corpus, he refers to things that do not exist. What "does not exist" is not simply nothing, but includes, for Aristotle, things that no longer exist or do not exist yet (an example to which Aristotle refers several times is Socrates), constructions of the mind (the infamous goat stag), as well as things whose existence is precluded due to impossibility. These are things about which we are able to think and speak, though in a strict sense of "existence", they do not exist. While there is currently no single work looking specifically at how to interpret Aristotle's concept of truth in relation to things that don't exist, the problem is mentioned by various authors coming at it from various angles. What the problem is, exactly, also depends on the vantage point of the commentator. Any interpreter of Aristotle's philosophy of language is almost obligated to say something about his views on things that don't exist. For how is it possible to speak of what does not exist; to what are we referring? Interpreters of Aristotle's theory of thought will at some point need to account for how it is possible to think of what does not exist, the origin of such a thought, and perhaps the ontological status of the thought itself. Anyone who engages in the study of Aristotle's reputed realism will come across the problem of how a real relation—perception, thought—can exist between an existing subject and something that does not exist. When these problems are approached from within the context of a more primary object of study, the proposed solutions are often cursory, resulting in a conception of things that don't exist that is meant to be consistent with the broader concern which is the author's focus. However, it

seems to me that there is a need for an examination that takes Aristotle's views on things that don't exist as the primary focus; otherwise, the interpretations become skewed to a particular vantage point, while possible inconsistencies with other aspects of Aristotle's thought are never fully accounted for. An interpreter attempting to integrate Aristotle's views on things that don't exist into an interpretation of Aristotle's view of linguistic reference, for instance, probably will not go into much detail as to how he thinks it is possible to think about the non-existent, and the interpreter concerned with the relational nature of thought does not seem to worry about evaluating the truth-values of declarative sentences.

The present work compiles what Aristotle has to say about truth in relation to what does not exist, and forms a cohesive interpretation of what is said about truth in relation to things that do not exist. Aristotle speaks of what does not exist in various contexts within his works, and questions about things that don't exist arise at every level of the structure of reality Aristotle lays down in Chapter One of *De Interpretatione*. There, Aristotle describes a relationship between things (πράγματα), affections of the soul (παθήματα τῆς ψυχῆς), and spoken and written language.[1] I will be referring to all of the contexts in which Aristotle says that something "does not exist", and sorting them out

[1] 16a3-9, Ackrill translation: "Now spoken words are symbols of affections in the soul, and written marks symbols of spoken sounds. And just as written marks are not the same for all men, neither are spoken sounds. But what these are in the first place signs of—affections of the soul—are the same for all; and what these affections are likenesses of—actual things—are also the same." *Aristotle's Categories and De Interpretatione: Translated with Notes and Glossary* [London: Oxford University Press, 1963]. All translations are, unless otherwise noted, taken or modified from those available in *The Complete Works of Aristotle*: *The Revised Oxford Translation*, Jonathan Barnes ed. [Princeton: Princeton University Press, 1984]. All references the Greek text of the *Categories* and *De Interpretatione* are from *Categoriae et Liber De Interpretatione*, Oxford Classical Texts, ed. L. Minio-Paluello [Oxford: Oxford University Press, 2008]. Ἔστι μὲν οὖν τὰ ἐν τῇ φωνῇ τῶν ἐν τῇ ψυχῇ παθημάτων σύμβολα, καὶ τὰ γραφόμενα τῶν ἐν τῇ φωνῇ. καὶ ὥσπερ οὐδὲ γράμματα πᾶσι τὰ αὐτά, οὐδὲ φωναὶ αἱ αὐταί· ὧν μέντοι ταῦτα σημεῖα πρώτων, ταὐτὰ πᾶσι παθήματα τῆς ψυχῆς, καὶ ὧν ταῦτα ὁμοιώματα πράγματα ἤδη ταὐτά.

along the way. For instance, Aristotle speaks of what does not exist in the *Categories*, where he claims that the truth of a statement is secondary to the existence or non-existence of a state of affairs: "For it is because the actual thing exists or does not exist that the statement is said to be true or false."[2] Again in the *Categories*, Aristotle explains how a one-true-one-false principle for corresponding affirmations and negations applies to what does not exist, stating that ,"For take 'Socrates is sick' and 'Socrates is not sick': if he exists it is clear that one or the other of them will be true or false, and similarly if he does not; for if he does not exist 'he is sick' is false but 'he is not sick' true."[3] (The "one-true-one-false" principle for corresponding affirmations and negations in the case where their common subject does not exist is a topic for Chapter 2). But he also speaks of non-linguistic representations of things that do not exist, for instance in the *Metaphysics*: "There are things which exist, but whose nature it is to appear either not to be such as they are or to be things that do not exist, e.g. a sketch or dreams; for these are something, but are not the things the appearance of which they produce in us. We call things false in this way, then … because the appearance which results from them is that of something that does not exist."[4] This is a topic for Chapters 3 and 5.

In various places in different texts, Aristotle refers to all of these—things, affections of the soul, and statements—as truth-bearing. However, the ways in which

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[2] *Categories*, 4b8-10: τῷ γὰρ τὸ πρᾶγμα εἶναι ἢ μὴ εἶναι, τούτῳ καὶ ὁ λόγος ἀληθὴς ἢ ψευδὴς εἶναι λέγεται
[3] *Categories* 13b29-33: τὸ γὰρ νοσεῖν Σωκράτη καὶ τὸ μὴ νοσεῖν Σωκράτη, ὄντος τε αὐτοῦ φανερὸν ὅτι τὸ ἕτερον αὐτῶν ἀληθὲς ἢ ψεῦδος, καὶ μὴ ὄντος ὁμοίως· τὸ μὲν γὰρ νοσεῖν μὴ ὄντος ψεῦδος, τὸ δὲ μὴ νοσεῖν ἀληθές·
[4] *Metaphysics*, IV.29, 1024b21-26: τὰ δὲ ὅσα ἔστι μὲν ὄντα, πέφυκε μέντοι φαίνεσθαι ἢ μὴ οἷά ἐστιν ἢ ἃ μὴ ἔστιν (οἷον ἡ σκιαγραφία καὶ τὰ ἐνύπνια· ταῦτα γὰρ ἔστι μέν τι, ἀλλ' οὐχ ὧν ἐμποιεῖ τὴν φαντασίαν)· — πράγματα μὲν οὖν ψευδῆ οὕτω λέγεται, … τῷ τὴν ἀπ' αὐτῶν φαντασίαν μὴ ὄντος εἶναι· Greek text from the *Metaphysics* from W.D. Ross, *Aristotle's metaphysics*, 2 vols. Oxford: Clarendon Press, 1924 (repr. 1970 [of 1953 corr. edn.]

each is said to be true or false suggests that Aristotle applied the notion of "truth" more strictly at some times than at others. In light of these differences, the traditional conception of Aristotle as a correspondence theorist requires careful examination. This work, as a whole, finds a great amount of complexity in Aristotle's concept of truth, evidenced by his accounting for what does not exist.

In what follows I will proceed on the assumption that there is a general Aristotelian theory of the relationship between things, thought, and language that can be consistently applied. That is, I will begin with the working hypothesis that Aristotle offers a broadly consistent view across his various works and posit an inconsistency between Aristotle's texts only if it seems absolutely necessary. I draw on the work of many interpreters of Aristotle, with various and diverse concerns. The goal of this work is, however, not to criticize any particular author, but to take what has been said in various contexts, refocus and revise the interpretive work on Aristotle with an eye to providing a clear and coherent account of Aristotle's views on truth in relation to non-existence: what things that "do not exist" are (or not), how they are thought about, how they are spoken or written about, and how any of the previous (things, thoughts, linguistic representations) can be said to be true or false.

Because Aristotle's references to things that don't exist occur in various contexts, the topics of my chapters are also diverse. That is, if I am to end up with an interpretation of what Aristotle has to say about truth in relation to things that don't exist, it is also necessary to provide a more general account of the contexts in which things that don't exist arise as a concern. For instance, what is true to say of something that does not exist

is dependent on a more general notion of truth, one that is dependent on a notion of combination (Chapter Three); and how things that don't exist are signified (symbolized) by words is dependent on how *anything* comes to be symbolized by a word (Chapter One). Over the course of these discussions I refer to many authors working on these particular problems. However, no one arises as a central figure around whose work my interpretation is to be grounded. Rather, I refer to these authors to aid in the development of my own interpretation.

Aristotle's claims about truth and non-existence demonstrate the nuance of his thought on many topics—ontology, psychology, language, and their interdependence. In contemporary literature, Aristotle is often referred to in terms suggesting that his work is a philosophical precursor to our more advanced contemporary theory. While it is easy to reject an ancient philosopher's musings on a topic of contemporary interest on the grounds that they come off as in some way antiquated, I argue that taking such a dismissive attitude to Aristotle's thinking is to underestimate the significance of certain of his remarks. Consider, for instance, a passage I refer to in Chapter 3, which relates what does not exist, thought, language, and truth: "It is not true to say that what is not, since it is thought about, is something that is; for what is thought about it is not that it is, but that it is not" [*De Interpretatione*, 21a32-3]. In a single sentence, Aristotle dismisses a theory that has appealed to many more recent philosophers,[5] according to which the object of

[5] For instance, this view appealed to Meinong, whose ontology attempted to account for non-existent objects. Meinong's view was influenced by Brentano's descriptive psychology (see Marek, "Alexius Meinong", entry in the Stanford Encyclopedia of Philosophy). Brentano's descriptive psychology, I argue (in another work), assumes a misinterpretation of "the perception that we perceive" in Aristotle, one that leads to his concluding (in *Psychology from an Empirical Standpoint*) to the irreality of the intentional

thought, simply by being an object of thought, can be said to exist, and also gives an enthymematic argument for this refutation: the object of thought that does not exist is, when the thought is not mistaken, thought of as not existing; granting existence to the object of thought would contradict the thought of it as not existing; therefore, the thought of something that does not exist does not grant existence to that thing. Such an argument seems both interesting and relevant, not only to Aristotle scholarship, but to the philosophical community generally. And there are many such brief, underappreciated, contemporarily relevant arguments to be found in Aristotle's remarks about what does not exist, which provide evidence of a systematic philosopher aware of the implications of his statements.

In Chapter One I approach Aristotle's views on truth and non-existence from the perspective of his theory of language. In *De Interpretatione* 1, Aristotle defines truth as a function of combination and separation. There, he specifies both that the term "goat stag" is significant, and that it is neither true nor false when nothing further is added (16a16-18). I defer discussion of the topic of combination, and whether it is necessary or sufficient for truth, until Chapter Three. In the first chapter I focus rather on how a term becomes significant according to Aristotle, and to what a term refers; that is, the fundamental considerations of a theory of language that can possibly hope to allow language to refer meaningfully to a goat stag. The fact that names and verbs "signify something" (σημαίνει τι) distinguishes the noises of animals from the basic elements of human language. This capacity of names and verbs to signify is specified by Aristotle to

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object (and, in fact, all objects). He revises this view in the Appendix to the same book, introducing the *in recto, in obliquo* distinction of mental reference.

be a matter of convention (κατὰ συνθήκην), which indicates a rejection of any natural relationship between a name or verb and what it signifies. The conventionality of language is the precondition for a language capable of symbolizing what does not exist. Furthermore, what is symbolized is not required to exist in nature as a thing. The significance of "convention" itself is of utmost importance, since, as the etymology of the term suggests, it implies a "putting together". The question is: what is put together with what, on Aristotle's account? I argue that Aristotle's usage of the term does not indicate an agreement between persons as to the meaning of a term, but rather a putting together of the term and its referent (this is how a name becomes a symbol, or gains significance). Only one agent capable of such an act is required for Aristotle's concept of "convention". Aristotle's theory of language, when so understood, provides the necessary basis for the expression of things that don't exist; the significance of a term is imposed upon the natural, material component of language by a subject capable of producing such things, and this is only possible if the significance of terms is conventional in the way specified. What this term symbolizes is an affection of the soul; the distinction between what exists, in a strict sense, and what does not exist is whether or not this affection of the soul has a presently embodied material correlate in the realm of things, of which it is a likeness.

Chapter Two focuses on a specific problem often noted in the existing literature on Aristotle. When speaking of things that do not exist, a so-called contradiction between the *Categories* and *De Interpretatione* is often cited, on the problem of whether we can

infer existence from truth, and vice versa.[6] In the *Categories*, Aristotle asserts that if something does not exist, *only* denials made about it will be true; whereas in the *De Interpretatione* he claims that we cannot infer from the truth of an affirmation that its subject term exists. In this chapter I resolve this apparent contradiction. Specifically, I argue that the thesis to which commentators have claimed Aristotle is committed based on the *Categories* 13b26-36—that is, that, given a true predication, existence is assured—neither is the main point of the passage nor is stated in such a way as to directly contradict what Aristotle later says at *De Interpretatione* 21a25-33. I take these two passages to refer to any statement in which the subject term does not exist. I conclude that a resolution of the apparent contradiction is achieved by recognizing the asymmetry of the relation Aristotle is expressing; that is, if we know that the subject term does not refer to anything that exists, we may attribute truth-values to certain declarative statements, but, given truth-values only, we may not infer existence or inexistence. This solution is indicative of a logic that is not context-invariant. For Aristotle, in order to evaluate the truth of a conditional claim, we must know the exact nature of an implication; when we know the nature of the implication, we can rephrase the conditional claim in a more precise, categorical form.

In the third chapter I examine Aristotle's claim in *De Interpretatione* 1 that truth and falsity have to do with combination and separation. There are various senses in which we could interpret this claim. We might, for example, think that *any* combination, by the

[6] For example, in J.L. Ackrill, *Aristotle's Categories and De Interpretatione*; Christopher Kirwan, *Aristotle's Metaphysics Books Gamma, Delta, and Epsilon* [Oxford University Press, Oxford, 1971]; and M. Wedin "Aristotle on the Existential Import of Singular Sentences" *Phronesis*, Vol. 23, No. 2 (1978), pp. 179-196.

mere fact of its being combined, demands that that thing have a truth value; on this view, combination is a sufficient condition for something to bear a truth-value. Alternatively, we might think that combination is a necessary condition for something to have a truth-value, but insufficient. Aristotle's views on fictional entities, which exist as a result of combinations in thought, provide an important test case for settling these issues. In *De Interpretatione* 1, Aristotle claims that the term "goat stag" itself has no truth value; it requires something to be added in order to be truth-evaluable. However, in the *Metaphysics* (at IV.29, 1024b17-26), Aristotle gives examples of false things that do not involve predications (e.g., an image whose subject does not exist). These claims, I think, can be reconciled by recognizing that by giving examples of false, existent things, Aristotle is not equating the non-existent with the false (contrary to Paolo Crivelli's interpretation of the same passage).[7] The sort of combination that is required for something to have a truth-value is dependent on a particular relation between a name and a verb, such that something is said of (λέγεται) something, something is said to belong to (ὑπάρχει) something, or something is predicated of (κατηγορεῖται) something; while combinations in thought, for instance, which result in our being able to think of a fictional entity, do not themselves have a truth value, despite being combinations that have no likeness in reality. The observations in this chapter also serve to support those of Chapter 2, where I suggest that it is possible to make true statements about things that don't exist. The fact that we can make true statements about things that don't exist is explained by homonymy.

[7] Crivelli quotes this passage in Paolo Crivelli, *Aristotle on Truth* [Cambridge University Press: New York; 2004], pp. 46-47.

In the second half of the dissertation I turn to a more explicit discussion of Aristotle's views on the nature of truth, insofar as they are relevant to things that don't exist. Chapter four deals with the correspondence theory of truth and the question of whether Aristotle held a view that could reasonably be labeled as such. I examine the textual evidence various scholars have used to support terming Aristotle's notion of truth a "correspondence" theory, and attempt to define what exactly is meant by the term "correspondence". When we take into account the various types of objects to which Aristotle applies the word "truth", the exact nature of "correspondence" becomes elusive. I conclude that when the term "correspondence" is applied to Aristotle's theory of truth, it indicates what we might call (and what Patterson does call) a "weak" sort of correspondence.[8] An example of such a "weak" notion of correspondence is that described by Crivelli as "correspondence-as-isomorphism". This definition of correspondence is far from the strong correspondence theory that proposes that we look at what exists and what is true as independent, and attempt to locate a correspondence between them.[9] The term "correspondence", when applied to Aristotle's theory of truth, denotes a relation of isomorphism between a truth-bearer and what exists, where truth is dependent on what exists. Given that Aristotle accounts for what does not exist, the question arises again as to what corresponds to what when a term in a statement refers to

[8] D. Patterson, "What Is a Correspondence Theory of Truth?" in *Synthese*, Vol. 137, No. 3 (Dec., 2003), 421-444.

[9] The strong correspondence theory that I am arguing against, as characterized by Patterson, assumes that what exists and what is said about it are independent insofar as they can be described and analyzed separately, and then compared. I argue that it is wrong-headed to do so insofar as what exists and what is said are related: one already *depends* upon the other, as language symbolizes affections of the soul that are likenesses of things. Therefore, to compare them as if they were entirely distinct is already to err. The definition of "independent" I am using here denotes a lack of inter-relation; and when I say that what exists and what is said about it are not independent, I mean that what is said cannot be described distinctly from (i.e., without reference to) its dependence on what exists (insofar as it is a symbol of what exists).

something that does not exist. To what would this statement correspond? I argue that the correspondence between what does not exist and what is said about it is an imprecise way of speaking about the correspondence between the *concept* of a thing that does not exist and what is said about it; the goat stag, for instance, can be nominally defined, and though it does not exist, the concept of it does, and can be properly used as a term in a true predication.

In the fifth chapter I distinguish between the various objects to which Aristotle applies the notion of truth, and examine how the term is applied in relation to each of these objects. Aristotle uses the term "truth" in relation to all of the following: objects, perceptions, *phantasmata*, and statements. The truth of statements (or assertions) is the type of truth most commonly referred to when scholars are discussing Aristotle's theory of truth, and the most amenable to a correspondence definition. Aristotle, however, uses a broader definition of truth when referring to *phantasmata*, perceptions, and objects. Here I undertake an examination of the truth relation with regard to non-standard truth-bearers, looking at, for example, what is it upon which the truth of a *phantasma* depends. The conclusion here is a refinement of the definition of correspondence of the previous chapter. On the view I defend, Aristotle applies a broader definition of truth to non-standard objects that means something more like "accurate representation". I reject the interpretation according to which, when Aristotle describes simple objects as true, he means nothing more than that they exist; that is, the interpretation Crivelli proposes in

Aristotle on Truth.[10] On my account, there is no correspondence (a dependence relation) between a thing and itself, and therefore something's existence is not equivalent to its truth (which is defined as correspondence). Instead, I argue (with Caston) that the simple object is called false only by synecdoche,[11] as the cause of something else that *is* false.

The final chapter (Chapter 6) examines contemporary attempts to account for "empty" terms in Aristotle. What an empty term is, is not clearly defined; we might say that the "empty" term is one that does not refer. However, what we mean by "reference" here is ambiguous, and that ambiguity is the source of the problem when we talk about empty terms in Aristotle. Crivelli attempts to resolve the problem of empty terms in general by comparing the example of "goat stag" to that of the "man and horse" example of *De Int.* 18a23.[12] However, his solution ignores the distinction between terms having *kath' hauto* significance and terms that do not, to which I referred in Chapter 3 and on which I here expand. Charles attempts to define the relationship between the "goat" and "stag" elements of the compound by supplying the relation "being the offspring of".[13] However, again, if something is the offspring of two things, those things have *kath' hauto* significance, whereas "goat" and "stag" in the compound term "goat stag" do not. Noriega-Olmos attempts to resolve the problem by splitting a goat in half (that is, as the referent of the term "half-goat" in his supplied nominal definition of "goat stag": a half-goat half-stag animal), and then decides that "half-goat" is not a property of any kind, for

[10] "In the case of simple objects, DTF takes on the following form: an affirmative simple belief, or assertion, concerning a simple object is true when and only when this simple object is true, i.e., when and only when it exists." Crivelli, p. 19.
[11] I have adopted this term as it is used in Victor Caston's paper, "Why Aristotle Needs Imagination" *Phronesis,* Vol. 41, No. 1 (1996), pp. 20-55, p. 51.
[12] Crivelli claims that an empty term is essentially a composite term in disguise. (Crivelli, 159).
[13] David Charles, *Aristotle on Meaning and Essence*, [Oxford: Oxford University Press, 2000], p. 89.

half of a goat would not be a substance but a chunk of matter.[14] I argue against the idea that there is nothing we are referring to when we say something is "half-goat". I have consistently maintained that Aristotle can account for so-called "empty" terms; by replacing the term with its definition we might make accurate and true statements about a goat stag. For the term is only "empty" if by "empty" we mean that it refers to a contemporarily defined material, extramental object. On my view, it refers to something that does not exist; however, it does refer, as the term symbolizes an affection of the soul. In my mind the term "empty" would mean that there is absolutely nothing at all to which the term refers. In a strict sense of the word, then, the term "goat stag" is not "empty"; for it has significance, and is capable of being (at least nominally) defined, and has material and form. The class of extramental material things to which the universal might be thought to refer is empty, but the term is not. In short, the contemporary problem of the empty term in Aristotle is not reflective of the three-tiered structure of reality defined in *De Interpretatione* 1. The problem with "empty" terms is that they refer to what does not exist, and this is evident in the definition of the problem itself—since a term is considered "empty" for the reason that its referent is not a *pragma*. However, for Aristotle, the referent of no word is a *pragma.* Rather, it is an affection of the soul which may or may not be a likeness of a thing.

In this work as a whole, I show that things that do not exist do not in fact cause much trouble for Aristotle, either with respect to how they are objects of thought, or with respect to the utterances that can be made about them, or with respect to the truth of those

[14] Noriega-Olmos, Simon, *Aristotle's Psychology of Signification* [Berlin: De Gruyter, 2013], p. 72.

utterances. Where contemporary scholars in the philosophy of language might like to interpret Aristotle as holding a naïve view, an imposition of modern theories onto Aristotle's work only leads to misinterpretation. If there is a coherent explanation of how things that don't exist can be integrated into Aristotle's theory of truth, the theory as a whole looks more sophisticated and more defensible from a contemporary standpoint.

Chapter One: The Conventional Aspect of Language and Naming What Does Not Exist

In this chapter I will examine Aristotle's notion of language. I will explain how, on his view, it is possible to speak of things that don't exist, and how we go about imposing significance on otherwise insignificant sounds.

The goal of this dissertation as a whole is to provide a cohesive interpretation of what Aristotle has to say about truth and non-existence. This will involve explaining how Aristotle thinks it is possible for there to be a term which has no extramental referent. While this is a concern throughout the dissertation, here I will look specifically to Aristotle's views on the nature of language for insight. In order to figure out how it is possible to speak of what does not exist, we must first determine how Aristotle thinks it is possible to speak at all, or what it means to speak as opposed to merely making sounds. Then we must determine how he thinks it is possible to combine a sound with a signification in a way that leaves room for what we observe to be obviously true, namely that certain terms are "empty." To put the question in Aristotelian terms, we must determine how a name can be a symbol of something that does not exist. (I call into question the characterization of such terms as "empty" in Chapter 6.) As I will show, an Aristotelian conception of language does leave room for speaking of things that don't exist.

The first chapter of Aristotle's *De Interpretatione* describes a relation between things, affections of the soul, and spoken and written sounds. According to this passage,

affections in the soul (παθήματα τῆς ψυχῆς) resemble things (πράγματα). These affections of the soul are symbolized in a spoken language by vocalizations (things in vocalized sound—τὰ ἐν τῇ φωνῇ), which are symbols (σύμβολα) of those affections of the soul. Written marks are symbols of vocalizations. Aristotle states in this passage that the things (in nature), as well as the affections in the soul that they produce, are the same for all people. Vocal and written symbols of these things are not.

> Now spoken words are symbols of affections in the soul, and written marks symbols of spoken sounds. And just as written marks are not the same for all men, neither are spoken sounds. But what these are in the first place signs of—affections of the soul—are the same for all; and what these affections are likenesses of—actual things—are also the same.[15]

In what follows, I will be focusing on part of this statement of the relation between nature, thought and language in *De Interpretatione*. Specifically, I will focus on (i) the problem of what constitutes a spoken language, (ii) how words come to be symbols of affections of the soul, and (iii) the possibility of finding linguistic expression for what does not exist. For this discussion I will draw on Aristotle's statements concerning the difference between the types of sound produced by humans and animals, as for Aristotle only certain sounds qualify as part of a spoken language. Consistently with his statement that vocalizations are not the same for all people, Aristotle suggests that vocalizations become symbols of affections of the soul by convention. I will examine how far this notion of convention extends, and whether there are limits to the arbitrariness introduced by labeling spoken language as conventional. I conclude that while there is no natural

[15] 16a3-8, Ackrill. Ἔστι μὲν οὖν τὰ ἐν τῇ φωνῇ τῶν ἐν τῇ ψυχῇ παθημάτων σύμβολα, καὶ τὰ γραφόμενα τῶν ἐν τῇ φωνῇ. καὶ ὥσπερ οὐδὲ γράμματα πᾶσι τὰ αὐτά, οὐδὲ φωναὶ αἱ αὐταί· ὧν μέντοι ταῦτα σημεῖα πρώτων, ταὐτὰ πᾶσι παθήματα τῆς ψυχῆς, καὶ ὧν ταῦτα ὁμοιώματα πράγματα ἤδη ταὐτά.

relationship between a particular word and what it symbolizes, it is natural for humans to communicate by speech, and also natural that we produce vocalizations, which Aristotle distinguishes from sounds; whereas animal sounds may reveal something, vocalizations in addition signify, in the sense of being a symbol (a sign) of something. By adding the notion that vocalizations are the matter of a spoken language, we can identify this naturalistic element of Aristotle's theory of language while maintaining that language is conventional; the differentia that defines spoken language is that it is significant, while affections of the soul become symbolized by particular, significant words by convention. The conventional aspect of spoken language allows for speaking of non-existent entities, but the translation of κατὰ συνθήκην as "by convention" introduces some modern associations that do not apply to the symbolization of affections of the soul by words. Where we might associate "convention" with agreement between a group of individuals, the translation more applicable to Aristotle's concept of linguistic signification is, I argue, that of a "putting together", i.e., putting together the linguistic sign with what it signifies—no groups of people are required.

Spoken Language and the Noises of Beasts

Aristotle states in the *Politics*:

> Nature, as we often say, makes nothing in vain, and man is the only animal who has the gift of speech.[16]

[16] 1253a9-10, Jowett. οὐθὲν γάρ, ὡς φαμέν, μάτην ἡ φύσις ποιεῖ· λόγον δὲ μόνον ἄνθρωπος ἔχει τῶν ζῴων. Here Jowett translates λόγος as "speech", but it may equally refer to "language" (there are, as well, many other seemingly less-fitting translations of the word). Since Aristotle refers directly afterward to animal noises, I believe the translation as "speech" or "spoken language" is justified.

In defining what is necessary for a sound to qualify as part of a spoken language, Aristotle frequently refers to the difference between the sounds produced by non-human animals and those produced by humans, to emphasize what he sees to be the differences between a word and a noise. [17] I will be looking in particular at two passages, one from the *De Interpretatione* and one from the *Poetics*.

In the *De Interpretatione* at 16a26-9, Aristotle defines what it is to be a name (ὄνομα). Here he differentiates a name (a composite significant sound not involving the idea of time[18]) from the inarticulate sounds of beasts (ἀγράμματοι ψόφοι). In this passage he implies that symbolization by convention is necessary for a composite sound to be called a name—that the fact that it may "reveal something" (δηλοῦσί τι) does not alone qualify a sound as a name.

> I say 'by convention' because no name is a name naturally but only when it has become a symbol. Even inarticulate noises (of beasts, for instance) do indeed reveal something, yet none of them is a name.[19]

An immediate conclusion to draw based on this statement would be that the difference between animal sounds and human language is that human language includes significant terms such as names (symbolizing affections of the soul); i.e., human language reveals real subjects, predicates and their relations by symbolizing the affections of the soul which are supposed to be likenesses of things. Animal sounds do reveal something (τι), but not something that would allow the sound to qualify as a name, or part of a

[17] In the *History of Animals* 535a29-b2 Aristotle suggests that what is required for language is that an animal have lips and a tongue; here "language" is translated from διάλεκτός. The consequences of this difference extend beyond the bounds of the present work.
[18] 16a19-20. See also 1457a11
[19] 16a26-9, Ackrill. τὸ δὲ κατὰ συνθήκην, ὅτι φύσει τῶν ὀνομάτων οὐδέν ἐστιν, ἀλλ' ὅταν γένηται σύμβολον· ἐπεὶ δηλοῦσί γέ τι καὶ οἱ ἀγράμματοι ψόφοι, οἷον θηρίων, ὧν οὐδέν ἐστιν ὄνομα.

language.[20] Revealing something, on my interpretation, is different from signification, as signification is the indication of something (for instance, an object), while animal sounds do not indicate in the same sense. We may infer from an animal sound, for instance, *that* the animal is in pain, but the sound itself is not a signification of the proposition, "I am in pain!", nor even a symbolization of the concept 'pain'. Something becomes a symbol not only by revealing something, but also by signifying something by convention.[21]

The fact that Aristotle describes the sounds of animals as "inarticulate" might make it seem as though this description should exclude a mere sound from inclusion in a language. Ackrill makes the observation:

> Aristotle only weakens the force of his remark by mentioning *inarticulate* noises, that is, such as do not consist of clearly distinguishable sounds which could be represented in writing. For someone could suggest that what prevents such noises

[20] At *Politics* 1253a10-15 Aristotle states: "And whereas mere voice is but an indication of pleasure or pain, and is therefore found in other animals (for their nature attains to the perception of pleasure and pain and the intimation of them to one another, and no further), the power of speech is intended to set forth the expedient and the inexpedient, and therefore likewise the just and the unjust."

[21] This interpretation is rejected by Simon Noriega-Olmos in *Aristotle's Psychology of Signification* who maintains that signification and revealing something are synonymous, and also synonymous with symbolization. But he later insists that what is signified is a thought, rather than a perception or *phantasia*. If animal sounds reveal something, and this is equivalent to signification, then by this conception animals must have thoughts, which is a distinctly un-Aristotelian concept. With regard to the passage here, Noriega-Olmos claims, "The point of the passage is that even forms of vocal sound that do not entail communication indicate something. However, the passage does not say, nor does it imply, that among vocal sounds intended for communication (e.g. mating-vocalized sounds of frogs, the singing of birds, and human language) some simply indicate and some signify. Aristotelian testimonies, as a matter of fact, contradict such a view, showing that the two terms are interchangeable and synonymous…" (p. 60). And later, "I have claimed that Aristotle states that affections of the soul are the same for everybody because the affections he has in mind are thoughts, and thoughts, contrary to other affections, e.g. *phantasiai*, are the same for everybody insofar as they grasp what things are" (p. 134). That animals do not think, according to Aristotle, is evident in *De Anima*, for instance where he claims at 414b16-19 that thought is exclusive to man or something superior to him: "Certain kinds of animals possess in addition the power of locomotion, and still others, i.e. man and possibly another order like man or superior to him, the power of thinking and thought." (ἐνίοις δὲ πρὸς τούτοις ὑπάρχει καὶ τὸ κατὰ τόπον κινητικόν, ἑτέροις δὲ καὶ τὸ διανοητικόν τε καὶ νοῦς, οἷον ἀνθρώποις καὶ εἴ τι τοιοῦτον ἕτερον ἔστιν ἢ τιμιώτερον.) I maintain neither that revealing something and signification are identical in meaning, nor that Aristotle means "affections of the soul" to refer only to thoughts in this book.

> from counting as names is not that they are natural rather than conventional signs, but precisely that they are inarticulate.[22]

In this passage, the word translated as "inarticulate" is ἀγράμματοι. Here Ackrill has interpreted the word to include the implication that inarticulate sounds are those that could not possibly be written. I agree that Aristotle is distinguishing human language from animal sounds based on a qualification of "articulateness." I question, however, whether something must be writable in order to be articulate. The word ἀγράμματοι seems to derive from γράμμα, a term that usually denotes a letter, something drawn, or a written character, and it seems to be this connotation that Ackrill is using when he makes the connection between a sound's being "inarticulate" and its being unwritable. This definition of ἀγράμματοι as "unwritable", however, would introduce an inconsistency into Aristotle's theory of language. When we recall that written language is a symbolization of spoken language, and that symbolization is achieved through convention, it would seem odd to conclude that a sound cannot qualify as a vocalization only because it is unwritable. Spoken language is supposed to be prior to and symbolized by written language.[23] We could posit that on Aristotle's view the potentiality to be a written language is an essential characteristic of any spoken language, but I find no support in the text for attributing such a bold and controversial claim to Aristotle.

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[22] Ackrill, 117.

[23] Apostle, remarking on the first chapter of the *De Interpretatione*, states: [16a4] "This statement seems to suggest that spoken expressions among men precede written expressions, and hence that the latter are used as substitutes for the former. A sign of this is observed in children, for they first learn to speak and then to write." Hippocrates G. Apostle, *Aristotle's Categories and Propositions (De Interpretatione)* [Grinnel: The Peripatetic Press, 1980], p. 98.

Instead, I believe we should look to other uses of γράμμα in the Aristotelian corpus. Zirin mentions a use of γράμμα that seems to avoid this conclusion. Speaking of the vocalizations of animals that Aristotle writes of in the *Parts of Animals*, he writes:

> The term γράμμα—letter—is here used in a phonetic sense; it obviously refers to the minimal unit of vocalization, and therefore is synonymous with στοιχεῖον.[24]

Zirin is here equating the word γράμμα with another word that Aristotle uses to refer to a base element of language, the στοιχεῖον. The word στοιχεῖον ("element") is used in the *Poetics*, for instance, to indicate the most fundamental unit of diction, and is also translated as "letter" by Bywater.[25] A στοιχεῖον, however, does not have the same connotation of being writable, as it is used to refer to a part of spoken language.

The question of what constitutes the difference between sounds and vocalizations becomes more complicated when we compare the phrasing of our passage in the *De Interpretatione* (ἀγράμματοι ψόφοι) to that used in the *Poetics* to describe the sounds of animals. In the *De Interpretatione,* Aristotle seems to distinguish between sounds (ψόφοι), produced by animals, and vocalizations (φωναί), produced by humans. However, in the *Poetics*, the sounds of animals are also vocalizations (φωναί). There, they differ from the vocalizations that constitute a part of language not in that they are inarticulate and therefore incapable of becoming names (ὄνομα), but rather because they are

[24] Ronald Zirin, "Aristotle's Biology of Language", *Transactions of the American Philological Association*, Vol. 110 (1980), pp. 325-347, p. 337.
[25] In translating the sentence at 16a27, Zirin avoids using the phrase "inarticulate sounds" by replacing it with "unspellable noises".

undivided or indivisible (ἀδιαίρετοι).[26] So we are now faced with the question of whether animal sounds are differentiated from human sounds (on Aristotle's account) on account of their being undivided or indivisible, or on account of their being inarticulate, or whether these qualifications are, in fact, equivalent (or at least related).

When Aristotle discusses the sounds of beasts in the *Poetics*, he uses στοιχεῖον to refer to the element of language that animal sounds are not. Although also sometimes translated as "letter" (e.g., by Bywater), στοιχεῖον seems to be used here to refer (as the discussion is, after all, about diction) more specifically to the most basic element of a vocalization. In this passage, the undivided or indivisible vocalizations of beasts (ἀδιαίρετοι φωναί) fail to count as "letters" or "elemental sounds" (στοιχεία), which are stated to be the indivisible sounds necessary to constitute a compound sound. From this distinction, it seems that Aristotle is claiming that the undivided sounds of animals lack the potentiality of a letter to become a combination (a syllable— συλλαβή), a consideration that we should take into account prior to considering what could constitute a name (which adds the distinction of being *significant* composite sound). But in the *Poetics* letters (στοιχεία) are defined just as those indivisible sounds that come together to form composites. As a result, the distinction between animal and human sounds on the basis of divisibility doesn't seem to indicate an essential differentia between animal sounds and human language. Aristotle differentiates between letters and the indivisible sounds of animals by stating that

[26] "Since the word 'ἀδιαίρετον' has two senses, i.e., may mean either 'not capable of being divided' or 'not actually divided'…" 430b6-7 (τὸ δ' ἀδιαίρετον ἐπεὶ διχῶς, ἢ δυνάμει ἢ ἐνεργείᾳ) *De Anima* Greek text from W.D. Ross, *Aristotle. De anima*. Oxford: Clarendon Press, 1961 (repr. 1967).

> A letter is an indivisible vocalization, not any one but one from which a composite vocalization naturally arises.[27]

If we are only looking at the sounds themselves, then this qualification (the potential to become a composite vocalization) does not differentiate between the sounds of humans and of animals, since the potential to become composite is not yet actual.[28] But the sounds of animals and the στοιχεία that constitute a spoken language still differ in that it is possible to combine στοιχεία into an articulate composite vocalization, which can then gain significance. The point is, even when we are looking only at the kind of *sounds* that may or may not constitute a language, the sort of sound that constitutes a language is restricted by the qualifications of articulateness and the potential to form composites. These composite sounds gain significance by convention, my topic for the following sections.

Symbolization, Conventionalism and Naturalism

The underlying problem of what it is to be a significant sound is how it comes to be that a sound gains significance. In the *De Interpretatione*, Aristotle clearly states that the symbolization of affections of the soul by vocalizations is achieved through "convention" (συνθήκη), contradicting the idea that the vocalized sound is in any way connected by nature (φύσει) to that which it symbolizes.[29] Deborah Modrak examines extensively the natural and conventional aspects of Aristotle's theory of language in *Aristotle's Theory of Language and Meaning*. In considering this distinction, Modrak claims that Aristotle has

[27] 1456b22-3, translation modified from *The Complete Works* based on a suggestion by David Hitchcock. στοιχεῖον μὲν οὖν ἐστιν φωνὴ ἀδιαίρετος, οὐ πᾶσα δὲ ἀλλ᾽ ἐξ ἧς πέφυκε συνθετὴ γίγνεσθαι φωνή.
[28] This potential is, however, necessary for the production of composite sounds, i.e., names and verbs.
[29] 16a19, 16a26

found a compromise between the doctrines of naturalism and conventionalism. However, she restricts the naturalistic element to the pre-linguistic, stating that there is a natural connection between the affection of the soul and what it represents in nature, but a conventional connection between the affection of the soul and its symbolization by language:

> In the *De Interpretatione*, Aristotle chooses to negotiate a compromise between the two rejected alternatives. The relation between written and spoken words is conventional, as is the relation between spoken words and the mental states that are the vehicles of meaning; different languages correlate different sounds with the same intentional content and the same sound with different contents. Notwithstanding, the relation between the mental state and the object it represents is natural—the same for all humans—and reference is secured by resemblance.[30]

This way of understanding Aristotle's view does indeed seem to be supported by the introductory chapter of the *De Interpretatione*. However, the close tie between what is natural and what is the same for all humans is not *alone* sufficient to explain the naturalistic element I am suggesting exists within Aristotle's theory of language. What Modrak says here is correct, as far as it goes, but she overlooks a further way in which language is "natural" on Aristotle's view. While here Modrak puts the naturalism of Aristotle's account of language more into the realm of mental representation, my interpretation puts the naturalistic component of Aristotle's account of language more squarely in the realm of linguistic representation. Working with the same definition of

[30] Deborah Modrak, *Aristotle's Theory of Language and Meaning* [Cambridge: Cambridge University Press, 2001], p.4.

"natural" (what is the same for all humans), I specify in addition that it is natural for humans to *signify* using sound.[31]

What it is to be conventional, on the other hand, is already tied in with what was said regarding the sounds of animals, for the sounds of animals are not significant by convention, and their vocalizations do not have the same potential to be significant as the vocalizations made by humans; they are inarticulate and unable to come together as a composite. It would seem, therefore, that to identify what kind of sounds can qualify as part of a spoken language requires (as a matter of ontological priority) that particular sounds have the potentiality to become significant. But we must define what it means to be "conventional."

In the *De Interpretatione* at 16a26, Aristotle opposes convention to nature, stating that no name is a name naturally but only when it has become a symbol (as cited above). When looking to define convention, therefore, we should look first towards Aristotle's definition of nature. In *Physics* II.1, Aristotle's definition of nature hinges on the idea that a thing's nature is a principle of change or rest contained within the thing:

> … nature is a principle or cause of being moved and of being at rest in that to which it belongs primarily, in virtue of itself and not accidentally.[32]

Aristotle uses this definition to differentiate natural things from artifacts on the basis that artifacts require an external source of change, or an agent ("None of them has in itself the

[31] The assumption that what is the same for all humans is equivalent to what is natural for humans could be easily contradicted by identifying some thing [anything] that is the same for all humans not because of their nature, but accidentally, e.g., the spurious claim that it is part of human nature to live on the earth.
[32] 192b20-3, Hardie and Gaye. ὡς οὔσης τῆς φύσεως ἀρχῆς τινὸς καὶ αἰτίας τοῦ κινεῖσθαι καὶ ἠρεμεῖν ἐν ᾧ ὑπάρχει πρώτως καθ᾽ αὑτὸ καὶ μὴ κατὰ συμβεβηκός

principle of its own production"[33]). The distinction between a naturalistic theory of language and a conventional one, I claim, is similar. If a word were to have a natural relationship with what it symbolizes, the thing would, in some sense, be the cause of its own symbolization. But with Aristotle's conventional theory of language, the word has a conventional relationship with what it symbolizes. So when Aristotle denies that names arise naturally, we may suppose that this means that a name does not of itself come to symbolize an affection of the soul, but only by the action of something else (an agent). *De Interpretatione* 16a26 supports this view, as this passage implicates convention as the *cause* of a word's becoming a symbol.

That words are symbolic by convention rather than by nature is also supported in the *De Interpretatione* by the idea that spoken and written languages, unlike the affections of the soul, are not the same for all people (in different cultures and in different times, or in the same culture at the same time). Aristotle appears to reason as follows: because there exist different words for the same thing, there is no natural connection between a particular word and what it symbolizes. This also allows for Aristotle to claim in the *Poetics* that other types of names are referential, such as metaphorical or coined terms, in addition to foreign words:

> Whatever its structure, a noun (ὄνομα) must always be either the ordinary word for the thing, or a strange word, or a metaphor, or an ornamental word, or a coined word, or a word lengthened out, or curtailed, or altered in form.[34]

[33] 192b29-30, Hardie and Gaye. The idea of telos is also evident when referring to a particular thing's nature: "For what each thing is when fully developed, we call its nature, whether we are speaking of a man, a horse, or a family." 1252b32-3, *Politics*.
[34] 1457b1-3, Bywater. ἅπαν δὲ ὄνομά ἐστιν ἢ κύριον ἢ γλῶττα ἢ μεταφορὰ ἢ κόσμος ἢ πεποιημένον ἢ ἐπεκτεταμένον ἢ ὑφῃρημένον ἢ ἐξηλλαγμένον.

So if there is a place for naturalism in Aristotle's theory of language, it does not seem to be in some kind of natural connection between a particular word and its referent. This relationship is conventional. And the fact that this relationship is conventional should indicate a difference between animal sounds and a name—that is, in order for a species to participate in communication by a language, it must be capable of establishing the right kind of relationship between word and referent by convention, in the sense I will later define.

But we might yet find a place for naturalism in Aristotle's theory: we might still consider that it is natural for human beings to symbolize affections of the soul by names *in general*, so that while particular symbols are not naturally linked to their referents, the act of symbolization is natural for human beings. In addition, there is the trivial claim that it is natural for these conventional symbols to be sounds; that is, it is natural for human beings to have language and to communicate by sound, for it is certainly natural and not conventional that humans have the requisite organs for speaking and hearing articulate sounds. Zirin summarizes the physiological requirements of producing voice, relying again on *De Anima* II.8.

> Voice cannot be present in animals which do not have the organic structure necessary for its production, and, in addition, no sound can be considered voice unless it is set in motion by the ψυχή and is accompanied by a mental image.[35]

Here Zirin proposes to interpret Aristotle as making three claims about human language: that it is natural for a human being to have an organic structure necessary for communication by language; that human beings also have a soul capable of setting in

[35] Zirin, 335.

motion a vocalization; and that the vocalizations that constitute human language correspond to a mental images (i.e., signify). The first two of these qualifications seem to be shared by humans and non-human animals alike: both are endowed with the organic structure and type of soul necessary for producing sounds. The difference between whether these sounds "reveal something" or "signify" is the third qualification. That the organic structure is not accidental but, according to Aristotle, is for the purpose of communication by language is supported by his discussion of the faculties of the soul in the *De Anima*:

> If then Nature never makes anything without a purpose and never leaves out what is necessary… it follows that, had they [here Aristotle is differentiating plants and animals with regard to locomotion] been capable of originating forward movement, they would have possessed organs necessary for that purpose.[36]

It would seem that in addition to an animal's being capable of producing vocalizations as indicated, in order for the sounds produced to qualify as language, there must also exist a conventional relationship between particular vocalizations and what they signify. It seems it is a human capacity to impose significance on particular sounds such that they may constitute a language. Aristotle contrasts a name (which is a symbol) with the animal sounds that only "reveal something"; symbolization (signification) seems to be a distinctly human capacity. The next problem I turn to is whether there are any restrictions to this capacity, i.e., to what extent the conventional nature of language introduces arbitrariness into the creation of language.

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[36] 432b21-25, Smith. Translations *De Anima*, unless otherwise noted, are modified from Aristotle, *Aristotle's De Anima Books II, III*, D.W. Hamlyn ed.[Oxford: Oxford University Press, 1968]. εἰ οὖν ἡ φύσις μήτε ποιεῖ μάτην μηθὲν μήτε ἀπολείπει τι τῶν ἀναγκαίων, πλὴν ἐν τοῖς πηρώμασι καὶ ἐν τοῖς ἀτελέσιν, τὰ δὲ τοιαῦτα τῶν ζῴων τέλεια καὶ οὐ πηρώματά ἐστιν (σημεῖον δ' ὅτι ἐστὶ γεννητικὰ καὶ ἀκμὴν ἔχει καὶ φθίσιν) —ὥστ' εἶχεν ἂν καὶ τὰ ὀργανικὰ μέρη τῆς πορείας.

Convention, Restriction, and Arbitrariness

We might be tempted to take the terms "spoken language" and "written language" and assume that the genus of these is some overarching "language", of which "spoken" and "written" are the differentiae.[37] But from all that Aristotle has to say concerning spoken language discussed above, it would seem that the definition of "language" specifies that it is a subset of the more general class of sounds and graphics: there are vocalizations, some of which constitute a spoken language (and analogously, there are written marks, some of which constitute a written language). A spoken language may rather be defined as a system of "significant vocalizations", vocalizations being the genus in this definition (and therefore the matter of the definition of spoken language[38]), and significance providing the differentia between all vocalizations (including the ones of animals) and those that constitute a spoken language.

If it is true that vocalizations are the material of a spoken language, and that it is natural that humans communicate using vocalizations (as do animals), then it would seem that the material of a language is natural, while significance is attributed to sounds by convention, differentiating between the sound and the word. This, I believe, is what Arens

[37] The difference would indicate which of the terms in the definition indicates a larger class from which a smaller class is differentiated, the genus and the differentiae, or the matter and form.

[38] For Aristotle's definition of the relationship between matter and form, genus and differentiae with respect to definition, see *Metaphysics* VIII.6, where Aristotle explains how the unification of matter and form, genus and differentiae ensure that a definition refers to single thing: "But if, as we say, one element is matter and another is form, and one is potentially and the other actually, the question will no longer be thought a difficulty. For this difficulty is the same as would arise if 'round bronze' were the definition of cloak; for this name would be a sign of the definitory formula, so that the question is, what is the cause of the unity of round and bronze? The difficulty disappears, because the one is matter, the other form." (Ross, 1045a23-30)

suggests when discussing a name as conventional, though he does not expand on his use of the word "materially":

> The word or name or onoma is not wholly a product of nature—only materially—, but a product of the human will, whether of an individual or of a community: being conventional it is arbitrary.[39]

Setting aside for the moment Arens' association of "conventional" with "arbitrary", I would like to consider the question of whether there is a limitation on what vocalizations may come to be symbols of affections of the soul. The possibility that there might be a natural limitation to the sort of vocalization that might become spoken language is suggested by Ackrill's comment regarding the passage at 16a3 (*De Interpretatione* 1).

> Of course it is not true that all men meet the same things or have the same thoughts. Nor would the mere fact that different words are equally capable of expressing a given thought be enough to prove that words are significant only by convention, not by nature. (The choice of material for an axe is *not* a matter of convention; the nature of an axe's task imposes limits. Yet there may be a variety of materials any of which would do—though not every material would do. Thus the possibility of different people's using differently made tools for the same job does not show that it is purely a matter of convention how a tool for that job is made.)[40]

While Ackrill's argument may show that it is not *arbitrary* what material can possibly become symbolic, I don't think it shows that it is not a matter of convention. Certainly, we may impose a limitation on the material of a language by saying that it must provide the potential for communication (and so limit the material to what can be produced by one human and interpreted by another, i.e., vocalizations and written signs).[41] Where

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[39] Arens, Hans, *Aristotle's Theory of Language and its Tradition* [Amsterdam: John Benjamins Publishing Company, 1984], 38.
[40] Ackrill, 113-4
[41] "Language consists, on the material side, of the combination of sounds called "letters" (γράμματα) produced in voice by lips, teeth, tongue, and other organs; and, although other animals than man can utter indivisible sounds and have voices, man, and after man some birds, are peculiarly equipped to utter letters."

convention seems to come into the picture, however, is not at the level of material, but of the word. The analogy to the axe would fit[42] if we were concerned with arbitrariness in the *material* of a spoken language—vocalizations—but where arbitrariness comes into the picture would not be here, but where convention is introduced. Noriega-Olmos also reduces arbitrariness to a result of the conventional aspect of language:

> This analysis of convention shows that the relation between the phonetic material and the *significatum* of a linguistic expression is conventional, and it is conventional in the sense that it is arbitrary in saussurean sense, i.e. dependent on human choice. To the surprise of the modern reader, who is accustomed to the idea of language as a social phenomenon, Aristotle in *De int.* is not interested in explaining how this convention comes about and how language is determined and institutionalized by human society. He does not explain whether the convention at stake is an explicit agreement sealed at a given time or place, or an implicit and spontaneous agreement.[43]

I think we may immediately dismiss the idea that the particular word chosen as a symbol is completely arbitrary. It is already limited by all of the other features of names that were dismissed as being definitive, but are still necessary, i.e., the name must be a divisible, articulate sound.

Convention as the Precondition for Linguistic Representation of Non-Existents

The preceding discussion has identified a conventional relationship between a name and an affection of the soul to which the name refers; the act of establishing the conventional

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McKeon, Richard, "Aristotle's Conception of Language and the Arts of Language" in *Classical Philology*, Vol. 41, No. 4 (Oct. 1946), pp 193-206, 201.

[42] To apply this analogy at the level of the significant name, we would have to say rather that for any particular job, the choice of axe is conventional—the choice that we would make would be between particular axes, all of which are suited to the job, just as we choose particular words, any of which may symbolize whatever it is we want them to symbolize (including words that are ordinary, foreign, metaphorical, etc.). So the restriction that Aristotle recognizes on the material of any composite being does not indicate that the relation between the material and form of a language is natural and not conventional.

[43] Noriega-Olmos, 169.

relationship endows the name with significance. In order to determine what Aristotle means in this context by "convention," and how he thinks words gain significance, it will be useful to consider what happens when a name refers to a non-existing subject. Given that an affection of the soul is supposed to be a likeness of a thing, and it is an affection of the soul that is supposed to be represented by a name in language, how is it possible that we are to able to significantly refer to non-existing subjects? In these cases, a word seems to have a meaning but no referent, if a referent is supposed to be something materially existing. However, Aristotle states confidently that "goat stag" *does* signify something (16a16). Thus the question to be answered is how the combination of concepts referred to by the term "goat stag" comes to have significance independent of the terms of which it is comprised and, more generally, how convention allows us to speak about things that do not exist.

Speaking of things that do not exist seems to be the direct converse of that scenario wherein we questioned whether the particular word is constrained by its material element, divisible spoken sounds. Whereas in the former situation the question was whether the material of the thing was limited by the thing's intended use, now this latter scenario asks whether, given the prerequisite materials, we may impose significance upon a sound such that that sound may be used for another purpose than that for which it seems best fit—that is, whether there are limits on the conventional relationship preventing us from extending spoken language to express non-existents. I see no reason why there should be.

In the preceding section we saw Arens equating the conventionality of language to its being produced by a human agent.I intend here to support and defend this comparison. Since Aristotle sees no natural connection between the particular word and its referent, it seems that the act of naming is just the imposition of significance on linguistic material (vocalizations). In this way the word is an artificial construct, created by convention. The preceding discussion of the matter of a spoken language led to the conclusion that for Aristotle vocalizations do not naturally combine to form specific words. If vocalizations do not naturally combine to form specific words, an agent is required to perform that function. It seems, therefore, that for Aristotle the process of establishing the referent of a word by convention (and by "referent" I mean whatever is signified by the name) is precisely the difference between our being able to make sounds and our being able to create names. The conventional aspect of a spoken language is precisely the addition of signification to particular sounds, i.e., of the sounds becoming symbols, by the imposition of significance by an agent. In this way, vocalizations are those types of things which "cannot exist apart from some one who has the art of making them."[44]

The faculty for making a sound significant is important to explain the way in which non-existents come to be represented in language. There is a difficulty introduced by Aristotle's three-tiered structure of the representation of reality from *De Interpretatione* 1. It might seem that if affections of the soul can only be likenesses of things, this should exclude our having affections of the soul without a material correlate. However, it seems safe to assume that not all affections of the soul are passively received

[44] *Metaphysics*, 1034a18 διὰ τοῦτο τὰ μὲν οὐκ ἔσται ἄνευ τοῦ ἔχοντος τὴν τέχνην τὰ δὲ ἔσται

from perceptions of things. It is possible (as I examine in Chapter Five) to have false perceptions, as well as false *phantasiai*, and Aristotle speaks of thoughts (δόξαι) of things that don't exist at 21a32-3. Affections of the soul that are not passively received likenesses of external objects are precisely those that are necessary for the linguistic representation of non-existents.[45]

What "Does Not Exist"

Taking the above considerations into account, I propose a provisional account of the nature of things that do not exist according to Aristotle, one that explains how it is possible on his view to think and speak of such things. We must take as given that for Aristotle a term referring to something that does not exist does not refer to *nothing* (as the most extreme example of non-existence), or else it would be impossible to refer to any particular non-existent subject. Rather, what Aristotle means when he says that something does not exist falls out of the distinction between affections of the soul that are passively received (for example, by perception), and those which are constructions of thought. That is, the difference between existence and non-existence for my purposes will be that the referent of a subject term labeled "non-existent" has no presently materially embodied correlate thing (πράγματα) of which it is a likeness. While this seems like a convoluted way of saying that something that does not exist does not exist, we are in fact restricting existence to the extramental world, and imposing on Aristotle a more limited definition of *einai* than he himself would maintain (considering his discussions concerning being "said

[45] As an extension, we might make the claim that if there were no affection of the soul which any given name symbolized, then the word would not express a non-existent subject but would instead be nonsense, however well formed.

in many ways"). However, with regard to things that "don't exist", it seems that Aristotle is using the term in only one way, that which I have just specified.[46]

Simon Noriega-Olmos, in *Aristotle's Psychology of Signification*, suggests a slightly different solution to the problem of how we refer to things that don't exist. My definition here suggests that a term symbolizes an affection of the soul, but that an affection of the soul need not necessarily be a likeness of a thing. Noriega-Olmos prefers a schema whereby, instead of excluding things that don't exist from the class of *pragmata,* we instead interpret *pragmata* as including not only extramental referents, but also abstractions and things that exist only in the mind. He states,

> πράγμα can be construed as including not only external objects but also the formal aspect of concrete objects that thoughts grasp, as well as objects that only exist in the mind. This construal does not restrict linguistic signification to the forms of concrete objects such as a rock, a chair, etc., and has the advantage of including among the *significata* of linguistic expression abstract entities (e.g. numbers, virtue, etc.), non existent entities such as goat stag (*De int.* 16a15-16) and states of affairs such as those indicated by verbs (e.g. to walk).[47]

However, my definition provides for the most consistent interpretation of Chapter One of *De Interpretatione* 1. If we were to interpret the term *pragma* as including things that exist only in the mind, the objects of thought would, in the case of what does not exist, be double. For if we admit a non-existent *pragma,* then the affection of the soul which is a likeness of it would (on Aristotle's view) have to be something besides it, or else a superfluous conceptual device. That is, if a name symbolizes an affection of the soul that resembles a *pragma*, and if the *pragma* and the affection of the soul are identical in the

[46] The fact that Aristotle is using *einai* in this way when referring to things that don't exist implies that it is possible for those things to have some kind of being other than material instantiation, a theme picked up by later authors and open to interpretation.
[47] Noriega-Olmos, pp. 124-5.

case of objects that exist only in the mind, then we are either met with the problem of how something can be double and a likeness of itself. Alternatively, we can dismiss one of the mental object's incarnations as superfluous. I prefer the latter option, for my interpretation of a *pragma* as an external object avoids this overly complicated and problematic ontological consequence. To solve the problem of how it is possible to signify what does not exist, I argue that, in general, a word signifies (symbolizes) an affection of the soul, taking *De Interpretatione* 1 as authoritative on this matter. The account of signification I end up with does not in fact contradict Noriega-Olmos' conception of the signification of language, for he also is of the opinion that what is signified by a word does not necessarily exist in the external world. The difference between our conceptions is only a difference of what is referred to by the term *pragma*.

> Even though there would not be language without the existence of things, given that the existence of things is for Aristotle a condition *sine qua non* for human thought, strictly speaking the place where *significata* are—as we have seen—is in the intellect, and *significata* need not correspond to things in the external world.[48]

As I see it, if there is no requirement for what is signified by a word to exist in the external world, we have no motivation for defining mental objects as *pragma*, and therefore no reason to introduce self-referential entities into our ontology.

By Convention (κατὰ συνθήκην)

In the preceding discussion, I compared the symbolization of an affection of the soul by a word to the creation of an artifact. This demands another look at what is meant by

[48] Noriega-Olmos, 126.

"convention." As we will see, this has some very interesting implications for how best to understand the phrase "by convention" in the context of Aristotle's theory of language. When the modern reader encounters the phrase, the immediate question that comes to mind is how many people it takes to establish such a convention. The mention of different peoples having different names for things also confuses the matter, as the modern reader assumes a modern definition more akin to a societal convention. However, the preceding discussion moves us further away from the modern conception of convention and toward a slightly different conception. This becomes apparent when we take into account the etymology of the term. This new definition puts the notion of agreement implied by the word "convention" at the level of things, as opposed to people. That is, what comes together and agrees, in the creation of linguistic signs, is not a group of people agreeing that this term should refer to that object, but the linguistic sign and what it signifies.

συνθήκην derives from συντίθημι, a verb comprised of τίθημι, meaning "to put" or "to place," and prefixed by συν-, meaning "with" or "together with," such that the compound indicates a putting or placing together. The problem that arises is a confusion of what it is we are placing together when we symbolize an affection of the soul by a word. The modern usage of "convention" (from the Latin verb "convenio") brings to mind an agreement between people, such that a first glance interpretation of Aristotle's theory of language would be that words become symbols when people agree that a particular word should symbolize a particular thing. However, a more natural construal of Aristotle's assertion that something becomes a name when it becomes a symbol is that it becomes a name when it is *put together with* its referent. This interpretation easily allows

for groups of people to use the same words to denote the same things (which, after all, is what allows for communication); the public dimension of language is, I speculate, a natural result of speakers attempting to communicate with one another most efficiently, i.e., by agreeing to use one term or another to denote a specific thing. But I argue that this is not what Aristotle has in mind when he speaks of the creation of linguistic signs by convention.

Intervention by an agent is required for the putting together of a name and its referent, and this is the difference between a natural theory of language and a conventional one. In short, the name and its referent are not naturally linked but must be put together by an agent.[49] This requires an agent capable of putting things together in an unnatural way (in the sense that they are not naturally together, as opposed to "unnatural" in the stronger sense of being contrary to nature). More specifically, what the agent does is to put together a linguistic sign with what it signifies, in such a way that a sound becomes a name.

This interpretation eliminates the question of how many people it takes to in order for there to exist a convention. For a name becomes a symbol when it is put together with a referent, and this requires only one agent capable of doing such a thing. The modern usage of "convention", on the other hand, would introduce an unnecessary difficulty into

[49] Noriega-Olmos would support my construal of convention to this point, though he does not go so far as to identify significant words as artifacts: "The common feature 'human consent', which is what strictly speaking defines convention and all kinds of convention, indicates that convention is a human choice, and that 'conventional' things are things caused by humans, so that convention, in the last analysis, is a form of 'human agency', and things that are conventional are a 'product of human agency'. As a matter of fact, among the Greeks the problem of what is by convention (συνθήκην / κατὰ συνθήκην) is inseparable from the problem of what is by nature (φύσει, κατὰ φύσιν), i.e. what is not produced by human intervention." Noriega-Olmos, 142.

Aristotle's theory of the development of language; for if the convention were between people and not between a name and its referent, Aristotle's notion of symbolization would become incomprehensible. Consider, for instance, the naming of an object, recalling that a name becomes a name when it becomes a symbol. If objects are named by convention in the modern sense (of agreement between people), then more than one individual would be required to name any object; that is, a name would be a symbol only when multiple people agree that a particular name is a symbol for a particular thing. I see no evidence that this is Aristotle's view. The idea that multiple agents are required to make a particular word meaningful can only mean that each agent provides some indispensable contribution to the process of naming that either individual alone cannot attend to. This in turn would mean that individual persons have different capabilities conducive to symbolization, which would have to work in tandem during the symbolizing process (if any name is to exist). I see no evidence of such a view in Aristotle's work. If we take into account Aristotle's comments that symbolization is by convention, then we can rightly exclude the interpretation that the convention is between people. The convention is rather between the name and its referent.

The associated meanings of "symbolization" and "convention" are also noted by Noriega-Olmos, though he does not (as I do in a previous section) identify convention as the cause of a symbolization (symbolization only "suggests" convention). He refers to the etymology of "symbol", a result of an agreement between persons. This footnoted passage in fact adds to his ultimate minimal definition of "convention" which requires, as

does mine, only the intervention of a human agent (as opposed to many) in whatever is to exist "by convention".

> Σύμβολον from the verb συμβάλλω, which means 'to throw together' or 'unite', is a *nomen rei actae* that originally meant 'something thrown together', 'something united' in reference to the two halves of an object (e.g. a ring or a seal) that were separated so that when brought together they could be used as recognition tokens of the identity of partners in a contract or treaty. This meaning strongly suggests convention because the two halves cannot be recognized as identifying the persons involved, unless there is a previous agreement that the possessors of each half are the contract partners.[50]

I prefer to maintain the associated word meanings of "convention" and "symbol" without carrying over the notion of a previous agreement between parties. That is, as something "thrown together", the symbol is a result of a convention, a "putting together", that is, the putting together of what is united (a name and its referent).

I conclude that the conventional aspect of language that allows for the expression of non-existing things reduces to an imposed agreement between a name and its referent, which Aristotle terms symbolization, and which is possible only if there exists an agent capable of putting together things which do not naturally occur together. Only one such agent is required.[51]

Conclusion

Since vocalizations are common to humans and animals, and there doesn't seem to be any definitive difference between human sounds and animal sounds, I conclude that the sounds themselves do not indicate any essential differentia that allows for a definition of a

[50] Noriega-Olmos, 55, footnote112.
[51] The function by which humans are capable of combining concepts [in the soul, so as to create concepts of fictional entities] is an interesting parallel which will be discussed in Chapter Three.

spoken language, i.e., language is more than sound. What defines language, on the other hand, is that words are not just significant but significant *by convention*; significance by convention defines spoken language as language (differentiated from sound). Hence the defining differentia, the form or actuality of language, is convention, though to communicate by significant composite sounds is natural. By identifying convention (the ability to "put together") as an ability of the soul allowing an agent to make particular sounds significant, non-existents may be expressed by language. The resulting definition of "non-existence" specifies that the referent of a subject term defined as non-existent has no present material embodiment that is its likeness and serves as its cause. Further, I interpret Aristotle's definition of the conventional aspect of language as reducible to the process of symbolization by which terms are put together with their referents.

These concerns will prove important when, in later chapters, I go on to interpret what Aristotle has to say about what it is true to say of things that don't exist. What it means not to exist, for Aristotle, has broad implications that will factor into what it is possible to say of fictional entities, things that no longer exist, or things that do not yet exist. "Not to exist" has the connotation that an "empty" term has no extramental material existence. But the fact that the term exists at all indicates that is a symbol of something. The term itself exists, and it signifies a content, which also exists. The content, however, has no "thing" of which it is a likeness, outside of the affection of the soul which the term signifies; and neither do the term or its content "exist" *as pragmata*—otherwise the goat stag would exist.

In the following chapter, I will examine two specific remarks Aristotle has made on non-existence and its relation to truth. Whereas commentators have noted the seeming incompatibility of Aristotle's remarks in the *Categories* and *De Interpretatione* with regard to whether we can infer the truth of a statement given the existence of that to which it refers, and vice versa, I dissolve this apparent contradiction.

Chapter Two: Truth and Existence in the *Categories* and *De Interpretatione*

In the previous chapter, I looked at Aristotle's theory of language, along the way explaining what it means for something to not exist, and how it is possible to speak of it. Now I turn to a very particular consequence of Aristotle's theory of truth with regard to what does not exist—that we may infer the truth value of a statement if we know that something does not exist, but we may not infer that something exists if we only have a true statement about it. I have not yet looked at why a statement is said, according to Aristotle, to have a truth-value, and why other sorts of combination (like the term 'goat stag') do not. This is a problem for Chapter 3, as it arises for fictional entities specifically—one particular sort of thing that does not exist. The problem I deal with here applies to things that don't exist more generally, and not fictional entities in particular. So for the moment we must take for granted what Aristotle says in *De Interpretatione* 1, that the term 'goat stag' has no truth value unless 'is' or something else is added; that is, that statements have a truth-value while terms do not. (The particular examples of things that don't exist referred to in this chapter—Socrates and Homer—are indeed less problematic than a combination term such as 'goat stag', as they are intuitively conceived of as unities—that a goat stag is also a unity still has to be argued.)

In this chapter I will offer a resolution to the apparent contradiction between *Categories* 13b26-36 and *De Interpretatione* 21a25-33. Whereas in the *Categories* Aristotle seems to rule out the possibility of a true affirmative statement whose subject term does not refer, the passage from *De Interpretatione* forbids inferring knowledge of

the existence of the subject from a true affirmative statement (e.g., "Homer is" from "Homer is a poet"). After considering previous attempts to attribute the difficulty to the so-called ambiguity of εἶναι (the existential and predicative uses), I determine that a better resolution to the apparent contradiction is achieved by recognizing the asymmetry of the relation Aristotle is expressing, i.e., that given non-existence we may attribute truth-values to certain declarative statements, but given truth-values we may not infer existence or inexistence.

My resolution suggests that when forming rules for logical consequence we must take into account the nature of the situation the logical claims intend to express; precisely that inferences relating claims asserting existence to claims asserting any other predicate present a unique problem for the formation of rules of logical inference. These scenarios present a foundational problem to any logical system intended to be context-invariant.

The Problem as it Stands

According to traditional interpretations[52], at *Categories* 13b26-36 Aristotle makes the claim that in order for an affirmation to be true, the referent of its subject term must exist. The passage in question reads:

[52] See, for instance, Wedin, M. "Aristotle on the Existential Import of Singular Sentences". This interpretation is required if the contradiction is to be a contradiction at all, as it has been many times interpreted. Ackrill notes in his commentary, "Does Aristotle maintain that the non-existence of the subject always makes an affirmative statement false and a negative one true, or does he have in mind only singular statements? How, in any case is this view to be reconciled with the contention at *De Interpretatione* 21a25-8 that 'Homer is a poet' does not entail 'Homer is'?" Ackrill, J.L. *Aristotle's Categories and De Interpretatione*", p. 111. Kirwan notes the passage from *De Interpretatione* as possibly inconsistent with that of the *Categories* in Kirwan, p. 118. Owen takes the *De Interpretatione* passage as primary, and therefore denies that Aristotle infers existence from true statements in G.E.L. Owen, "Aristotle on the Snares of Ontology", in *New Essays on Plato and Aristotle*, R. Bambrough ed., [Routledge and Kegan paul, London, 1965[.

> But with an affirmation and negation, whether something exists or doesn't exist, one will always be false and the other true. For take 'Socrates is sick' and 'Socrates is not sick': if he exists it is clear that one or the other of them will be true or false, and similarly if he does not; for if he does not exist 'he is sick' is false but 'he is not sick' true. Thus it would be distinctive of these alone—opposed affirmations and negations—that always one or the other of them is true or false.[53]

This passage suggests that should a subject term fail to refer, all affirmations concerning that subject will be false, but all denials will be true. This view both confirms and denies some of our basic intuitions. We would like to say that if Socrates does not exist, then anything said about him would not be true; for the predication is supposed to reflect reality, and you cannot affix a quality to a non-existent subject. This is what Aristotle seems to be saying in the case of affirmations. However, in the case of denials, Aristotle says rather that if something does not exist, then we may yet form a true statement concerning that something, namely if that statement is negative. This appeals to another of our intuitions: if Socrates is non-existent, he's definitely not sick. Assigning a truth value of "true" to this statement affirms that if something is non-existent, certainly whatever quality we attempt to apply to it will not hold; and if no quality holds of it, any particular quality will *not* hold (assuming that non-existent entities cannot have real qualities). When examining this passage, it is important to recall that "Socrates is sick" and "Socrates is not sick" are contradictories, which for Aristotle means that it is always the case that one is true and the other false. Aristotle intends, in this passage, to show that

[53] 13b27-36 ἐπὶ δέ γε τῆς καταφάσεως καὶ τῆς ἀποφάσεως ἀεί, ἐάν τε ᾖ ἐάν τε μὴ ᾖ, τὸ μὲν ἕτερον ἔσται ψεῦδος τὸ δὲ ἕτερον ἀληθές· τὸ γὰρ νοσεῖν Σωκράτη καὶ τὸ μὴ νοσεῖν Σωκράτη, ὄντος τε αὐτοῦ φανερὸν ὅτι τὸ ἕτερον αὐτῶν ἀληθὲς ἢ ψεῦδος, καὶ μὴ ὄντος ὁμοίως· τὸ μὲν γὰρ νοσεῖν μὴ ὄντος ψεῦδος, τὸ δὲ μὴ νοσεῖν ἀληθές· ὥστε ἐπὶ μόνων τούτων ἴδιον ἂν εἴη τὸ ἀεὶ θάτερον αὐτῶν ἀληθὲς ἢ ψεῦδος εἶναι, ὅσα ὡς κατάφασις καὶ ἀπόφασις ἀντίκειται.

this definition of contradiction applies even to non-existent subjects. These considerations lead to an interpretation of Aristotle as holding that, with respect to non-referring terms, only negations may be true, while affirmations never are.

In this passage from the *Categories*, it seems that Aristotle is claiming that in any true affirmation the subject term refers to an existing subject. However, a passage from *De Interpretatione* would seem to contradict the passage from the *Categories*, and to lead to a different interpretation of how Aristotle deals with non-referring terms. This passage reads:

> For example, Homer is something (say, a poet). Does it follow that he is, or not? No, for the 'is' is predicated accidentally of Homer; for it is because he is a poet, not in its own right, that the 'is' is predicated of Homer. Thus, where predicates both contain no contrariety if definitions are put instead of names and are predicated in their own right and not accidentally, in these cases it will be true to speak of the particular thing even without qualification.[54]

This passage seems to indicate that the truth value of "Homer is a poet" is not dependent on Homer's existence. Aristotle explains this by claiming that in this case the particular predicate "is a poet" is being applied accidentally to the subject term. Even so, if we take the above interpretation of the *Categories* to heart, it would seem that since "Homer is a poet" is an affirmation rather than a denial, the truth-value should exactly depend on his existence: if Homer does not exist, then "Homer is a poet" should be false. The particular example used in the *Categories* parallels in form that of the *De Interpretatione* exactly;

[54] 21a25-31. ὥσπερ Ὅμηρός ἐστί τι, οἷον ποιητής· ἆρ' οὖν καὶ ἔστιν, ἢ οὔ; κατὰ συμβεβηκὸς. γὰρ κατηγορεῖται τὸ ἔστιν τοῦ Ὁμήρου· ὅτι γὰρ ποιητής ἐστιν, ἀλλ' οὐ καθ' αὑτό, κατηγορεῖται κατὰ τοῦ Ὁμήρου τὸ ἔστιν. ὥστ' ἐν ὅσαις κατηγορίαις μήτε ἐναντιότης ἔνεστιν, ἐὰν λόγοι ἀντ' ὀνομάτων λέγωνται, καὶ καθ' αὑτὰ κατηγορῆται καὶ μὴ κατὰ συμβεβηκός, ἐπὶ τούτων τὸ τὶ καὶ ἁπλῶς ἀληθὲς ἔσται εἰπεῖν.

for "is sick" and "is not sick" seem also to be non-essential predicates where Socrates (who is, like Homer, an individual) is concerned.

Let's take a moment to see why this is so, for it requires a particular inference to be made from what is actually said. In the *Categories*, Aristotle is asking what can be derived from the true statement of the non-existence of an individual—i.e., given that a name does not refer, what are we to say about the truth-value of simple affirmations and denials in which this name is the subject term? In the *De Interpretatione*, Aristotle is asking what can be derived from a true predication—i.e., whether given a true predication, we can derive existence. The difference between these scenarios is the asymmetrical relation between existence and predication. The former passage states that, given non-existence, we can form true denials; the latter states that, given true assertions, we cannot infer existence. We might think these passages are dealing with distinct scenarios, if not for the seemingly essential relation between existence and affirmation that, while not explicitly stated, is easily derived from what Aristotle has to say in the *Categories*; namely that the existence of a referent for the subject term is a precondition of that affirmation's truth. For where the predicate is affirmed, Aristotle assigns truth only to affirmations where the referent of the subject term exists.

William Jacobs interprets these passages as not as contradictory as tradition might tell us.[55] Rather, he claims that if a subject term fails to refer, a predication will fail to be

[55] "Since an assertion, in order to be an assertion, must assert either that one thing belongs to one thing or that one thing does not belong to one thing, should the subject fail to refer, then there will not be anything to which we can assert the predicate belongs. In other words, should the subject of a sentence fail to refer, the sentence will be neither true nor false and hence will not be an assertion." William Jacobs "Aristotle and Nonreferring Subjects" *Phronesis*, 24, (1979) pp. 282-300, p. 286.

an assertion. Using this interpretation, he asserts that, concerning whether Homer is a poet or not,

> Rather than asking whether "Homer exists" follows from "Homer is a poet," this passage merely notes that because being a poet is an accident of Homer, "Homer is a poet" may be true or false.[56]

While Jacobs highlights here the importance of the type of predicate applied to Homer in asserting whether his existence follows, applying his interpretation of the passages in combination requires, as Scott Carson notes, that he take a very technical definition of how Aristotle uses the present participle of *einai* in the *Categories*, one that doesn't seem to be reflected anywhere else in the corpus.[57]

Still, we might find support for Jacobs' interpretation in the *Posterior Analytics*, where Aristotle restricts knowledge to existing entities. For instance, we may take the passage at 92b5-8 to say that it is impossible to make an affirmation about a subject whose existence has not been established. This passage reads:

> For it is necessary for anyone who knows what a man or anything else is to know too that it is (for of that which is not, no one knows what it is—you may know what the account or the name signifies when I say goatstag, but it is impossible to know what a goatstag is). [58]

And again at 93a20:

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[56] Jacobs, 289.

[57] "Jacobs appears to be claiming that Socrates' being what he is is part of the attendant circumstances that would make assertions of his sickness or wellness true or false. But this would require that the Greek word *ὤν*, the present participle of the verb "to be", have the technical meaning "essence"." Carson, Scott, "Aristotle on Existential Import and Nonreferring Subjects" *Synthese*, Vol. 124, No. 3 (Sep., 2000), pp. 343-360, p. 346.

[58] 92b5-8. ἀνάγκη γὰρ τὸν εἰδότα τὸ τί ἐστιν ἄνθρωπος ἢ ἄλλο ὁτιοῦν, εἰδέναι καὶ ὅτι ἔστιν (τὸ γὰρ μὴ ὂν οὐδεὶς οἶδεν ὅ τι ἐστίν, ἀλλὰ τί μὲν σημαίνει ὁ λόγος ἢ τὸ ὄνομα, ὅταν εἴπω τραγέλαφος, τί δ᾽ ἐστὶ τραγέλαφος ἀδύνατον εἰδέναι).

> … for it is impossible to know what a thing is if we are ignorant of whether it is.[59]

The trouble with taking these passages as evidence that Aristotle wants to exclude assertions concerning non-existent subjects from the class of affirmations is that the discussion revolves exclusively around the definition of the essence of a thing. While it may be true that it is impossible to define a thing that does not exist, presumably we may still make assertions[60] concerning the concept. For Aristotle, the term "goat stag" signifies something (τί σημαίνει), though nothing with an essence (for the simple reason that it does not exist). It seems I could make an obvious objection to the idea that no assertions can be made about a goat stag, if only I specify that my affirmations and negations are about the account (λόγος) of goat stag rather than its essence (τί ἐστὶ). The affirmation would, however, be excluded from what Aristotle defines as a definition (ὁρισμός). If only something with an essence can have a definition, then it would seem that properly applying an essential predicate (or, one might infer, a predicate essential to the subject) to a subject should indicate its existence. (A definition is distinguished from an account—the term 'goat stag' would have an account but no definition.) The difference between a definition and an account of the significance of a name (which we find in

[59] 93a20. ἀδύνατον γὰρ εἰδέναι τί ἐστιν, ἀγνοοῦντας εἰ ἔστιν. This raises an interesting question concerning things which we cannot be certain *continue* to exist—critically endangered species, the local businesses in our hometown, friends we haven't heard from in a while, etc. With these examples we have the certainty that they at some point *did* exist, and should we find that they no longer exist, assertions we made in the present tense become true only in the past tense (e.g., "Roxanne's Book Shop has friendly staff" becomes "Roxanne's Book Shop had friendly staff"). In both assertions we have had the experience necessary to ascertain the qualities of the subject about which we claim to have knowledge. In this chapter I focus on subjects that are either truly said to not exist or about which no claim of existence can be made; to demand we have continuous demonstration of a thing's existence is to limit our possible subjects to things which we are either currently perceiving or that are somehow outside of temporality. I don't think Aristotle would endorse this limitation.

[60] Assertions are differentiated from statements by the quality of having a truth value.

Posterior Analytics) seems to be exactly that the former applies to something existent and the latter does not.

> If therefore, the definer proves what a thing is or what its name signifies, then if a definition has nothing at all to do with what a thing is, it will be an account signifying the same as a name. But that is absurd.[61]

The question is now whether we can in any meaningful way make an affirmation with a subject term that does not refer, given that any such assertion would be excluded from defining its essence.

It is tempting also to take as evidence against Jacobs' interpretation Aristotle's seemingly straightforward explanation of assertions made using non-referring subject terms from the *De Interpretatione* at 16a11-18.

> For falsity and truth have to do with combination and separation. Thus names and verbs by themselves—for instance 'man' or 'white' when nothing further is added—are like the thoughts that are without combination and separation; for so far they are neither true nor false. A sign of this is that even 'goat stag' signifies something but not, as yet, anything true or false—unless 'is' or 'is not' is added (either simply or with reference to time).[62]

This passage serves to emphasize that the addition of a predicate to a subject term coincides with the statement as a whole acquiring a truth value. That is, according to Aristotle, a statement with a truth value is an assertion, whether the referent of the subject term exists or not, and it is the particular combination of subject term and predicate that decides the truth value. On Jacobs' account, since a statement with a non-referring subject

[61] *Post. An.* 92b26-28. Εἰ ἄρα ὁ ὁριζόμενος δείκνυσιν ἢ τί ἐστιν ἢ τί σημαίνει τοὔνομα, εἰ μὴ ἔστι μηδαμῶς τοῦ τί ἐστιν, εἴη ἂν ὁ ὁρισμὸς λόγος ὀνόματι τὸ αὐτὸ σημαίνων. ἀλλ᾽ ἄτοπον

[62] 16a11-18. περὶ γὰρ σύνθεσιν καὶ διαίρεσίν ἐστι τὸ ψεῦδός τε καὶ τὸ ἀληθές. τὰ μὲν οὖν ὀνόματα αὐτὰ καὶ τὰ ῥήματα ἔοικε τῷ ἄνευ συνθέσεως καὶ διαιρέσεως νοήματι, οἷον τὸ ἄνθρωπος ἢ λευκόν, ὅταν μὴ προστεθῇ τι· οὔτε γὰρ ψεῦδος οὔτε ἀληθές πω. σημεῖον δ᾽ ἐστὶ τοῦδε· καὶ γὰρ ὁ τραγέλαφος σημαίνει μέν τι, οὔπω δὲ ἀληθὲς ἢ ψεῦδος, ἐὰν μὴ τὸ εἶναι ἢ μὴ εἶναι προστεθῇ ἢ ἁπλῶς ἢ κατὰ χρόνον.

term would fail to be an assertion, the statement "a goat stag is" should not be an assertion.

We might argue that *De Int.* 16a11-18 refers only to statements of the existence of non-referring subjects. On the other hand, if the phrase is construed as predicating existence of the subject, then the same problems apply. We might again call upon Aristotle's explanation of why "Homer is a poet" does not predicate existence, and turn again to the distinction between accidental and essential predication. The *Posterior Analytics* seems again to enlighten us concerning the accidental predication of existence within some other affirmation. In differentiating between nominal and causal definitions, Aristotle describes the difficulty in moving from one to the other based on the accidental predication of existence in nominal definition:

> Since a definition is said to be an account of what a thing is, it is evident that one type will be an account of what the name, or a different name-like account, signifies—e.g. what triangle signifies. And when we grasp that this is, we see why it is; but it is difficult to grasp in this way why a thing is if we do not know that it is. The explanation of the difficulty has been stated already—that we do not even know whether it is or not, except accidentally.[63]

In this passage Aristotle again makes a statement concerning the relation between accidental predication and existence; specifically, that even if we know what a name signifies, if the assertion stating what a name signifies only predicates existence accidentally, then existence is not assured. The last part of this quotation mirrors the view of the *De Interpretatione* passage in that existence is only predicated accidentally; but

[63] 92b29-35. Ὁρισμὸς δ᾽ ἐπειδὴ λέγεται εἶναι λόγος τοῦ τί ἐστι, φανερὸν ὅτι ὁ μέν τις ἔσται λόγος τοῦ τί σημαίνει τὸ ὄνομα ἢ λόγος ἕτερος ὀνοματώδης, οἷον τί σημαίνει [τί ἐστι] τρίγωνον. ὅπερ ἔχοντες ὅτι ἔστι, ζητοῦμεν διὰ τί ἔστιν· χαλεπὸν δ᾽ οὕτως ἐστὶ λαβεῖν ἃ μὴ ἴσμεν ὅτι ἔστιν. ἡ δ᾽ αἰτία εἴρηται πρότερον τῆς χαλεπότητος, ὅτι οὐδ᾽ εἰ ἔστιν ἢ μὴ ἴσμεν, ἀλλ᾽ ἢ κατὰ συμβεβηκός.

here it seems clearer that it is the mode of predication rather than the predicate that determines whether existence can be inferred.

The difference between accidental and essential predication will be important in determining whether there is a difference between particular affirmations concerning non-existent subjects; that is, between affirmations that attribute existence and affirmations that predicate something else. That is, it must be determined whether existence is predicated essentially in the phrase "a goat stag is" and accidentally in the phrase "a goat stag is a hoofed animal". If the type of predication depends not on the form of the affirmation but on the predicate itself, existence is predicated no more essentially in the former case than in the latter, as existence is not an essential predicate for anything. That is, if we take the definition of what a thing is as the genus and final differentia, and a definition is supposed to describe the essence of a thing, there seems to be no room for "existing" as part of a definition. Therefore, while we may take existence to be a necessary condition for definition, it adds nothing to a definition and does not itself describe anything's essence.[64]

There is good evidence to suggest that Aristotle did not distinguish between predicating existence alone and predicating anything else in *Metaphysics* V.7. In this chapter, he gives four possible senses of being, none of which are meant to distinguish

[64] Here I follow Scott Carson, where he states, "First, Aristotle would not have regarded existence as a property of any sort, let alone of an essential sort. An essential property is what makes a thing what it is, but existence is common to everything and does not count as a principle of differentiation." Carson "Aristotle on Existential Import and Nonreferring Subjects", p. 354. Existence for Aristotle is rather an activity, "Socrates is" would be an assertion of the same form as "Man runs". If we were to predicate existence in the manner of a property, it would take an analogous form to a statement such as "Man is a running thing"; existence is, however, a special case, for we are ascribing not only the potential to engage in an activity but a constantly actualized activity.

existence from any other predicate (as, for the purpose of this argument, anything more essential). Again, existence is stated to be a prerequisite for possible true affirmations:

> Thus when one thing is said in an accidental sense to be another, this is either because both belong to the same thing, and this *is*, or because that to which the attribute belongs *is*, or because the subject which has as an attribute that of which it is itself predicated, itself *is*.[65]

Charles Kahn, in a detailed study of how the verb *einai* is used in Greek texts, cites *Metaphysics* V.7 as evidence that the most fundamental use of the verb 'to be' without predicates is not to denote existence at all, but rather to denote that something is true or is the case.[66] In a later work on the same subject, Kahn seems to implicitly prefer the converse of the traditional interpretation of the passage from the *Categories*. Kahn's interpretation seems to me to be clearly preferable and better supported by the text. On this interpretation, rather than extracting existence from predication, Aristotle stresses that existence is not simple but that 'to be' is already to be *something*.[67]

A Reformulation

Most of the preceding considerations surrounding the connection between non-existence and truth for Aristotle have depended upon our formulating the problem as one of being able to infer existence from predication, e.g., "Homer is" from "Homer is a poet". Given that this is exactly what the *De Interpretatione* seems to forbid, it makes sense that this is

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[65] 1017a20-3. τὰ μὲν οὖν κατὰ συμβεβηκὸς εἶναι λεγόμενα οὕτω λέγεται ἢ διότι τῷ αὐτῷ ὄντι ἄμφω ὑπάρχει, ἢ ὅτι ὄντι ἐκείνῳ ὑπάρχει, ἢ ὅτι αὐτὸ ἔστιν ᾧ ὑπάρχει οὗ αὐτὸ κατηγορεῖται·

[66] "These remarks are intended to render plausible my claim that, for the philosophical usage of the verb, the most fundamental value of *einai* when used alone (without predicates) is not "to exist" but "to be so", "to be the case" or "to be true"." [250] Kahn, Charles, "The Greek Verb 'To Be' and the Concept of Being" *Foundations of Language*, Vol. 2, No. 3 (Aug., 1966), pp. 245-265

[67] "In their [Plato and Aristotle's] view *to be* is always to be a definite kind of thing." Kahn, Charles, "The Verb 'to be' and the Concept of Being" in *The Logic of Being*, S. Knuuttila and J. Hintikka eds, D. Reidel Publishing, Dordrecht, 1986, p. 22.

often used as the starting point for discussions of existence and truth in the literature on Aristotle.[68] However, a simple restatement of the problem makes this formulation and Aristotle's statements in *Categories* only apparently contradictory. The two texts rather warn us against committing two independent mistakes when attempting to relate existence and truth. What Aristotle does in the *Categories* is to assert that, *irrespective of whether the subject of a predication exists or not*, for any affirmation and corresponding denial one will be true and the other false; whereas in the *De Interpretatione* he seems to be concerned with the possibility of inferring existence based on a true affirmation. That is, where in the *De Interpretatione* Aristotle does seem to limit our ability to extract a true statement about existence from a predication, the *Categories* describes the converse situation, where existence or inexistence of a subject is given and what we may then truly predicate of it is limited.

Borrowing a symbolization from Michael Wedin, the situation we are facing given *Categories* b27-33 is that Aristotle implies that given an affirmation, existence is implied. That is, precisely, that

$Fa \supset (\exists x)(x=a)$[69]

However, this interpretation of the passage seems rather far from how the passage reads. The symbolization as given does seem to directly contradict the passage from *De Interpretatione*; however, reading the passage and symbolizing directly, this formula does

[68] See, for instance, Russell Dancy, "Aristotle and Existence" in *The Logic of Being*, Knuuttila and Hintikka eds., D. Reidel Publishing, Dordrecht, 1986, p. 57; David Charles, "Aristotle on Names and their Signification" in *Companions to Ancient Thought 3: Language*, Cambridge University Press, Cambridge, 1994, p. 54; and Michael Wedin, "Aristotle on the Existential Import of Singular Sentences", p. 179.
[69] Here I preserve Wedin's notation for consistency, p. 179.

not accurately reflect what Aristotle actually says in the *Categories*. Once again, the passage Wedin takes himself to be symbolizing reads[70]:

> But with an affirmation and negation one will always be false and the other true whether something exists or not. For take 'Socrates is sick' and 'Socrates is not sick': if he exists it is clear that one or the other of them will be true or false, and equally if he does not; for if he does not exist 'he is sick' is false but 'he is not sick' true.

The first sentence is simply a statement that for any corresponding affirmation and denial, one will be true and the other false, with the qualification that this rule applies to both existent and non-existent entities. The second sentence only seems to reaffirm that idea. This passage (I propose) is best interpreted precisely as a pair of rules of inference whose conditions present us with a dilemma scenario of both existence and inexistence, and whose consequents lead us to accept that in any state of existence, the rule applies. Since Aristotle is here defining the condition for placing truth values on statements, the passage is best represented by a metalinguistic translation. That is, precisely:

> For any name ν, if the subject to which ν refers exists, then for any predicate φ, either φ_ν is true and $\sim\varphi_\nu$ is false, or φ_ν is false and $\sim\varphi_\nu$ is true.

and

> For any name ν, if the subject to which ν refers does not exist, then for any predicate φ, either φ_ν is true and $\sim\varphi_\nu$ is false, or φ_ν is false and $\sim\varphi_\nu$ is true.

What Aristotle does next is to explain how, despite the impossibility of being able to construct a true affirmation about a non-existent subject, this "one true and one false" rule applying to corresponding affirmations and denials holds; for the other disjunct (that is,

[70] Wedin translates this passage as: "… with an affirmation and negation one will always be false and the other true, whether he exists or not. For take "Socrates is sick" and "Socrates is not sick;" if he exists it is clear that one or the other of them will be true or false, and equally if he does not; for if he does not exist "he is sick" is false but "he is not sick" true." Wedin, 179. The difference in translation does not have an immediate effect on the symbolization.

the negation) is true. For this Aristotle depends on our being able to correctly infer negations from statements of inexistence, or:

> For any name ν, if the subject to which ν refers does not exist, then for any predicate φ, φ_ν is false and $\sim\varphi_\nu$ is true.

The problem we run into when attempting to symbolize this claim is that it is the very rule that Aristotle is here arguing for that would allow us to render a denial and a false affirmation as logically equivalent claims; our modern conventions of symbolization render them equivalent, though here we might be looking at an instance of a more general problem—that is, symbolizing the claims made by ancient philosophers in a way compatible with our modern conventions. With modern logic, we are only able to symbolically represent the falsity of an affirmation (It is not true that Socrates is sick) as equivalent to a denial (Socrates is not sick) if we assume that for any corresponding affirmation and denial one is true and the other false. If we attempt to take an instance of the claim expressed above in the metalanguage, and symbolize only what Aristotle states to be true, we may yet only claim to derive the contrapositive of how Wedin symbolizes what he sees to be the claim of the passage in the *Categories*:

$\sim(\exists x)(x=a) \supset \sim Fa$[71]

[71] If we also wanted to account for the statement that Aristotle takes to be false, we must take the "one true, one false" principle for affirmations and denials as an assumption. In this way we would end up with a redundant element in our symbolization, due to the equivalence between "It is false that Socrates is sick" and "Socrates is not sick", both of these elements being symbolized nowadays as ~Fa. If we take this equivalence as an assumption, the proper instantiation would be $\sim(\exists x)(x=a) \supset (\sim Fa \& \sim Fa)$. For sources supporting the equivalence of the metalinguistic assertion "Fa is false" and the symbolic "~Fa", see Irving M. Copi and Carl Cohen, *Introduction to Logic*, 12 ed. [Pearson: New Jersey; 2005], p. 312 and Richard T. W. Arthur, *Natural Deduction*, [Broadview: Peterborough; 2011], p. 61. Graeme Forbes uses the negation symbol to represent both an affirmation including a "not" and an affirmation prefaced by "it is not the case that"; he states additionally that "the effect of prefixing 'it is not the case that' to a sentence is to *reverse* that sentence's truth-value. This fact exactly captures the meaning of 'it is not the case that', at least as far

The error that previous authors seem to have made is to eliminate one of the disjuncts prior to stating Aristotle's assertions in their full complexity. If in fact we did symbolize what Aristotle claims in the *Categories*, we would have to take an instance of the principle in its entirety, and that is that whether something exists or not, for any affirmation and denial where that something is the subject one is true and the other false. We would then end up with the very cumbersome statement:

$[(\exists x)(x=a) \vee \sim(\exists x)(x=a)] \supset [(Fa \,\&\sim\sim Fa) \vee (\sim\sim Fa \,\& Fa)]$

This monstrous statement looks absurd to the modern logician, for the reason that it is a tautology that something either exists or not, and because it is redundant to claim that something is true as well as being not false. But this is what Aristotle is claiming. So it seems we can either reject the contradiction based on the impossibility of applying modern logical rules to ancient statements, or at the very least we can conclude that whatever is stated in the *Categories* that contemporary authors claim is contradictory to the *De Interpretatione* is only a supporting claim to Aristotle's main point that becomes so weird when stated symbolically; that the one true and one false principle of corresponding affirmations and denials applies to both existent and non-existent subjects. The truth of statements of the form $\sim(\exists x)(x=a) \supset \sim Fa$ serves only to support that. Further, I want to claim that to assume that this is the contraposition of the claim denied in the *De Interpretatione* is to misidentify the point of that passage as well. That is, I intend to show that the *De Interpretatione* does not deny that $Fa \supset (\exists x)(x=a)$.

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as logic is concerned, and we want to define our symbol '~' so that it has this meaning." Graeme Forbes, *Modern Logic*, [Oxford University Press: New York; 1994], p. 46.

In any case, the contraposed statement whereby Aristotle would allow us to infer existence from predication is not the immediate point of the passage from the *Categories*. Aside from having to apply the intermediate steps of contraposition and double negation to get from $\sim(\exists x)(x=a) \supset \sim Fa$ to $Fa \supset (\exists x)(x=a)$ (in order to render the passages contradictory), $Fa \supset (\exists x)(x=a)$ does not seem to be what is denied in the *De Interpretatione*. While Aristotle does not explicitly deny the possibility of contraposing the conditional, he implicitly limits us from doing so based on the type of predication involved in the statement of Fa and whether it is essential or accidental. With an accidental predication, we are not given that $Fa \supset (\exists x)(x=a)$; what Aristotle warns us against is simplifying an accidental predication (Fa stated alone), where the "is" is included in a statement such as "is a poet", to form a derivative statement of existence.

Accidental Predicates and Accidental Predication

Inferring sentences such as "Socrates is not sick" from statements concerning Socrates' non-existence is not the main message of the passage from the *Categories*. However, Aristotle does in fact require this conclusion as support for the claim that the "one true and one false" principle for corresponding affirmations and negations holds in cases where the subject term does not refer. Therefore we must examine this supporting claim and what previous commentators have seen as Aristotle's denial of the transposed form of its exemplification in the *De Interpretatione*. The reasoning that Aristotle seems to provide us with for this denial is apparent in his claim that in the phrase 'Homer is a poet' the 'is' is predicated accidentally of Homer.

Dancy, while denying that the passages contradict each other and making an important point concerning the nature of the 'is' in the predication "Homer is a poet", locates the accident in 'is' in the nature of the predicate itself. On this line of reasoning, Aristotle is not denying that "Homer is" follows from "Homer is a poet", but is only asserting that it does not follow by simplifying (or truncating) the predication. On this point, I completely agree. However, Dancy goes on to make the claim that if the phrase were instead to include some essential predicate of Homer's, then the same truncation would be possible.

> The second reason for avoiding making Aristotle deny the entailment is that there is a very simple argument in favor of it, based in part on the *De int.* passage itself. Homer is a poet. But poets are, after all, human; so they are men. So Homer is a man. But there the 'is' is a καθ' αὑτό 'is', and we can simplify. So Homer is.[72]

But this will not do. Earlier in the work, Dancy accuses modern philosophers of language of focusing all of the ambiguity of a phrase on a single word, particularly the 'is'.[73] It is exactly this 'is' which seems to be the problem for Aristotle, and I would disagree with Dancy's theory that the difference is one of the particular predicate tacked on to "Homer is"; that is, the 'is' in "Homer is a man" is applied in virtue of itself no more than it is in the "Homer is a poet". Again, the 'is' is supplied in virtue of the essential predicate.

There does seem to be some sense behind assuming existence based on attributing an essential predicate to a subject, and this seems to be based on Aristotle's restricting our attributing an essence to something existing. Therefore, it would seem that if something

[72] Dancy, p. 67.
[73] Dancy calls this the 'fallacy of the magnifying glass'. He later concedes much to locating the ambiguity of the phrase on the word 'is' in his ultimate interpretation.

essential is truly predicated, this should guarantee the existence of the subject. However, it has been questioned whether applying essential predicates to a subject might guarantee its existence (specifically those predicates supplying a nominal definition[74]). In any case, my contention is that it is not the particular predicate that introduces ambiguity into the copulative 'is', but rather the *mode* of predication.

On my interpretation, we can trace the difficulty to the word 'is'; however, this feature of introducing ambiguity is not peculiar to the word 'is' alone, but functions as with any other word that may be used either independently or dependently (modifying some other predicate)[75]. Rather than point to the difference in predicates applied to Homer, I would maintain that the syntactic parallel between the predication of an essence in "Homer is a man" and the predication of an accident in "Homer is a poet" causes the 'is' in *both* phrases to be applied accidentally. The situation parallels that which Arisotle introduces earlier in the *De Interpretatione*, in discussing the good cobbler (on this point I follow Wedin exactly). Aristotle states that while someone may be good and a cobbler, it does not follow that they are a good cobbler.[76] This is because the 'good' in the phrase "X

[74] Demoss and Devereux point to 72a18-24 and 76a32-6 in support of the idea that a definition does not assure the existence of the thing defined. David Demoss and Daniel Deveareux, "Essence, Existence, and Nominal Definition in Aristotle's Posterior Analytics II 8-10" in *Phronesis*, 1988 vol. XXXIII/2, p. 142. Bolton suggests that 92b5-8 has led interpreters to deny that nominal definitions have existential import. Robert Bolton, "Essentialism and Semantic Theory in Aristotle: Posterior Analytics, II, 7-10" in *The Philosophical Review*, LXXXV, 4 (October 1976), p. 522.

[75] We might note a difference between these two examples: where the "good" in the phrase "good cobbler" has a difference in meaning to "good" simpliciter, the "is" in "is a poet" seems to be closer in meaning to an "is" said of itself, as both indicate something's being. The "good" in the phrase "good cobbler" specifies what kind of cobbler someone happens to be; if someone "is a poet" therefore, perhaps the "is" specifies what kind of poet they are—precisely, an existing one. But this would mean that existence is a property of the same sort as "good", which I have claimed Aristotle denies. The point I'm making is not that words with dependent meanings help us to identify kinds, but only that their independent meaning cannot be assumed when the word is being used for some other purpose—in the case of "Homer is a poet", to connect the subject and predicate.

[76] 20b35-6.

is a good cobbler", rather than specifying a predicate independent of and in addition to 'cobbler', instead serves as a modifier to 'cobbler'.[77] On my interpretation, the 'is' in "Homer is a poet" functions in much the same way, and so we can no more infer that "Homer is" given that "Homer is a poet" than we could infer the singular statement "Homer is good" were he a good cobbler.[78] In short, rather than applying some special ambiguity to the word 'is', Aristotle has previously recognized the difference in usages of particular words as dependent or independent and warns us against haphazardly switching between them. This seems to be the point of *De Interpretatione* 21a25-8.

In short, the 'is' that indicates 'is a poet' is predicated accidentally of Homer; there is a difference between predicating an accidental property of Homer and predicating accidentally some (any) property of Homer. This is not a difference in the particular predicate, but in whether the 'is' is essentially or derivatively predicated—that is, either as the predicate of a singular statement or as dependent on some other predicate. This interpretation has the advantage of being consistent with the difference between accidental and essential predication as Aristotle describes it in *Metaphysics* V.7. Here Aristotle's distinction between καθ' αὑτό and κατὰ συμβεβηκός predication does not rely on the difference in the particular predicate, but rather on how and to what type of subject a predicate is applied. Those things said to be in their own right are applicable directly to the subject term, and things said to be in an accidental sense are attributed not to the

[77] This example, wherein one term could be used independently or as a modifier should be contrasted with other examples where both predicates may be applied to the subject as two distinct singular statements, e.g., "Socrates is a white man".

[78] Consider also the case where the copulative 'is' is left unstated. In this case "Homer is a poet" would correspond to "Homer good cobbler". While the derivative predicates may not be taken alone, those predicated essentially may be. In the former example, Homer is a poet, whether an existing one or not; in the latter, he is a cobbler, whether he is good (in an absolute sense) or not.

subject but to one of its attributes[79]. This is the reason why Wedin rephrases "accidental predication" as derivative predication.[80] While 'being a poet' is an accidental attribute of Homer, in the phrase "Homer is a poet" it is not predicated accidentally but in its own right. It is only existence, or the 'is', that is predicated accidentally, or derivatively. This type of predication is likened to no predication at all in the *Posterior Analytics*, where Aristotle states that such predications are useless for demonstration and then chooses to focus on more illuminating predications, including those with accidental predicates (predicated non-accidentally).[81]

So it is the difference between predicating accidentally and predicating an accidental attribute that saves Aristotle's claim that a predication does not entail existence. Yet the transposed statement—namely, that inexistence entails the impossibility of forming a true affirmation—remains valid, for in those types of statement there is no difference in the way existence or any other predicate is applied. That is, while the simplification from "Homer is a poet" to "Homer is" is denied, the expansion from "Homer is not" to "Homer is not x" may be conducted without restraint. The relation is asymmetrical; for in the former situation what Aristotle is claiming is not $\sim[Fa \supset (\exists x)(x=a)]$, but that Fa is not a compound claim of existence and predication, such as would be subject to a valid simplification. It is itself simple.

[79] An example of accidental predication would be "The musical thing is white".
[80] Wedin, 182
[81] See *Posterior Analytics*, I.22 83a15-24.

Justifying the Asymmetrical Relation

If in fact Aristotle intended to describe to us an asymmetrical relation between truth and existence, then there should be some reason why we cannot transpose the conditional that tells us that if something does not exist, all affirmations where that thing is the subject are false. Alternatively, we would have to assume that the problem is the result of an oversight on Aristotle's part. This latter option seems like an interpretive path that is too easy to follow, and we should make every attempt to account for the reasoning behind such little oddities as that with which I have been dealing before giving up and blaming Aristotle.

At this point then I will assume that, despite the different motivations behind these two passages, there is yet some dissonance between them, regardless of the contextual differences to which I have ascribed the apparent contradiction. This dissonance results from our automatic cognition of the conditional statement from the *Categories* as two conditionals. Now we might at this point want to look at how Aristotle's logic tells us conditional statements function as a part of an argument, and what can be inferred from them; but *there are no conditionals* in Aristotle's logic. And the fact that there are no conditionals in Aristotle's logic is also not the result of some naivety on his part, for he dismisses them as possible premises explicitly and, it seems to me, with good reason.[82]

In the *Prior Analytics* Aristotle dismisses outright the hypothetical syllogism, discounting it as a syllogism; for, as he reasons, something necessary follows from the

[82] Many thanks to David Ebrey for the ideas inspired by his presentation "Why are there no conditionals in Aristotle's logic?" at the Marquette Summer Seminar in Aristotle and Aristotelianism, June 20, 2012.

conditional premises, but the class of things that are necessary is larger than that of syllogisms. Thus he states:

> We are misled in cases like these by the fact that something necessary results from what is supposed, because a syllogism is also necessary. But 'necessary' is more extensive than 'syllogism': for every syllogism is necessary, but not everything necessary is a syllogism.[83]

It seems here that Aristotle takes a harsher line with the use of conditional statements than does modern logic, where we often see universal statements expressed in the form of conditionals. As conditionals, however, the problem is that the relation between the antecedent and consequent in a conditional statement is unspecified, and that if the relation were specified, the conditional would be translatable into (for Aristotle) a proper categorical statement suitable for use in a syllogism. Aristotle uses conditionals in both of the passages under discussion, and the unspecified relation is that between existence and truth-values.

Now our concerns become many: for we must ask immediately if we can legitimately conclude something necessary, even if Aristotle did not think it resulted as the conclusion of a syllogism; we must ask whether these conditionals can be reformed into proper categorical statements and whether the contradiction is resolved; and what is missing from these statements that Aristotle left out by expressing them as conditionals. In order to avoid being misled, Aristotle asks that we decompose our statements into terms. The categories implied by the problem as I have been discussing it are "non-existent subjects" and "true affirmative statements". Expressed as a categorical statement

[83] 47a32-5. Ἀπατώμεθα δ᾽ ἐν τοῖς τοιούτοις διὰ τὸ ἀναγκαῖόν τι συμβαίνειν ἐκ τῶν κειμένων, ὅτι καὶ ὁ συλλογισμὸς ἀναγκαῖόν ἐστιν. ἐπὶ πλέον δὲ τὸ ἀναγκαῖον ἢ ὁ συλλογισμός

in the modern way, the problem as interpreted by the tradition would need to be reformulated as, "Nothing that does not exist is the referent of the subject term of a true affirmative statement"[84]. According to Aristotle's rules of conversion, this is a convertible statement. It converts to "No referent of the subject term of a true affirmative statement does not exist", which is what Aristotle is claiming in the *De Interpretatione* to be an invalid inference. Another valid reformulation would be, "If Socrates does not exist, 'Socrates is sick' is false and 'Socrates is not sick' is true." The most straightforward generalization of this reformulation would be two conjoined universal statements: "Every singular affirmation whose subject-term refers to something that does not exist is false" and "Every singular denial whose subject-term refers to something that does not exist is true". More work is required to get out of these categorical statements what the *De Interpretatione* denies (that Homer may not exist even though he *is* a poet).

Now we might point out that Aristotle's examples are not universal statements, for his examples are particulars (though we may extract universal statements from them by assuming our terms are infinitely substitutable). Particular statements do not convert in the same way, and are similarly asymmetrical depending on whether the statement is affirmative or negative (for if some X are Y, some Y are X; but if some X are not Y we cannot infer that some Y are or are not X). This to me seems like it would be a very interesting way of dealing with things, but I think the more correct way is just to recognize that particular examples give us what Aristotle wants us to pick out in the first

[84] Other reformulations are defensible.

place (to avoid being misled)—and that is a middle term. Instead of reforming conditionals as statements, we must reform them as syllogisms.

The syllogisms we would need would take as premises just what Aristotle wrote in the *Categories* and *De Interpretatione*. For instance, if we are given a true statement about whether something exists or does not, we can infer a multiplicity of true statements—we can infer that if (P) Socrates does not exist, it is true that (C1) he is not sick, (C2) nor is he well,[85] (C3) nor is he a wallaby. But when we are given no assurance of existence, we cannot infer anything beyond what we are given—(P) Homer is a poet, and that's all. If Homer is a poet, it does *not* follow that he is. What we can note, however, is that from this Aristotle concludes that we may speak of *particular* things without qualification. This will become important when we move away from these two particular non-existing individuals to speak of non-existing universals in the next chapter (particularly, a non-existent species).

Perhaps the only certain relation we may extract is that the dependence relation between truth and existence is one-way: truth-values depend on existence, and not the other way around. The conclusions we form from the conditional statements as given cannot be part of a syllogism because they lack the causal connection between premises

[85] Things that do not exist, unlike things that do, are not subject to the same rule of contraries, that one must hold if the other does not, Aristotle affirms in the *Categories* 13b12-35, e.g., for an existing subject, one of "Socrates is ill" or "Socrates is well" must hold, as must one of "Socrates is not ill" and "Socrates is not well". However, if he does not exist, both contraries do *not* hold: "Socrates is not ill" and "Socrates is not well" are both true.

and conclusion that defines a syllogism.[86] As Aristotle states in the *Sophistical Refutations*,

> For the conclusion ought to come about because these things are so, and this does not happen where the premises are not causes of it.[87]

And also in the *Prior Analytics*:

> I mean "by these things being so" that it results because of these.[88]

Therefore in the construction of a proper syllogism, if we are to use either truth or existence as a premise, it would have to be a cause of the conclusion.[89] We can do this when we have existence as a premise, but we cannot if we only have truth. To reverse the situation would be to confuse the priority of existence to truth. This missing premise would be an excellent reason why Aristotle might express an asymmetry in the treatment of statements about non-existent subjects.

Conclusion

I have argued that the thesis to which commentators have claimed Aristotle is committed based on the *Categories* 13b26-36—that is, that given a true predication, existence is assured—is neither the main point of the passage nor stated in such a way as to directly contradict what Aristotle later says at *De Interpretatione* 21a25-33. Rather, where in the *Categories* Aristotle presents us with an argument as to how, given corresponding affirmations and negations, the principle that it is always the case that one is true and the

[86] These references were pointed out by David Ebrey in his treatment of conditional statements in general, which I here apply to the specific so-called contradictory conditionals.
[87] 168b22-4. δεῖ γὰρ τὸ συμπέρασμα "τῷ ταῦτ' εἶναι" συμβαίνειν, ὅπερ οὐκ ἦν ἐν τοῖς ἀναιτίοις
[88] 24b20-21. λέγω δὲ τῶι ταῦτα εἶναι τὸ διὰ ταῦτα συμβαίνειν
[89] How exactly something is a cause of something else is a topic of much discussion, especially with Aristotle's expanded notion of causality as compared to our modern notions.

other false applies equally well to sentences with existent or non-existent subjects, the *De Interpretatione* provides us with a restriction on simplifying already simple statements. Even if we attempt to reform these conditional statements into proper categorical form, no direct contradiction can be found, though it becomes clearer that the asymmetrical relation of truth to existence is the result of a unidirectional dependence relation whereby truth depends on existence but not existence on truth.

This conclusion is a direct statement of a sort of correspondence theory of truth (that is, an Aristotelian sort). What "correspondence theory" means is a broader concern reserved for Chapter 4.

Chapter Three: Fictional Entities: Truth as a Function of Combination and Homonymy

This chapter looks at one particular type of thing that doesn't exist, the fictional. The most common example cited by commentators as Aristotle's example of something that does not exist is the goat stag. This is a complex concept constituted by thought, combining the features of a goat and a stag. The trouble arises for contemporary commentators, I shall argue, when they start to mix up the type of combination required for something to have a truth-value and the kind of combination the goat stag is—a complex concept. These commentators often explain Aristotle's views on non-existent things and the possibility of making statements about them with reference only to the goat stag, However, their interpretations are skewed by the idea that a goat stag is a combination in thought and therefore (according to some conceptions) a possible truth-bearer. For example, Paolo Crivelli's interpretation of Aristotle's views on empty terms (a subject of Chapter Six) treats empty terms as a combination of the same sort as the combination of "horse and man" referred to by the name "cloak"—but this is not the same sort of combination.[90] Noriega-Olmos' interpretation of the goat stag claims it is problematic because of its nominal definition, which he claims is dependent on the absurd claim that there exist some such thing as a half-goat, as well as a half-stag, each themselves bits of matter, which must combine.[91] But again this is the wrong sort of combination.

[90] Crivelli, 174. I will go into depth about the problems with this conception in Chapter 6.
[91] Noriega-Olmos, 72.

This chapter will serve the very important purpose of explaining what kind of combination the goat stag is, how it is thought, and what relation that thought has to a declarative statement where that thought is the referent of the subject term. This requires a more general description of complex concepts, and a careful consideration of what sort of combination it is that has a truth-value, according to Aristotle. It might seem (as Scott Carson claims[92]) that a combination of concepts not corresponding to a combination of things would give rise to a false subject term, in that the term itself refers to a combination of concepts that has no extramental correlate (such as the goat stag). However, the same term, referring to the combination of concepts that is a goat stag, is stated in the *De Interpretatione* to have no truth value unless some predicate is added. (The combination of subject and verb is, for this reason, stated to be the shortest form of discourse in Plato's *Sophist*; whereas strings of nouns do not qualify, for they have no truth-value). The possibility of true and false singular terms also arises in the *Cratylus* as the premise for a naturalistic theory of word meaning. I will use these discussions to distinguish between combinations giving rise to a fictional entity and those having a truth-value. On my interpretation of Aristotle, *how* combinations are formed is relevant in determining whether we need to attribute a truth-value to them; a combination such as "goat stag" has no truth value in itself, whereas a combination such as "man runs" does. The difference is in the kinds of things combined and the relation between these things. In a truth-evaluable statement, the terms are related in such a way as to describe a relation holding between the subject and predicate (an "interweaving"). There is a particular sort

[92] See Carson, "Aristotle on Existential Import and Nonreferring Subjects".

of combination that does this: the combination that is required for something to have a truth-value is dependent on a particular relation between a name and a verb, such that something is said of (λέγεται) something, something belongs to (ὑπάρχει) something, or something is predicated of (κατηγορεῖται) something. This is Aristotle's definition of a proposition[93] in *Prior Analytics* I.1.

The problem can be summarized as that of locating where falsehood is introduced. For Aristotle, can an inexistent object itself be described as false (as Crivelli claims in *Aristotle on Truth*, based on the passage cited below)? Or is falsehood introduced only when we attempt to predicate anything of a subject term whose referent does not exist? Aristotle seems to make contradictory claims on the subject of whether a thing itself can be described as false. In the *Metaphysics* Aristotle describes a thing (πρᾶγμα) as false if it is a combination that does not or cannot exist. The following passage in the *Metaphysics* seems to indicate how Aristotle might think that a thing itself can be a bearer of truth:[94]

> We call false (1) that which is false as a *thing*, and that (a) because it is not put together or cannot be put together, e.g. 'that the diagonal of a square is commensurate with the side' or 'that you are sitting'; for one of these is false always, and the other sometimes; it is in these two senses that they are non-existent. (b) There are things which exist, but whose nature it is to appear either not to be such as they are or to be things that do not exist, e.g. a sketch or a dream; for these are something, but are not the things the appearance of which they produce in us. We call things false in this way, then,—either because they themselves do not exist, or because the

[93] I use the "proposition" translation of πρότασις here, as I am discussing the preconditions for a linguistic construction to have a truth-value. While Robin Smith translates πρότασις as "premise" in the Hackett translation, I want to avoid the connotation that what is described here is what can be *assumed* to be true (as the term "premise" connotes), rather than the basic condition for having a truth-value at all.

[94] This passage is discussed in Crivelli, *Aristotle on Truth*. He uses it as the basis for his interpretation that "Aristotle distinguishes two kinds of objects that are true or false: composite objects and simple objects," (p. 3). Since his interpretation of where truth and falsity occurs is not a result of combination, I reserve it for a future chapter.

> appearance which results from them is that of something that does not exist.[95]

I return to discuss this important passage below. For the moment, I note that Aristotle discusses a similar topic in *De Interpretatione,* but appears to arrive at a different conclusion about whether a non-existent thing can itself be described as false. There Aristotle again relies on the concept of combination and separation to explain where truth values come to be applicable to a combination of terms. However, in *De Interpretatione,* Aristotle states that the combination of goat and stag (which seems to be exactly the sort of thing which does not exist) acquires no truth value unless a predicate is added. Where the goat stag is introduced, Aristotle explains that "falsity and truth have to do with combination and separation."[96] However, in this case, Aristotle does *not* indicate that the term 'goat stag' itself is false, as we might expect given the definition of false *pragma* given above. Rather, he states that "even goat stag signifies something but not, as yet, anything true or false—unless 'is' or 'is not' is added."[97]

The passage from the *Metaphysics* appears to give fodder to the argument that if "goat stag" is divisible, then the term itself should have some kind of truth or falsity to it; Scott Carson supports this kind of idea in "Aristotle on Meaning and Reference"[98]. However, it seems unclear exactly where he wishes to place the falsehood of the goat

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[95] *Metaphysics*, IV.29, 1024b17-26 Τὸ ψεῦδος λέγεται ἄλλον μὲν τρόπον ὡς πρᾶγμα ψεῦδος, καὶ τούτου τὸ μὲν τῷ μὴ συγκεῖσθαι ἢ ἀδύνατον εἶναι συντεθῆναι (ὥσπερ λέγεται τὸ τὴν διάμετρον εἶναι σύμμετρον ἢ τὸ σὲ καθῆσθαι· τούτων γὰρ ψεῦδος τὸ μὲν ἀεὶ τὸ δὲ ποτέ· οὕτω γὰρ οὐκ ὄντα ταῦτα), τὰ δὲ ὅσα ἔστι μὲν ὄντα, πέφυκε μέντοι φαίνεσθαι ἢ μὴ οἷά ἐστιν ἢ ἃ μὴ ἔστιν (οἷον ἡ σκιαγραφία καὶ τὰ ἐνύπνια· ταῦτα γὰρ ἔστι μέν τι, ἀλλ' οὐχ ὧν ἐμποιεῖ τὴν φαντασίαν)· —πράγματα μὲν οὖν ψευδῆ οὕτω λέγεται, ἢ τῷ μὴ εἶναι αὐτὰ ἢ τῷ τὴν ἀπ' αὐτῶν φαντασίαν μὴ ὄντος εἶναι·

[96] *De Interpretatione* 16a11: περὶ γὰρ σύνθεσιν καὶ διαίρεσίν ἐστι τὸ ψεῦδός τε καὶ τὸ ἀληθές

[97] *De Interpretatione* 16a16-18: καὶ γὰρ ὁ τραγέλαφος σημαίνει μέν τι, οὔπω δὲ ἀληθὲς ἢ ψεῦδος, ἐὰν μὴ τὸ εἶναι ἢ μὴ εἶναι προστεθῇ

[98] Scott Carson, "Aristotle on Meaning and Reference", *History of Philosophy Quarterly*, Vol. 20, No. 4 (Oct., 2003), pp. 319-337.

stag.[99] At times it seems he wants to claim that the term "goat stag" itself has a truth-value. Supporting the claim that a single term can have a truth value is the notion that a goat stag is a likeness of reality insofar as goat and stag are, yet that the combination as such (prior to any sort of predication) represents nothing real. If we assume that falsehood is the result of a combination that represents nothing in reality, then falsehood would be introduced into our thinking at the moment our thought comes to misrepresent reality; that is, when the concepts 'goat' and 'stag' are combined to form the concept 'goat stag':

> When we attempt to combine them in thought (*noêsai*, 417b24) in ways that do not match up to the external reality that we are trying to represent, the result is falsehood, a mismatch between our mental representation of the external world and the actual ontological complexity of that world.[100]

Slightly later in the argument, however, Carson seems to backpedal, asserting that a goat stag is, rather than a falsehood itself, simply a falsehood waiting to happen:

> As soon as we attempt to "combine" this new conception with anything else we run the risk of falsehood, for every affirmation about "goat stags" will fail to refer and hence, be false. Denials about goat stags will be true, however, because a denial, for Aristotle, is simply the affirmation that a certain combination does not exist.[101]

This quote introduces the difficulty I have just examined in Chapter 2—precisely that it *does* seem possible, on Aristotle's account, to make true affirmations about non-existent subjects.[102] In addition, it introduces the problem I am now attempting to solve: the

[99] Crivelli, on the other hand, equates falsity and non-existence, such that even simple terms—and simple things—can be false. But his argument does not depend on the notion of truth and falsity being the result of combination, and so is reserved for a future chapter.
[100] Carson, "Aristotle on Meaning and Reference" , p. 334.
[101] Carson, "Aristotle on Meaning and Reference", p. 335.
[102] This interpretation necessarily brings up the common modern interpretation of Aristotle as claiming that any affirmation with a non-existent subject will "fail to refer" and therefore be false. With the considerations of the preceding chapter, I argue that it is only possible to identify a failure to refer if the

difference between a combination of thought such as the goat stag and the kind of combination that results from predicating one thing of another. If we take *De Interpretatione* 1 as authoritatively stating that the term "goat stag" is itself neither true or false, then it is truth-valueless on Aristotle's account. In short, the fact that we *call* a thing false (as Aristotle states in the *Metaphysics*) does not mean that Aristotle believed that "true" and "existent" are equivalent (nor are "false" and "non-existent"), and they cannot be predicated interchangeably of things.

A False Thing or a False Term?

Perhaps the most important distinction to recognize, when attempting to answer the question of whether a term may be false, is the distinction between this term and the thing which is its referent. Whereas Aristotle seems to be discussing the problem of false *things* in the passage from the *Metaphysics* quoted above, in the *De Interpretatione* it is the *term* which he denies to have a truth value.

The examples Aristotle gives of a way in which a thing (πρᾶγμα) may be false are of two sorts: existent things (or states of affairs) and non-existent things (or states of affairs).[103] The fact that Aristotle distinguishes here between non-existing false things and

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information that the subject term does not exist is given. If the ontological status of the referent of the subject term is unknown, then we cannot say it fails to refer, so "Homer is a poet" continues to be true, and we cannot conclude therefrom that "Homer is". Further, in this chapter I will argue that it is not the subject term that fails to refer—for the notion that it does is dependent on an interpretation of Aristotle that specifies that words refer directly to things, which is contradicted by *De Int.* What a subject term refers to is a concept (an "affection of the soul"), which exists as much as and in the same way that a thought does, and we can make true affirmations about this concept.

[103] I specify both things and states of affairs here because, as I have been using '*pragma*' (as a result of my reading of *De Int.*), it is whatever an affection of the soul is a likeness of (while the name or verb refers to the affection of the soul). This definition of *pragma* does not exclude states of affairs. In the *Metaphysics*, the *pragmata* Aristotle speaks of seem to be more like states of affairs than individual things. I assume that

existing false things is evidence that he is not confusing the notion of falsity with non-existence. The first set of examples, those referring to non-existing false things, includes the example of the commensurability of the diagonal with the side of a square, and the example of someone not currently sitting. While the former is an example of an impossible situation, the latter is an example of a possible but not currently exemplified situation. The second set of examples (a sketch or a dream) includes existing things which represent non-existing things. Whereas the dream or sketch itself exists, its content—that which it represents --does not. This is what makes it "false". We might think the content of a dream is much like a narrative: events or situations are presented (by the imagination, or by description, in the case of a narrative) that either correspond or don't to an actually existing state of affairs.

We can note also that Aristotle's examples of non-existing false things in the passage from the *Metaphysics* are less objects than states of affairs. As I have stated, I don't believe the passage is evidence that an object (mental or otherwise) can be false, unless combined with another term and *in a certain way*. Aristotle gives no example of an object that does not exist, but supplies all of the necessary components of an impossible or presently not existing state of affairs which an affirmation could (falsely) describe—that the diagonal of the square is commensurate with the side, or that you are sitting. I argue that the most interesting part of this passage is that it implies that Aristotle's use of *pragma* must include not only objects but also states of affairs. This shouldn't prove to be a problem when we consider his usage of the term in the *De Interpretatione*, where names

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the term is used inclusively by Aristotle to speak of both individual things and states of affairs, and therefore contributes to the confusion as to whether things themselves can be false.

and verbs are symbols of affections of the soul which are likenesses of those *pragmata*, for I see no reason to exclude states of affairs from that structure. What the *Metaphysics* passage indicates is, on my interpretation, the source of the confusion as to whether a thing can be false—for here a 'thing' is either an object or a state of affairs, both of which may be combinations, but combinations of different sorts.

The possibility of a false name is discussed in Plato's *Cratylus* at 387c-d, where Socrates argues for a naturalistic interpretation of language based on the possibility of true and false names. Over the course of the argument, Socrates leads Hermogenes to the assertion that not only statements are true, but also their parts, including names, relying on the assumption that anything that is said may be true or false. Already we should note the distinction between this definition and that of the *Sophist* 262b-c, where the definition of what is said is based on the qualification of it having a truth-value, and is as a result concluded to be a combination of terms. (As will be discussed below, whether we reason that things or combinations have truth-values depends on whether we begin by assuming that whatever is said has a truth-value, or by assuming that anything with a truth-value contributes to discourse).[104] In the *Cratylus*, Socrates gets Hermogenes to agree to the premise that things that are said are either true or false; he then applies the true-false distinction to names in support of a naturalistic theory of language of the kind that Aristotle rejects in the *De Interpretatione*.

Is there a part of a statement that's smaller than a name?

[104] Whereas Hermogenes assumes that anything said has a truth value, Aristotle specifies in the *Categories* that not anything said has a truth value, but only things said in combination, which is in line with the *Sophist*'s line of reasoning. *Categories*, 2a7-10 ἅπασα γὰρ δοκεῖ κατάφασις ἤτοι ἀληθὴς ἢ ψευδὴς εἶναι, τῶν δὲ κατὰ μηδεμίαν συμπλοκὴν λεγομένων οὐδὲν οὔτε ἀληθὲς οὔτε ψεῦδός ἐστιν, οἷον ἄνθρωπος, λευκόν, τρέχει, νικᾷ

Hermogenes: No, it is the smallest.
Socrates: In a true statement, is this smallest part something that's said?
Hermogenes: Yes.
Socrates: And, on your view, this part is then true.
Hermogenes: Yes.
Socrates: And a part of a false statement is false?
Hermogenes: That's right.
Socrates: So isn't it possible to say a true or a false name, since true or false statements are possible?
Hermogenes: Certainly.
Socrates: Now using names is a part of saying; since it is by using names that people say things.
Hermogenes: Certainly.
Socrates: And if speaking or saying is a sort of action, one that is about things, isn't using names also a sort of action?
Hermogenes: Yes.
Socrates: And didn't we see that actions aren't in relation to us but have a special nature of their own?
Hermogenes: We did.
Socrates: So if we are to be consistent with what we said previously, we cannot name things as we choose; rather, we must name them in the natural way for them to be named and with the natural tool for naming them. In that way we'll accomplish something and succeed in naming, otherwise we won't.[105]

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105 The text as given interjects a passage from 385c-d into 387c-d. I follow the organization of the translation by C.D.C. Reeve in *Plato: Complete Works*, ed. John Cooper [Hackett: Indianapolis; 1997], pp. 105-6. The corresponding passages from the Greek text are as follows (from J. Burnet, *Platonis Opera*, vol. 1. Oxford: Clarendon Press, 1900 (repr. 1967).
385c5 {ΣΩ.} Ἔστιν οὖν ὅτι λέγεις λόγου σμικρότερον μόριον ἄλλο ἢ ὄνομα;
{ΕΡΜ.} Οὔκ, ἀλλὰ τοῦτο σμικρότατον.
{ΣΩ.} Καὶ τοῦτο [ὄνομα] ἄρα τὸ τοῦ ἀληθοῦς λόγου λέγεται;
{ΕΡΜ.} Ναί.
{ΣΩ.} Ἀληθές γε, ὡς φῄς.
{ΕΡΜ.} Ναί.
{ΣΩ.} Τὸ δὲ τοῦ ψεύδους μόριον οὐ ψεῦδος;
{ΕΡΜ.} Φημί. (15)
{ΣΩ.} Ἔστιν ἄρα ὄνομα ψεῦδος καὶ ἀληθὲς λέγειν, εἴπερκαὶ λόγον;
{ΕΡΜ.} Πῶς γὰρ οὔ;
387c6 {ΣΩ.} Οὐκοῦν τοῦ λέγειν μόριον τὸ ὀνομάζειν; διονομάζοντες γάρ που λέγουσι τοὺς λόγους.
{ΕΡΜ.} Πάνυ γε.
{ΣΩ.} Οὐκοῦν καὶ τὸ ὀνομάζειν πρᾶξίς [τίς] ἐστιν, εἴπερ καὶ τὸ λέγειν πρᾶξίς τις ἦν περὶ τὰ πράγματα; (10)
{ΕΡΜ.} Ναί.
(d.) {ΣΩ.} Αἱ δὲ πράξεις ἐφάνησαν ἡμῖν οὐ πρὸς ἡμᾶς οὖσαι,ἀλλ' αὑτῶν τινα ἰδίαν φύσιν ἔχουσαι;
{ΕΡΜ.} Ἔστι ταῦτα.
{ΣΩ.} Οὐκοῦν καὶ ὀνομαστέον [ἐστὶν] ᾗ πέφυκε τὰ πράγματα ὀνομάζειν τε καὶ ὀνομάζεσθαι καὶ ᾧ, ἀλλ' οὐχ ᾗ ἂν ἡμεῖς βουληθῶμεν, εἴπερ τι τοῖς ἔμπροσθεν μέλλει ὁμολογούμενον εἶναι; καὶ οὕτω μὲν ἂν πλέον τι ποιοῖμεν καὶ ὀνομάζοιμεν, ἄλλως δὲ οὔ;

This argument is intended to support the conclusion Socrates is arguing for, that there is a correct way to name things, and therefore that a name is a natural rather than conventional symbol of a thing. Given Aristotle's clear rejection of this theory in the *De Interpretatione* (as discussed in Chapter 1), it seems reasonable to suppose that he would also reject the premise on which the argument is founded: that a name, or what is stated here (but not in the *Sophist*) to be the smallest part of what is said, itself is either true or false.

In summary, though it might be thought, based on the examples of things (e.g., dreams) representing non-existent things, that for Aristotle a single term could be considered false, a term seems to be something of a different kind. I have argued in this section that Aristotle's discussion of false things in the *Metaphysics* does not indicate that he believed that a term not stated in combination with something else could be false. While it may seem that it is possible for a term to itself be false, based on what he has to say about impossible or not existing combinations, this interpretation of Aristotle does not cohere with his theory of language in general. It makes sense that Aristotle would reject the idea that a term could have a truth value when stated alone, as Plato uses this possibility as a premise for the argument that words have a natural relationship with their referents, a theory dismissed in the *De Interpretatione*. At this point it seems that combination is a necessary condition for the attribution of a truth value to a linguistic utterance; however, it is not sufficient. The combination of "goat" and "stag" that gives us the term "goat stag" is not, as we saw in the *De Interpretatione*, itself false. As

clarification we might note that Aristotle explicitly mentions sketches as an example of a false object, and it is as the subject of an artistic work that the example of the goat stag arises in Plato (in the *Republic* 488a1-6). Aristotle refers explicitly to the sketch itself as an existing, false thing, which is false because the thing represented does not exist. Again, the goat stag itself is not false, but non-existent; and while the sketch exists, its falsity is dependent on the non-existence of its subject as it appears (not the falsity of its subject); the thing in the sketch appears differently than what the thing depicted is like.

Combining Objects in Thought

In the previous section I defended a standard interpretation of Aristotle that states that a single term cannot have a truth-value unless combined with another appropriate term—a verb, in the case of a noun, or a noun, in the case of a verb. The combination "goat" and "stag" in "goat stag" is no exception to this rule, though it is a combination and represents nothing in reality (such that someone might think it possible for it to be false). It follows that, in the cases of thought and language, Aristotle deems combination *necessary* but not *sufficient* for something to have a truth value. Yet while the combination of goat and stag yields no truth value for the term itself, it remains to be explained how we can think and speak of combinations without considerations of truth and falsity arising—that is, what kind of combination is *insufficient* for attributing a truth-value to that combination. The difference I'm describing, between combinations that are false and those that are not, marks the distinction between the "fictional" and the "false". Fictional combinations are

not the states of affairs that Aristotle termed false;[106] a fictional entity is a combination of thoughts (an affection of the soul) that is not a likeness of any sensible reality but that combines affections that are each likenesses of real things. That is, the term "goat stag", itself a combination of terms, is used to represent another type of combination—a combination of thoughts which when combined is a unity but which is the likeness of no extra-mental thing.

Simon Noriega-Olmos interprets an "affection of the soul", as Aristotle refers to it in *De Interpretatione*, as indicating a thought only (as opposed to a perception). It is for this reason that he must account for an affection of the soul being the same for all with reference to thought. His conclusion is that there are no simple thoughts of things that do not exist.

> Simple thoughts either grasp the essence of an object or do not grasp it. For that reason there are no 'false', i.e. wrong, thoughts. Thoughts are proper representations or no thoughts at all.[107]

This is, however, inaccurate. The thought of a goat stag grasps no essence whatever, since it is supposed to represent something that does not exist, and therefore there should be no thought of it. However, we can think of a goat stag, a thought which Noriega-Olmos claims is both a unity and signifiable, something our "cognitive apparatus" creates—a representation that grasps no essence:

> Moreover, if we consider that we signify non-existing entities such as goat stag, it appears that (d) our cognitive apparatus has the power to create objects of signification that are 'something and one', and that (e) the things that 'are' need not be the forms of substances and external objects. It appears that what

[106] A state of affairs, which Crivelli includes as a kind of object, is not false either, on my account. (See Chapter 5)
[107] Noriega-Olmos, Footnote 235, page 129. This will come up again in Chapter 6.

> is available for us to signify is what is in our soul and that a thing in the soul, *qua significatum*, is a 'something' that is 'one'.[108]

There is something we are signifying by the term "goat stag", and it is a combination we create, i.e., a fiction. If what names and verbs signify is an "affection of the soul", as according to *De Interpretatione* 1 all spoken words do, then the thought of a goat stag (i.e., the thought 'goat-stag') is an affection of the soul. In Chapter 1, I argued there must be a faculty responsible for such combinations in order for there to be terms which signify something not existing. Here I will attempt to provide an Aristotelian account of how that is supposed to happen.

For an explanation of how objects come to be combined in thought, I turn to the *De Anima*. Here Aristotle repeats what we see in both the *Categories* and *De Interpretatione*, that truth and falsity have to do with combination. In *De Anima* III.6 Aristotle applies the concept of falsehood directly to thoughts:

> The thinking of undivided objects is among those things about which there is no falsity. Where there is both falsity and truth, there is already a combination of thoughts as forming a unity.[109]

What Aristotle states here supports what I asserted in the previous section: that combination is necessary for the attribution of a truth value to thoughts and assertions. However, as I read the text, combination into a unity does not *necessarily* result in a truth-evaluable entity. An affirmation is a unity insofar as it is thought of as an affirmation, rather than distinct, unrelated terms. But most importantly, we must note that the combinations produced are productions *of thought*, *analogous* to combinations of being,

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[108] Noriega-Olmos, 67-8.

[109] *De Anima* 430a27-28. Ἡ μὲν οὖν τῶν ἀδιαιρέτων νόησις ἐν τούτοις περὶ ἃ οὐκ ἔστι τὸ ψεῦδος, ἐν οἷς δὲ καὶ τὸ ψεῦδος καὶ τὸ ἀληθές σύνθεσίς τις ἤδη νοημάτων ὥσπερ ἓν ὄντων

for as Aristotle adds: "And that which produces a unity is in each case the intellect."[110] If the object of thought were already a combination (i.e., were it a representation in thought of a real combination), the intellect would not be required to unify it (we might perceive it already as a unity).

As a conclusion to the section, Aristotle explicitly lays out the difference between thinking and asserting. Whereas affirmations and denials are always either true or false, thinking about something is not itself asserting. Thus, if we think (δοκέω) of a goat with features of a stag, we do not thereby assert that such a thing exists.

> Affirmation is the saying of something concerning something, as too is denial, and is in every case either true or false: this is not always the case with thought: the thinking of the definition in the sense of what it is for something to be is never in error nor is it the assertion of something concerning something; but, just as while the seeing of the special object of sight can never be in error, seeing whether the white object is a man or not may be mistaken, so too in the case of objects which are without matter.[111]

Distinguishing between thoughts and assertions leaves open the possibility for thought to form combinations which do not themselves have a truth value. It also allows us to distinguish between the thought and the thing which is thought *about* with respect to their existence. Aristotle considers in the *De Interpretatione* whether a non-existent thing may gain some kind of existence by being an object of thought and decides that it does not. This assertion, in fact, follows directly after Aristotle's discussion of the phrase "Homer is a poet" from the *De Interpretatione*:

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[110] *De Anima* 430b5 τὸ δὲ ἓν ποιοῦν ἕκαστον, τοῦτο ὁ νοῦς.

[111] *De Anima* 430b26-30 ἔστι δ' ἡ μὲν φάσις τι κατά τινος, ὥσπερ καὶ ἡ ἀπόφασις, καὶ ἀληθὴς ἢ ψευδὴς πᾶσα· ὁ δὲ νοῦς οὐ πᾶς, ἀλλ' ὁ τοῦ τί ἐστι κατὰ τὸ τί ἦν εἶναι ἀληθής, καὶ οὐ τὶ κατά τινος· ἀλλ' ὥσπερ τὸ ὁρᾶν †τοῦ ἰδίου ἀληθές, εἰ δ' ἄνθρωπος τὸ λευκὸν† ἢ μή, οὐκ ἀληθὲς ἀεί, οὕτως ἔχει ὅσα ἄνευ ὕλης. (Here we may assume that Aristotle's use of the term "matter" does not refer to conceptual matter, since anything thought would have conceptual matter.)

> It is not true to say that what is not, since it is thought about, is something that is; for what is thought about it is not that it is, but that it is not.[112]

On my view, this passage supports an interpretation of Aristotle that explains how a concept can be a combination (e.g., goat stag) without a truth value. Aristotle believes that we can have a concept of something that does not exist, without thereby making the assertion that the non-existent thing that that concept represents does not exist. For it is not true that all combinations are assertions. We can both think and speak an assertion, and those thoughts or utterances will be true or false, but it is possible to think a combination without making an assertion. We can think of something as not existing, and this is not equivalent to making an assertion that the thing does not exist. The passage indicates, on my view, that the fact that it does not exist is somehow contained in the concept for Aristotle. The fact that something does not exist is combined in the thought of something fictional, due to our awareness of the fact that we are just making something up.[113] We can therefore make the inference that on Aristotle's account, even if a recognition that the thing does not exist is included in the concept itself, it is *still* not a combination of the same sort as an assertion—it still does not have a truth-value. For if the goat stag can be thought about at all, and if, as the passage implies, this thought includes a notion that it does not exist, it still requires (by *De Int.* 16a16-18) that something be added to the term referring to the thought in order for it to be true or false;

[112] *De Interpretatione* 21a31-3: τὸ δὲ μὴ ὄν, ὅτι δοξαστόν, οὐκ ἀληθὲς εἰπεῖν ὄν τι· δόξα γὰρ αὐτοῦ οὐκ ἔσιν ὅτι ἔστιν, ἀλλ' ὅτι οὐκ ἔστιν.

[113] This does not mean that what we have made up is thereby precluded from ever existing. We conceptualize things that may exist or not; and we may in fact bring the thing we conceptualize into existence in some cases (not by thinking of it, but by producing it). The difference between a concept that has non-existence included in it, and that which does not, is how the concept comes to exist—as a result of a combination in thought, or as a result of the passive reception of some already existing unity.

the thought of a thing that doesn't exist is not exempt from these considerations. That is, we must distinguish between a thought *of* something that does not exist *as non-existent*, and the thought "X does not exist".[114] Only in the latter case might we think falsely.

At this point it might be objected that the thought *that* something does not exist is exactly what is supposed to be included in our concept of it: does this not mean that we have already made an assertion by thinking about it? I would say no. Rather, this example is better compared to the type of assertion Aristotle warns us against in *De Interpretatione* Chapter 11, where we attempt to predicate an opposite of a subject, from which a contradiction follows (the specific example is where we call a dead man a man[115]). If we attempt to make an assertion that a goat stag exists, that assertion predicates an opposite of part of our concept of a goat stag, from which a contradiction follows, and the affirmation is therefore false. As Aristotle claims, an assertion is contradictory if, when we replace names with definitions, the contradiction becomes evident. We can think of a goat stag and include in that concept a notion that it does not exist, prior to our making an assertion *that* it does not exist. When we attempt to combine "a goat stag" with either "is" or "is not", the former will be false as a result of contradiction, as a matter of definition: the thought that a goat stag exists is equivalent to the assertion "A combination of goat and stag that does not exist exists". This *assertion* (that we may think or speak) differs

[114] I have retained Ackrill's translation of δόξα in 21a31-3 as "thought", though it might also be translated as "judgment". If there is a judgment about something that does not exist, this may indeed qualify as an assertion; however, the term as it is used here doesn't seem to imply any definite statement predicating inexistence of something. The LSJ also lists "mere opinion", "conjecture" or "notion" amongst the possible translations of δόξα. These terms point to something indefinite in the thought of something that does not exist, which I take to mean something prior to a definite judgment, or assertion (thinking of something as non-existent, as opposed to thinking "X does not exist").

[115] 21a21-23: ἀλλ' ὅταν μὲν ἐν τῷ προσκειμένῳ τῶν ἀντικειμένων τι ἐνυπάρχῃ οἷς ἕπεται ἀντίφασις, οὐκ ἀληθὲς ἀλλὰ ψεῦδος, —οἷον τὸν τεθνεῶτα ἄνθρωπον ἄνθρωπον εἰπεῖν,

from the *definition* of goat stag I have here supplied: "a combination of goat and stag that does not exist". The definition is not yet an assertion, though it specifies non-existence.[116]

Applying this distinction to the difference in combinations I wish to explore, between those that introduce a truth value and those that do not, the falsity of an affirmation in which the subject term has no existing referent is, contrary to Carson's account, not an actualizing of the potential of the subject term itself (the "falsehood waiting to happen"), only applicable to the combination. That is, the falsehood of the assertion is properly a relational quality of the assertion; the subject term is in no way false itself. Carson asserts that "Denials about goat stags will be true, however, because a denial, for Aristotle, is simply the affirmation that a certain combination does not exist." As quoted above, he derives this from the fact that a combination of goat and stag does not exist, implying that the denial will be true because the subject term fails to refer. On my view, the introduction of falsity instead occurs when we add a predicate to a subject that does not exist, prior to which there is no nascent form of falsity in the subject term. As I quoted from Carson above, "When we attempt to combine them in thought (*noêsai*, 417b24) in ways that do not match up to the external reality that we are trying to represent, the result is falsehood." He in fact describes the possibility of falsehood as being introduced as soon as something becomes a matter of convention, or "up to us".[117] On my view, we can combine concepts, and we can have a combination in thought that does not match up to external reality, but the concept is nonetheless not "false". It

[116] Just as to define a bachelor as an unmarried man does not indicate that when we think of a bachelor, we thereby *make the assertion* that he is unmarried. We simply think of him *as* unmarried. The thought of the definition of bachelor ("unmarried man") is not equivalent to the thought, "X is an unmarried man."
[117] Carson, "Aristotle on Meaning and Reference", 334.

signifies something that does not exist, but this does not constitute falsity; the falsity of assertions in thought or language requires that there be a combination of thoughts (terms) of a certain type in a certain relation (subject and predicate). We saw Aristotle's views on denials and things that don't exist already in Chapter 2, where I examined Aristotle's considerations of non-existent subjects in general. It seems that a non-existent subject formed by combining objects in thought is not a special case in this regard, as it would have to be if the falsehood were instead introduced by the combination of concepts or terms that constitutes the subject. If it is our intent to avoid making false affirmations, we have not yet gone wrong where that particular combination fails to represent any existing object, but only when some predicate is added.

In this section I have distinguished between combinations in thought forming concepts and combinations forming assertions, denying that combinations in thought represented by a name themselves may have a truth value, and restricting our application of a truth value to assertions, which seem to be combinations of another sort. A question that arises immediately is whether it is simply the *manner* in which the things are combined that determines whether they have an associated truth value, or whether we must also account for what *type* of things come to be combined. Where objects are combined in thought (I have argued), they are simply a complex object—there is no assertion being made by recognizing this. Nor is the difference in combinations just the difference between things thought and things said; for it is completely possible to think false things.

I have argued that not all combinations in thought are assertions. If this is right the considerations raised in Chapter 1 become salient. It seems most plausible that if things come to be combined in thought, the combination takes place prior to the naming of that combination by the process of symbolization discussed earlier. Therefore, the term "goat stag" is a single, complex term, as opposed to a combination of terms, for it intends to express only one thing, that thing being a combination formed by thought. In this particular case, each part of the word is significant, but not significant *kath' hauto*. (I will expand more fully on what it means to be significant *kath' hauto* in Chapter 6.) If the elements of the compound term do not signify *kath' hauto*, then the word representing the combination concept cannot be an affirmation, for only one thing is signified; the combination of terms in "goat stag" is no longer composed of two independently significant terms, as they would have to be if they are to be compared to an affirmation. As Aristotle claims in *De Int.*:

> A name is a spoken sound significant by convention, without time, none of whose parts is significant in separation. For in Kallippos the 'ippos' does not signify anything in its own right, as it does in the phrase 'kalos ippos' (beautiful horse). Not that it is the same with complex names as with simple ones: in the latter the part is in no way significant, in the former it has some force but is not significant of anything in separation, for example the 'boat' in 'pirate-boat'.[118]

The combination word is no more an affirmation than the concept itself. In short, the difference in kinds of combinations I am here describing does not reduce to the difference between thoughts and words. In addition, the kinds of terms combined would

[118] *De Interpretatione* 16a19-26: Ὄνομα μὲν οὖν ἐστὶ φωνὴ σημαντικὴ κατὰ συνθήκην ἄνευ χρόνου, ἧς μηδὲν μέρος ἐστὶ σημαντικὸν κεχωρισμένον· ἐν γὰρ τῷ Κάλλιππος τὸ ιππος οὐδὲν καθ' αὑτὸ σημαίνει, ὥσπερ ἐν τῷ λόγῳ τῷ καλὸς ἵππος. οὐ μὴν οὐδ' ὥσπερ ἐν τοῖς ἁπλοῖς ὀνόμασιν, οὕτως ἔχει καὶ ἐν τοῖς πεπλεγμένοις· ἐν ἐκείνοις μὲν γὰρ οὐδαμῶς τὸ μέρος σημαντικόν, ἐν δὲ τούτοις βούλεται μέν, ἀλλ' οὐδενὸς κεχωρισμένον, οἷον ἐν τῷ ἐπακτροκέλης τὸ κελης.

both be names, which when combined do not give rise to anything true or false (a topic for the following section).

In the next section I will examine what the difference is in the kinds of terms combined, where some give rise to concepts of inexistent things, and others give rise to assertions involving truth and falsity.

The Kinds of Terms Combined

Aristotle's examples of combination in the *Categories* II give only the combinations of a name (ὄνομα) with a verb (ῥῆμα). Differentiating between things said in combination and those not, Aristotle gives 'man', 'ox', 'runs', 'wins' as things said without combination and 'man runs' and 'man wins' as thing said involving combination. However, what happens when 'man' and 'ox' are combined (with no intermediary 'is'), or 'runs' and 'wins', is left unstated. More generally, the combinations of ὄνομα-ὄνομα and ῥῆμα-ῥῆμα are excluded from discussion, and so we must *infer* what his having left them out signifies. It seems that by excluding examples of this sort from explanation, Aristotle is implicitly excluding juxtapositions of terms of the same type from being combinations of the relevant kind; two terms of the same type juxtaposed would not be a combination with a truth-value. I take this as providing some insight into how certain combinations are formed; that is, the process by which the mind combines goats and stags, or how the artist represents them in an image, and how they are different from predications; here we have juxtapositions of terms which seem to be precursors to complex terms—where "goat" and "stag" are juxtaposed prior combining to form the elusive "goat stag". In the previous section I argued that when, for instance, a complex term is formed from other terms, the

parts of the term signify nothing *kath' hauto*, as they would in separation. In a juxtaposition the parts *do* signify *kath' hauto*, as they are yet distinct terms; however, their juxtaposition does not (or should not, on Aristotle's account) give us cause to label them true or false, since they do not form a subject-predicate relation.

Let us consider the "goat" + "stag" and why it would be excluded from being a combination of the same sort as 'man runs' or 'man wins'. The purpose of this exercise is to eliminate the possibility that, were "goat" and "stag" to retain their *kath' hauto* significance when combined, the combination could be considered an assertion. In the *Cratylus* a name was included amongst things which are said (such that if anything said has the quality of being either true or false, and a name counts as something said, then names themselves must be true or false). However, Aristotle does not agree with the implications of such a conclusion, likely because of his disagreement (as I have argued) with the premise that *anything* said must be true or false. In the *Sophist*, Plato presents a different view, considering the smallest part of discourse (that having a truth value) to be a combination *of a certain sort*. Taking into account the construction of a language I discussed in Chapter 1, Aristotle doesn't seem to carry over the same relation that Plato describes, relating the smallest part of language or discourse and the having of a truth value. What he does seem to carry over from Plato is the particular type of combination required for something said to be true or false, which Plato discusses in the *Sophist*. Where Aristotle in the *Categories* provides only combinations of nouns and verbs as examples, in the *Sophist* Plato has The Stranger explicitly *exclude* nouns or verbs spoken in succession (or, juxtaposed) from constituting discourse:

> Stranger: For instance, "walks," "runs," "sleeps" and the other verbs which denote actions, even if you utter all there are of them in succession, do not make a sentence for all that.
> Theaetetus: No, of course not.
> Stranger: And again, when "lion," "stag," "horse," and all other names of those who perform these actions are uttered, such a succession of words does not yet make a sentence; for in neither case do the words uttered indicate action or inaction or existence of anything that exists or does not exist, until the verbs are mingled with the nouns; then the words fit, and their first combination is a sentence, about the first and shortest form of sentence.[119]

This passage ascribes a certain fitting together of nouns with verbs (or, perhaps, a 'weaving together', *sumplokê*) that noun-noun and verb-verb juxtapositions do not have. The shortest form of discourse, as Plato describes it here, is the combination of a noun and a verb, which asserts something of something. Now the possibility of truth is dependent on a fitting together of terms that represent a fitting together of things, as discussed earlier with respect to false non-existent states of affairs. The notion of truth here seems to be dependent on how discourse is supposed to express a relation existing in reality between what is signified by a subject term and what is signified by a predicate term. Neither verb nor noun alone indicates a state of affairs, nor do juxtaposed nouns or juxtaposed verbs. Consequently, reference and truth seem to raise different issues. The juxtaposition of the terms "goat" + "stag" is not an interweaving in the way that would

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[119] *Sophist* 262b-c tr. Nicholas P. White in *The Complete Works*. Modified on David Hitchcock's recommendation.
{ΞΕ.} Οἷον "βαδίζει" "τρέχει" "καθεύδει," καὶ τἆλλα ὅσα πράξεις σημαίνει ῥήματα, κἂν πάντα τις ἐφεξῆς αὔτ' εἴπῃ, λόγον οὐδέν τι μᾶλλον ἀπεργάζεται.
{ΘΕΑΙ.} Πῶς γάρ;
{ΞΕ.} Οὐκοῦν καὶ πάλιν ὅταν λέγηται "λέων" "ἔλαφος" "ἵππος," ὅσα τε ὀνόματα τῶν τὰς πράξεις αὖ πραττόντων ὠνομάσθη, καὶ κατὰ ταύτην δὴ τὴν συνέχειαν οὐδείς πω
συνέστη λόγος· οὐδεμίαν γὰρ οὔτε οὕτως οὔτ' ἐκείνως πρᾶξιν οὐδ' ἀπραξίαν οὐδὲ οὐσίαν ὄντος οὐδὲ μὴ ὄντος δηλοῖ τὰ φωνηθέντα, πρὶν ἄν τις τοῖς ὀνόμασι τὰ ῥήματα
κεράσῃ. τότε δ' ἥρμοσέν τε καὶ λόγος ἐγένετο εὐθὺς ἡ πρώτη συμπλοκή, σχεδὸν τῶν λόγων ὁ πρῶτός τε καὶ σμικρότατος.

indicate anything to belong to anything. This juxtaposition of terms lacks a truth value not value simply because there are no goat stags, but because it does not express a relation of the sort expressed by the combination of noun and verb. The juxtaposition of "goat" and "stag" is not an interweaving, nor does it become an interweaving when the terms lose their *kath' hauto* significance by being combined into unity, as in the single term "goat stag".

The Origin of the Goat stag; Fictional Entities and Images

A recurring theme in the discussion of fictional entities concerns the distinction between a representation and what is being represented. As noted, we might entertain the idea that a representation is false if the object represented does not exist. Among the examples Aristotle notes in the *Metaphysics* is a sketch: "There are things which exist, but whose nature it is to appear either not to be such as they are or to be things that do not exist, e.g. a sketch or a dream." Here Aristotle calls the sketch a false thing, as it is something that itself exists but represents something that does not exist. There is a sense in which we might say that something is a "true" representation, if it is an especially accurate likeness of something. However, there are many ways in which the sketch (by the very nature of its being a sketch) falsely represents what exists: for instance, Socrates may have aged since his portrait was painted; he may have died, while the sketch presents him as living; and in any stage of Socrates' life, never was he two-dimensional. This point is of particular interest because of the single mention of a goat stag within the work of Plato.

Plato mentions a "goat stag" in the *Republic* as an example of how we might combine experiences from many sources in order to construct a unified image. Thus it

seems the combining of features of various things in an artistic representation is a direct analogy to how we combine affections of the soul that are likenesses of things to form a concept of something which itself is not a likeness of a *pragma*:

> Socrates: What the most decent people experience in relation to their city is so hard to bear that there's no other single experience like it. Hence to find an image of it and a defense for them, I must construct it from many sources, just as painters paint goat stags by combining the features of different things.[120]

This analogy helps explain how the soul goes about combining concepts to form representations of non-existing things. Additionally, the ontological attributes of a fictional entity might well be indicated by this analogy to images.

What is clear in this passage from Plato is that the image produced is not the result of a passive reception of images of objects that somehow become intermingled; rather, the placing together of features of different objects is a result of the activity of the artist.[121] When a subject forms a combination term, significant sounds lose their significance as a new significance is imposed; when a painter paints a goat stag, they take elements from a goat and a stag as matter and mix them into a new form, that of a goat stag.[122] But in order for a painter to paint a goat stag, the concept must already be in the

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[120] Plato, *Republic*, 488a1-6 οὕτω γὰρ χαλεπὸν τὸ πάθος τῶν ἐπιεικεστάτων, ὃ πρὸς τὰς πόλεις πεπόνθασιν, ὥστε οὐδ' ἔστιν ἓν οὐδὲν ἄλλο τοιοῦτον πεπονθός, ἀλλὰ δεῖ ἐκ πολλῶν αὐτὸ συναγαγεῖν εἰκάζοντα καὶ ἀπολογούμενον ὑπὲρ αὐτῶν, οἷον οἱ γραφῆς τραγελάφους καὶ τὰ τοιαῦτα μειγνύντες γράφουσιν.

[121] Plotinus also takes recourse to a discussion of art and the cause of its imagery, concluding that the cause of the image is the artist as opposed to the thing represented. "To begin with the image and archetype: If we are reminded of an artist's picture we observe that here the image was produced by the artist, not by his subject; even in the case of a self-portrait, the picture is no "image of archetype," since it is not produced by the painter's body, the original represented: the reproduction is due to the effective laying on of the colours." *Enneads* VI.4.10 trans. McKenna.

[122] Aristotle describes the various ways in which things can come together in *Metaphysics* VIII.2. According to his description, the potential or matter is that from which the combination substance is composed, and the form or actuality is some other differentia. The matter of the complex concept 'goat stag' would be the components, the concepts of 'goat' and 'stag', and the combination comes to be when

mind of the painter. In this way, the possibility of painting goat stags is dependent on there existing the capacity of the soul to abstract material from perceived objects and combine it in new ways.

What we need to keep clear is the difference between the existence of the image and the existence of the thing. Aristotle claims that sketches are false things if "the appearance which results from them is that of something that does not exist.", In other words, the sketch is false because its subject appears to be other than how it actually is. Having been represented in a sketch does not give the subject existence, just as being thought about does not give the object of thought existence. The sketch exists, and the thought exists, but on Aristotle's account there is no special mode of existence for the content of a sketch or a thought that we can attribute to this content simply by virtue of its being represented. The concept of existence that Aristotle is working with does not allow for our attributing existence to a thing because it is represented in an image. We may combine concepts in thought and even include the non-existence of the thing in the concept, but this is no kind of affirmation, and has no truth-value. How then can an image of a non-existing thing be false, if a thought about it is not?

The falsity of an image is particularly problematic only if we consider thoughts to be images; however, the two are not quite analogous. For, as I argued above, for Aristotle the non-existing thing is thought of *as* non-existent. When it is represented in an image, on the other hand, the accompanying non-existence is not included in the representation.

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these are combined *in a particular way*, as a house is "bricks and timbers in such and such a position" (1043a7-8) and a harmony is "such and such a blending of high and low" (1043a10). Full quotation (1043a7-12): οἷον εἰ οὐδὸν δέοι ὁρίσασθαι, ξύλον ἢ λίθον ὡδὶ κείμενον ἐροῦμεν, καὶ οἰκίαν πλίνθους καὶ ξύλα ὡδὶ κείμενα (ἢ ἔτι καὶ τὸ οὗ ἕνεκα ἐπ' ἐνίων ἔστιν), εἰ δὲ κρύσταλλον, ὕδωρ πεπηγὸς ἢ πεπυκνωμένον ὡδί· συμφωνία δὲ ὀξέος καὶ βαρέος μῖξις τοιαδί· τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν ἄλλων.

The sketch, unlike the thought, is a visual representation, and the non-existence of what is visually represented must be inferred, rather than represented. Thus a sketch might represent an animal that is part-goat and part-stag, but it is unable to additionally signify this animal's non-existence except indirectly.[123] A complex thought, on the other hand, can include non-visual predicates (such as non-existence), assuming that we know what a goat stag is, and that we know it doesn't exist. But this is just to say that we have grasped an accurate definition of a goat stag, to the extent that we can think of it at all.[124] Having this clear concept is much like being given the premise that something does not exist, for we cannot think or speak the assertion that it *does* exist without contradicting ourselves.

The image represents a state of affairs in much the same way an assertion would; it is a visual expression of a state of affairs, where an assertion is a linguistic expression of a state of affairs,[125] and both allow for fiction in the sense that we do not know whether they correspond to anything existing extramentally unless we have previously observed what is represented or have some other evidence for its existence. If the representation does not correspond to anything existing, the representation is false in both cases, on Aristotle's account. And if we were to apply my conclusions from Chapter 2 to an image, this would result in our being able to assert, given the knowledge that the subject of the image does not exist, that the sketch is false. Conversely, given a representation of a

[123] On this definition, the only definitely false things to say about a goat stag are that it is not part-goat, not part-stag, or that it exists. All other affirmations have an uncertain truth-value, as I argued in the previous chapter, for instance, "a goat stag is in a flowery field", in which case the "is" does not necessarily denote existence, and the flowery field does not necessarily correspond to a real location.

[124] That is to say, things which we are uncertain about regarding their existence do not prove to be counter-examples to my point, for *our thought of them* is unclear. I'm thinking specifically of things which we've heard of but never seen, things referred to in casual conversation we've never heard of before, or anything else about which we have no clear thought to which what we've heard refers.

[125] On my account, a linguistic expression represents an affection of the soul that is a likeness of something existing; where that something exists, the affection of the soul and what exists are identical in form.

thing, we may not assume the subject's existence (and this seems self-evident). In short, the reason why we cannot attribute existence to something represented in an image is akin to the reason why we cannot attribute existence to the subject of an affirmation.

Aristotle does provide us with some indication of how the existence of a thing and the existence of its representation are related. The concept of an image once again arises in Aristotle's definition of the concept of homonymous being in the *Categories*. If we are to attribute any kind of being to the subject of the image, its being would be only homonymous to the being of the thing itself:

> When things have only a name in common and the definition of being which corresponds to the name is different, they are called homonymous. Thus, for example, both a man and a picture are animals. These have only a name in common and the definition of being which corresponds to the name is different; for if one is to say what being an animal is for each of them, one will give two distinct accounts.[126]

The concept of homonymous being provides us with a reason to support Aristotle's assertion in the *De Interpretatione*, explored in the previous chapter, that we may not infer the existence of a thing from a true predication about it. For there it seems evident that Aristotle's notion of simple existence implies a materially existing thing. However, the "is" of a predication truly proves ambiguous. Therefore if the "is" of a predication is homonymous to the "is" of existence, Aristotle is right to warn against truncating a predication to acquire an affirmation of simple existence.

In the context of our present discussion, the distinction has arisen several times between the existence of the thing and the existence of its representation; for whereas the

[126] *Categories* 1a1-5 Ὁμώνυμα λέγεται ὧν ὄνομα μόνον κοινόν, ὁ δὲ κατὰ τοὔνομα λόγος τῆς οὐσίας ἕτερος, οἷον ζῷον ὅ τε ἄνθρωπος καὶ τὸ γεγραμμένον· τούτων γὰρ ὄνομα μόνον κοινόν, ὁ δὲ κατὰ τοὔνομα λόγος τῆς οὐσίας ἕτερος· ἐὰν γὰρ ἀποδιδῷ τις τί ἐστιν αὐτῶν ἑκατέρῳ τὸ ζῴῳ εἶναι, ἴδιον ἑκατέρου λόγον ἀποδώσει.

sketch of a goat stag exists, the goat stag does not. So, met with the painting that Plato used as an example, it would be true to say that the painting is an animal;[127] the goat stag depicted, however, is not. The way in which a goat stag *would* exist (if it *did* exist) is as an animal in a spatio-temporal material world (as a *pragma*). The way in which its image is *an animal* is homonymous to how a living thing capable of perception is *an animal*. If we are thinking of an animal as a kind of *pragma*, then it is true that the goat stag is not an animal, for it does not exist. As an image, the goat stag is an animal. In both subject and predicate we have homonymy, and it is that homonymy that allows us to speak truly when we make affirmations about something that doesn't exist; if, for instance, we look at a painting of a goat stag and say, "Well, that goat stag is just peachy!". T.H. Irwin suggests something similar in his paper "Homonymy in Aristotle", using Aristotle's example of why we might call a sculpted or painted hand a hand:

> Most people will agree with his view that painted and sculpted hands—understood in the way suggested—are not real hands. To explain why we say of such things "That's a hand," but do not believe they are real hands, homonymy may be useful; if we assume the normal definition of hand, we are simply expressing a belief that we know, in Aristotle's view of representations, to be false. Homonymy saves us from self-contradiction or repeated deception.[128]

The result of Aristotle's discussion of homonymy is that he does not attribute existence, even homonymously, to a non-existent thing. Rather, a more subtle distinction must be made. Given that what we might say about the representation is homonymous to what we might say about the thing represented (knowing that the thing represented does

[127] ζῶον is, in fact, homonymous in Greek, referring to either a living being or an image.
[128] Irwin, T.H., "Homonymy in Aristotle" in *The Review of Metaphysics*, Vol. 34, No. 3 (Mar., 1981) pp. 523-544, p. 541-2.

not exist, while the image does), what we are describing is that situation Aristotle described in the *Metaphysics*, wherein the preconditions are met for describing that representation as false.

The Problem of Homonymy

Aristotle describes the problem with homonymous terms in the *Sophistical Refutations* IV. Here homonymy is described as a linguistic way of producing illusion. It is by homonymy (also ambiguity, combination, division, accent and form of expression) that "we might fail to mean the same thing by the same names or accounts".[129]

This serves to show only that Aristotle recognizes that homonymy allows us to express something other than what is the case, by taking advantage of homonymy in a way that is problematic. A word is homonymous in the sense that, if it is possible to accurately interpret a word in two ways, the word must have a double-meaning. The affection of the soul symbolized by the term "goat stag" (that is, the complex thought of something part-goat, part-stag that does not exist) includes the notion that it does not exist. However, the use of the term by the speaker may not coincide with the comprehension of the term by the listener. For example, I may utter a true assertion "a goat stag is an animal" (using "animal" as a shorthand for what I mean, which is "fictional animal"), while they may understand a false assertion "a goat stag is an animal" (by assuming that by "animal" I mean an existing genus indicating extramental objects with the faculty of perception). So, when I speak the phrase "a goat stag is an animal", it is perfectly reasonable for the listener to assume that by this I mean there exists such an animal as a goat stag amongst

[129] *Sophistical Refutations* 165b29-30 τοσαυταχῶς ἂν τοῖς αὐτοῖς ὀνόμασι καὶ λόγοις μὴ ταὐτὸ δηλώσαιμεν.

the *pragmata* which is a possible object of perception. But this is false. And it is not what I mean. So it seems quite possible for an affirmation consisting of the same words to be both true and false; but this is a result of homonymy. For instance, the statements "a goat stag is an animal" and "a goat stag is not an animal" are not opposite if by the former 'goat stag' I mean the subject of an image and by the latter I mean an animal that by definition doesn't exist.[130] Aristotle specifies in *De Interpretatione* 6:

> I speak of statements as opposite when they affirm and deny the same thing of the same thing—not homonymously, together with all other such conditions that we add to counter the troublesome objections of sophists.[131]

The truth of the two statements depends on our being able to replace the terms with their definitions. And when we do that, they become two different affirmations.

Conclusion

Having examined the relation between truth and falsity and combination in select passages from Aristotle and Plato, I conclude that for Aristotle combination is a necessary rather than sufficient condition for attributing to something the quality of truth or falsity in the strict sense Aristotle uses for assertions; combinations in thought, for instance, resulting in our being able to think of a fictional entity, do not have a truth value, despite being a combination that has no likeness in reality. Rather, whether something has a truth

[130] Irwin presents a similar example: "While we may be persuaded that there is something odd about "That's a finger and that's a finger," said of a painted finger and a living finger, we probably find nothing odd in a similar remark about a dead and a living finger. Aristotle argues that what we say is true, but only if we admit the same sort of homonymy as we admitted for painted fingers. What we say cannot be true if the same correct definition of finger is substituted for both occurrences of "finger"; for a finger is essentially part of a living organism performing its functions." Irwin, p. 542.

[131] *De Interpretatione* 17a34-7 λέγω δὲ ἀντικεῖσθαι τὴν τοῦ αὐτοῦ κατὰ τοῦ αὐτοῦ, —μὴ ὁμωνύμως δέ, καὶ ὅσα ἄλλα τῶν τοιούτων προσδιοριζόμεθα πρὸς τὰς σοφιστικὰς ἐνοχλήσεις.

value or not depends on what kinds of things are combined and the way in which they are combined. Whereas Plato relates having a truth value to being a part of discourse, Aristotle distinguishes between things said and things having a truth value using the necessary condition of combination. In discussing the notion of an image in relation to its subject I conclude that Aristotle's notion of existence precludes attributing (extramental) existence to the subject of an image, just as we may not attribute existence to the subject of an affirmation based only on the truth of the affirmation—the existence of the thing represented in words or images is not guaranteed. That is, the fact that something is represented *gives* it no kind of existence. That something that does not exist is represented leads Aristotle to define the representation as a false thing; and whatever we might say about what is represented is homonymous to what we might say about the thing (whether it exists or not). The fact that we can make true statements about things that don't exist is explained by homonymy. We must recall that the truth of affirmations is dependent on our being able to replace the subject and predicate terms with their appropriate definitions and then confirm some kind of correspondence between what is and what is said. Substituting the appropriate definitions, I can make the true claim, "a goat stag is an animal".

A fictional entity—that is, a complex concept created by thought—is not itself false, nor is the term which refers to it. Neither combination is of the sort required to be truth-evaluable. We can think about a goat stag, and think of it as not existing, and not thereby have made a judgment "a goat stag does not exist". The relation between a noun and a verb, and the actual relationship that the form of a predication is meant to express,

is not identical to the relation between the material components of a complex concept ("material" here meaning those things which are combined). The observations from Chapter Two apply here, as even if we were to say that "A goat stag is an animal", we might not attribute existence to it, for unless we already know that the goat stag to which we are referring does or does not exist (that is, whether we are speaking of an image, or of the concept, or anything else), we cannot infer from the affirmation that a goat stag exists. We cannot infer existence from a statement; "is" is only accidentally predicated. In Chapter Six, I will return to the problem of *kath' hauto* significance in order to refute Crivelli's (and others') interpretation of empty terms.

Chapter 4: Correspondence Theories of Truth

Aristotle's statements about things that don't exist raise the problem of whether Aristotle adheres to anything like the correspondence theory of truth, which is often attributed to him.[132] The basic tenet qualifying a theory of truth as a correspondence theory is that on it a statement is true if and only if it corresponds to something that exists. It therefore seems problematic to claim that we can make a true statement about anything that does not exist, for there is nothing to which the statement might correspond. I believe Aristotle avoids this problem by holding that the correspondence relation, in speaking of non-existent things, is not between language and external objects, but between language and the concept (e.g., it is possible to make both true and false statements about some general concept of a goat stag).[133]

The relation of correspondence, however, is a strange one that is never made explicit in Aristotle, "correspondence" being a word modern scholars have used to describe the relation Aristotle invokes. In this chapter I argue that Aristotle's theory of truth *can* be described as a correspondence theory, if by this label we denote only the weak claim that the truth values of truth bearers depend on their standing in some kind of agreement relation to reality. As for what this agreement is, Crivelli's concept of

[132] For instance, by Paolo Crivelli in *Aristotle on Truth*; Christopher Long in *Aristotle on the Nature of Truth* [New York: Cambridge University Press, 2011]; Patterson in "What Is a Correspondence Theory of Truth?"; M.V. Dougherty in "Aristotle's Four Truth Values", *British Journal for the History of Philosophy*, Vol., 12, No. 4, (2004), pp. 585-609; C. Shields "Review of *Aristotle on Truth*", *Philosophical Review*, Vol. 119, No. 2, 2010, 243-246; and Jack D. Davidson in "Appearances, Antirealism, and Aristotle" in *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition*, Vol. 63, No. 2 (Aug., 1991), pp. 147-166.

[133] To speak of a goat stag, it is not a necessary condition that different speakers should have identical concepts of what a goat stag is. For the concept to exist, however, we must assume that there is some unity or similarity between individual conceptions, such that they may be all called concepts of a goat stag.

"correspondence-as-isomorphism" proves useful. This concept can also be expanded to include the looser definition of truth Aristotle ascribes to the non-standard truth bearers I discuss in the next chapter (something more like "accurate representation"). A difficulty in Crivelli's analysis presents itself, however, when he attempts to explain how objects themselves can be true or false. In this chapter I demonstrate the difficulty in applying a correspondence definition of truth to objects In the following chapter, I will go into detail about the stricter and looser uses of "truth" in Aristotle. On the view I will defend in that chapter, the definition of "truth" Aristotle uses depends on whether he is talking about things, perceptions, images, thoughts, judgments, or statements.

Aristotle never calls his theory of truth a "correspondence" theory. In order to determine what a correspondence theory is, and whether Aristotle holds one, I first examine the modern concept of a correspondence theory of truth (with occasional references to Aristotle so that the salient points are highlighted). I next attempt to define what recent Aristotle commentators mean when they talk of a correspondence theory of truth. Then I determine if Aristotle's theory of truth does in fact meet those requirements. I conclude that Aristotle's theory of truth qualifies as a correspondence theory only in a very weak sense. This will lead to a definition of possible truth-functional relata that includes things that don't exist. I therefore maintain that it is possible, according to Aristotle, to make true statements about things that don't exist, in the way earlier specified—for example, that a goat stag is part-goat and part-stag, and that Homer is a poet.

Defining "Correspondence"

Any concept of correspondence demands that we conceive of two things in relation to each other. If there is a correspondence between a statement and something existing, a basic correspondence theory labels that statement as true. Truth, in this sense, would therefore be a relational property of a statement describing its correspondence to a state of affairs. Conceiving of truth as a relational property, a statement may become true or false depending on what it signifies and how that changes (for instance, when Socrates is sitting, "Socrates is sitting" is true; when Socrates gets antsy and stands up, "Socrates is sitting" is false, and "Socrates was sitting" is now true). This property of the truth-values, that they are capable of changing without any change to the utterance (considered syntactically), is well described by Paolo Crivelli, in *Aristotle on Truth*. The truth-value's potential to change without any change to the thing of which it is a property (the statement) leads Crivelli to describe the change in the truth value of an utterance as a "mere Cambridge change", by which he intends to describe a change that does not occur as the result of any change to the object itself, but only to the relation in which it stands.[134]

The problem with Crivelli's interpretation is that he applies this idea of a mere Cambridge change not only to the truth of statements, but also to states of affairs. On my account, states of affairs are not truth-bearers, for Aristotle. Nevertheless, the characterization of truth as a relational property seems a promising one, for the

[134] Crivelli goes on to assert that the properties involved in a Cambridge change are not genuine properties. It follows from his account that, if existence and truth are equivalent for objects and states of affairs, existence is no more a genuine property than truth. "Now, properties involved in a 'mere Cambridge change' are not genuine properties. It follows that truth is not a genuine property." Crivelli, 183.

observation that specific truth-values may change without any change to that of which they are a relational property seems undeniable, and this part of Crivelli's account I wholeheartedly endorse. However, in the case of statements about things that don't exist, we would have to allow for those things that don't exist to be relata, at least on the assumption that every relation must have (at least) two relata. Otherwise, where a perception or utterance is related to something that does not exist, the existence of that relation comes into question, and it would be impossible to say anything true or false about something that does not exist. But, as I examined in Chapter 2, Aristotle describes all negative statements where the subject term refers to something that does not exist as "true"; for if Socrates does not exist, he is not sick, neither is he healthy. If it is possible to say anything true or false of something that does not exist, such statements have to exist in relation to *something*, given that for Aristotle (as I argued in Chapter 2, when discussing the possibility of true statements about non-existents) truth is dependent on existence: if truth is a relational property, and it is possible to make true statements about what does not exist, then what does not exist must have the potential to be a relatum.

There are various definitions of a correspondence theory of truth in the recent literature, some more helpful than others. For instance, Christopher Long describes correspondence according to etymology:

> The etymology of the term 'correspondence' is instructive in this regard: 'cor-' is equivalent to 'com-,' which means "together,", and 'respond' is from the Latin *respondere*, to answer. Correspondence describes the site of ontological encounter in which things respond together with one another.[135]

[135] Long, p. 22.

I note this only as evidence of the range of possible definitions of a correspondence theory, for the idea that there is a location at which a statement and a state of affairs "ontologically" encounter one another and together respond (implying that they have agency) is nonsensical—there is no site where statements and the things they describe meet up and have response parties.

Douglas Patterson seems to have something else in mind when he attempts to describe what is common to all correspondence theories, namely that:

> As I use the terms, a *substantivalist* account of truth is a theory on which truth is treated as a property that can in particular play certain explanatory role in serious theory. A *correspondence* theory of truth is a substantivalist theory that in particular treats this property as consisting in a relation between its bearer and something else, which relation in addition can be considered one of "correspondence", candidate proposals in the literature being certain causal relations or indication relations, or relations of "picturing" or other sorts of isomorphism, and so on.[136]

This definition leaves open what could possibly qualify as the definition of the correspondence relation. It seems accurate to say, however, that it is a relation of some sort, and, for Aristotle, should specify at least causal dependence, since for him the way things are is the cause of the statement's being true or false. This facet of the relation we know from Aristotle's assertions regarding the relation of truth to existence, for instance at Categories 4b8-10: "For it is because the actual thing exists or does not exist that the

[136] Patterson, p. 422. Patterson attempts in this paper to establish that neither Tarski nor Aristotle were correspondence theorists in the strong sense he defines, and therefore, he concludes, in no interesting sense. It seems to me that his strong sense of correspondence contradicts *any* intuitively valid concept of truth we might hold, and while bolder claims tend to perhaps be more interesting, sometimes interesting means inaccurate. That is to say, I don't believe Patterson has proved that Tarski's or Aristotle's definition of truth is in any way suspect, but only that they do not meet his proposed standard for a strong correspondence theory, as they probably should not.

statement is said to be true or false."[137] (To see why this is so we might refer back to the later part of Chapter 2, where I looked at the asymmetrical dependence relation between truth and existence). But dependence does not yet entirely account for the additional significance of "correspondence", and so the definition of the relation must be expanded.[138] Patterson suggests causal relations (a good place to start, in my opinion), indication relations, "picturing", etc. as candidates.

Before I attempt to pin down the kind of relation between truth-bearer and reality that Aristotle might have had in mind, and to ask whether this in fact deserves the name "correspondence", I should also note a difference here between strong and weak correspondence, as defined by Patterson:

> On the weak conception of correspondence a theory is a correspondence theory if according to it truth depends on extra-linguistic fact… Strong correspondence, by contrast, requires that truth be explained in terms of some general characterization of the structural relationship that obtains between a sentence and the world when it is true; this will require, at the very least, some perspicuous yet general characterization of the structure of sentences, some perspicuous but general characterization of the "structure" of worldly correlates such as facts, and some view about when such different entities can have the same structure.[139]

It seems that Aristotle does hold to a weak correspondence theory on this definition, for he does believe that the truth of a statement is dependent on the way things are. But if that is all a correspondence theory entails, it seems not to require that in addition to this "dependence" we also call it a "correspondence"; the term "correspondence", when used in Patterson's weak sense, becomes vacuous, stating only that truth depends in *some* way

[137] τῷ γὰρ τὸ πρᾶγμα εἶναι ἢ μὴ εἶναι, τούτῳ καὶ ὁ λόγος ἀληθὴς ἢ ψευδὴς εἶναι λέγεται
[138] Other conceptions of correspondence not only signify something in addition to dependence, but might eliminate dependence from the conception of correspondence altogether; for instance, if we were to conceive of correspondence as a symmetry of independent existing things.
[139] Patterson, 425.

on extra-linguistic fact. If this is all "correspondence" entails, then the term "correspondence" additionally signifies nothing conceptually useful over and above "dependence". If this is so, then we should not call Aristotle's theory a "correspondence theory", either to avoid adding insignificant terms, or to avoid introducing significant but potentially misleading terms.

By contrast, the stronger conception of correspondence Patterson describes does not seem Aristotelian, for it demands a specific and definite description of the general characterization of the structure of sentences independently of what they are intended to describe. That is, Patterson demands in the passage above that there are independent structures of world and statements and the possibility that they correspond; looking at sentence structure as directly analogous to world structure demands that there be something out there which we are directly describing, for instance, by "and". I can see no strong correspondence being possible in a linguistic theory that attributes varying levels of significance to different syntactic elements. Aristotle's theory appears to have been of this kind. For instance, in the *Poetics*, Aristotle claims that articles have no significance: "An article is a non-significant sound marking the beginning, end, or dividing point of a sentence."[140] Since Aristotle ascribes a difference in the significance of different syntactic elements (as some are insignificant, some are significant but not significant *kath' hauto*, while others are significant *kath' hauto*), a strong correspondence theory of truth is not something he would have subscribed to. For example, based on his discussion of the

[140] *Poetics*, 1457a5-6: ἄρθρον δ' ἐστὶ φωνὴ ἄσημος ἣ λόγου ἀρχὴν ἢ τέλος ἢ διορισμὸν δηλοῖ. Note that Aristotle uses δηλόω here as opposed to σημαίνω, a distinction I discussed in Chapter 1. It is possible, for Aristotle, for a word to show something without properly signifying.

"good cobbler" in *De Interpretatione* (which I discussed in Chapter 2), it seems that for him the structure of the sentence is dependent on the significance of the individual terms of which it is constituted. But if this were Aristotle's view, the syncategorematic elements of language would have nothing to correspond to as their corresponding relata. As evidence for this conclusion I would ask the reader to consider the possible correspondent of "however", "though", "on the other hand", etc. Later in this passage, Aristotle states, "A sentence is a composite significant sound, some of the parts of which have a certain significance by themselves."[141] The fact that there is a structure of relative significance between the parts of a statement makes the application of a strong correspondence theory difficult, for the reason that there would have to be an analogous property of relative significance in the state of affairs the sentence describes, prior to its comparison to the statement, and corresponding to it (if the statement is to be true).

More immediately, a strong correspondence view cannot be Aristotelian because, for Aristotle, language is a symbolization of an affection of the soul (which is a likeness of a thing); language as well as affections of the souls are already ontologically dependent on what exists, which precludes beginning an evaluation of truth by positing that beliefs and statements are independent of things that are. We already saw how, in *De Interpretatione*, Aristotle works his way up to a linguistic theory by proceeding from words that signify things to combining those words in particular ways. But the combinations required of these words are not independently determined, but always dependent on the structure of a world. The strong definition of a correspondence theory

[141] 1457a23-4

here seems to require something other than a subject attempting to signify an affection of the soul through various sounds or graphics. In addition, it seems to require a "perspicuous but general characterization of the structure of sentences" *before* it is determined whether that structure corresponds to the structure of the world. That is, Patterson characterizes the strong correspondence theory as demanding a perspicuous yet general characterization of the structure of facts, independent of the perspicuous yet general characterization of the structure of reality. Patterson presents this idea of a strong correspondence theory *by contrast* to a weak correspondence theory, which is characterized only by the qualification that truth is dependent on existence. However, names and verbs are not significant prior to (or, independent of) their function as a conventional symbol, for Aristotle. And if sentence structure is conventional and intended to symbolize a world from its conception (as it is for Aristotle), then the dependence of language on existence is already embedded in the grammar, and cannot be considered independently of the world structure which it is supposed to be later measured against in order to discern correspondence. I argue that under such definitions of "weak" and "strong", Aristotle's correspondence theory is decidedly weak. (Of course, other definitions of "weak" and "strong" correspondence theories may result in the interpretation of Aristotle I propose to constitute strong correspondence.)

Modern correspondence theory has developed more nuance than a weak correspondence theory of the sort Patterson describes. This is a result, according to Herbert Keuth, of the traditional correspondence theory's being vulnerable to the liar

antinomy.[142] Tarski attempted to resolve the liar antinomy by banning from a well-constructed language terms signifying semantic properties of components of that language (not just truth values of its sentences, but also relations like denoting and signifying). Truth, as Tarski claims in "Truth and Proof", is defined well enough by the statement "p" is true iff p, where p is any declarative sentence.[143] However, this type of correspondence theory extends well beyond the kind of simplistic version we could plausibly ascribe to Aristotle. If Aristotle did subscribe to a correspondence theory that is vulnerable to the criticisms that come to light in face of the liar antinomy, it seems it would be possible to defend him. (For if the truth of the sentence is dependent on an existing state of affairs, statements of the sort of the liar antinomy would have no definite state of affairs on which their truth-value would depend.) But in any case, the kind of linguistic maneuver Tarski employs seems entirely foreign to Aristotle, just as Tarski intended; for he claims that Aristotle's definition of a correspondence theory of truth in the *Metaphysics* "leaves much to be desired from the point of view of precision and formal correctness."[144] He picks on Aristotle in particular for being too specific, insofar as Aristotle's description of truth as "saying" of what is "that it is" would result in the mutilation of sentences; Tarski believes that ramming common sentence structures into this framework would be difficult without "forcing the spirit of the language".[145] As far as being a candidate for a correspondence theory of truth which Aristotle might hold, I

[142] Herbert Keuth, "Tarski's Definition of Truth and the Correspondence Theory," in *Philosophy of Science*, Vol. 45, No. 3 (Sep., 1978), pp. 420-430
[143] Alfred Tarski, "Truth and Proof" in *Scientific American*, June 1969, pp. 63-70 and 75-77. Also see Patterson and Keuth.
[144] Tarski, "Truth and Proof".
[145] Tarski, "Truth and Proof".

believe that any one that involves this kind of linguistic maneuver can be safely eliminated.[146] In Tarski's words, he believes that he has "supersede[d] the Aristotelian formulation while preserving its basic intentions."[147]

Looking at these modern definitions of correspondence theory, I think some more general claims can be made about correspondence theories of truth and whether Aristotle holds one. If anything is meant by the term "correspondence" in these theories, it adds something positive (e.g. for Long, responding together with each other, or on Patterson's definition of strong correspondence, a structural symmetry between world and language) in addition to the dependence relation Aristotle describes. These conceptions of correspondence are not the dependence relation that Aristotle describes when he says that something is true if it says of what is that it is. If Aristotle is properly called a "correspondence" theorist, then it is only a weak (by the standard of modern philosophy) version of correspondence. In the following section, I turn to those who claim Aristotle's theory of truth is a correspondence theory, examine what textual support there is for this claim, and ask what is reasonable to conclude based on this textual support.

Textual Support for Ascribing to Aristotle a Correspondence Theory of Truth

In order to determine whether Aristotle's theory of truth is a correspondence theory, I turn to the recent literature claiming that Aristotle does hold a correspondence theory, and

[146] For a more complete discussion of whether and how Aristotle responds to the liar antinomy, see Paolo Crivelli, "Aristotle on the liar", in *Topoi*, Vol., 23, No. 1, (2004), pp. 61-70.
[147] Tarski, "Truth and Proof".

examine the textual evidence cited in support of this statement. M.V. Dougherty ascribes a simple correspondence theory to Aristotle:

> When the division or combination of subject and predicate corresponds to a division or combination of a state of affairs (*ta pragmata*), the proposition is held to be true, and when there is a non-correspondence, the statement is held to be false.[148]

Dougherty gets this theory from looking at *Metaphysics* 1051b2-9, *De Interpretatione* 19a33, and *Nicomachean Ethics* 1098b11-12, which I will discuss in turn. The first of these three passages is the following:

> The condition of this in the objects is their being combined or separated, so that he who thinks the separated to be separated and the combined to be combined has the truth, while he whose thought is in a state contrary to that of the objects is in error. This being so, when is what is called truth or falsity present, and when is it not? We must consider what we mean by these terms. It is not because we think that you are white, that you *are* white, but because you are white we who say this have the truth.[149]

This passage echoes some of the observations I made in the third chapter about combination and truth, namely that for Aristotle (i) combination is a precondition for attributing a truth-value to something (at least in language and thought), (ii) truth is dependent on existence, and (iii) thinking something does not make that thing exist. Here Aristotle refers explicitly to true thoughts as well as true statements. It doesn't seem to make a difference whether one is talking about a belief or about a statement; the truth

[148] Dougherty. p. 590.

[149] *Metaphysics* 1051b2-9. τοῦτο δ' ἐπὶ τῶν πραγμάτων ἐστὶ τῷ συγκεῖσθαι ἢ διῃρῆσθαι, ὥστε ἀληθεύει μὲν ὁ τὸ διῃρημένον οἰόμενος διῃρῆσθαι καὶ τὸ συγκείμενον συγκεῖσθαι, ἔψευσται δὲ ὁ ἐναντίως ἔχων ἢ τὰ πράγματα, πότ' ἔστιν ἢ οὐκ ἔστι τὸ ἀληθὲς λεγόμενον ἢ ψεῦδος; τοῦτο γὰρ σκεπτέον τί λέγομεν. οὐ γὰρ διὰ τὸ ἡμᾶς οἴεσθαι ἀληθῶς σε λευκὸν εἶναι εἶ σὺ λευκός, ἀλλὰ διὰ τὸ σὲ εἶναι λευκὸν ἡμεῖς οἱ φάντες τοῦτο ἀληθεύομεν

conditions are identical.[150] On the basis of this passage, it does seem that Aristotle subscribes to a correspondence theory of truth in the "weak" sense specified by Patterson, according to which truth depends on how things are. However, this passage provides no support for attributing to Aristotle a "correspondence theory" in the stronger sense. Dougherty does not develop the exact relation of correspondence, relying on a footnote to these three passages in Aristotle (the first of which is above). The introduction of the term "correspondence" to signify an agreement between divisions and combinations in subjects and predicates and states of affairs is unjustified, without specifying what the additional notion of correspondence entails (i.e., the topic of this chapter).

The second passage Dougherty cites is from *De Interpretatione*:

> … statements are true when they are similar to things… [151]

This statement is pulled from a larger one in the text, in the context of Aristotle's discussion of the sea battle in *De Interpretatione* 9. Aristotle uses this claim to support the idea that if what exists now admits of contraries, then it is not necessary that one or the other of those contrary (or contradictory) states of affairs already exist or not exist. Cut apart in this fashion, it seems to be a basic statement of how truth depends on existence, with the added condition that the statement and state of affairs are similar. As I argued above, this similarity is to be expected, if a statement or belief is about something that exists. That is, given that the representation (in language or thought) is causally dependent on things that are, and is in its inception intended to be representative, the structural

[150] Hamlyn also refers to this passage, making the comment, "This at least makes clear that the truth of a proposition is dependent on the facts, although Aristotle uses no general word like 'fact'." Hamlyn, D.W., "The Correspondence Theory of Truth," *The Philosophical Quarterly*, Vol., 12, No. 48 (Jul., 1962), pp. 193-205, p. 194.

[151] *De Interpretatione* 19a33: ἐπεὶ ὁμοίως οἱ λόγοι ἀληθεῖς ὥσπερ τὰ πράγματα

similarity between the representation and what it represents occurs as a natural result of the fact that the representation is *of* what is being represented. It is not an accidental similarity noted after the fact, i.e., if the representation and what is represented were assumed independent and then compared. Hence, it shows only that Aristotle subscribes to a correspondence theory of truth only in the weak sense of correspondence.

The final passage Dougherty uses is this one, from the *Nicomachean Ethics*:

> … for with a true view all the facts harmonize, but with falsehood truth quickly disagrees.[152]

When taken in isolation, this passage seems if anything to support attributing to Aristotle a *coherence* theory of truth, rather than a correspondence theory (due to the terminology of "harmonizing" used in conjunction with "disagreeing").[153] However, this passage is, like the one above from *De Interpretatione*, also taken out of a larger context. When we take into account this context, we see that the harmonizing occurring here is between "our conclusion and our premises" and "what is commonly said". As far as providing textual support for attributing to Aristotle a correspondence theory of truth, this passage seems the least useful so far.

J. Davidson quotes some of the same passages,[154] but also adds several more to the list as evidence that Aristotle held a correspondence theory of truth. Notably, these

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[152] *Nicomachean Ethics* 1098b11-12. τῷ μὲν γὰρ ἀληθεῖ πάντα συνᾴδει τὰ ὑπάρχοντα, τῷ δὲ ψευδεῖ ταχὺ διαφωνεῖ τἀληθές. Greek from I. Bywater, *Aristotelis ethica Nicomachea*. Oxford: Clarendon Press, 1894 (repr. 1962) ὑπάρχοντα might be better translated as "that which already exists" or "that which really exists". "πάντα τὰ ὑπάρχοντα", translated as "all the facts", would therefore apply if what exists is equivalent to a "fact", though in common usage "fact" is often used to denote a statement that is true or false, rather than what exists.

[153] Other translations of συνᾴδει, "harmonize" are "agree with", "accompany (as with a musical instrument)", or "sing together", which hardly help to eliminate the poeticism evident in this statement of a theory of truth.

[154] J. Davidson, "Appearances, Antirealism, and Aristotle".

include a famous passage from the *Metaphysics* that seems to provide the strongest evidence for the existence of a correspondence theory in Aristotle:

> This is clear, in the first place, if we define what the true and false are. To say of what is that it is not, or of what is not that it is, is false, while to say of what is that it is, and of what is not that it is not, is true; so that he who says of anything that it is, or that it is not, will either say what is true or what is false.[155]

This is the most often quoted passage of Aristotle's used to support the idea that he maintained a correspondence theory. However, it does not support attributing such a view

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[155] *Metaphysics* 1011b24-29. δῆλον δὲ πρῶτον μὲν ὁρισαμένοις τί τὸ ἀληθὲς καὶ ψεῦδος. τὸ μὲν γὰρ λέγειν τὸ ὂν μὴ εἶναι ἢ τὸ μὴ ὂν εἶναι ψεῦδος, τὸ δὲ τὸ ὂν εἶναι καὶ τὸ μὴ ὂν μὴ εἶναι ἀληθές, ὥστε καὶ ὁ λέγων εἶναι ἢ μὴ ἀληθεύσει ἢ ψεύσεται· ἀλλ' οὔτε τὸ ὂν λέγεται μὴ εἶναι ἢ εἶναι οὔτε τὸ μὴ ὄν. Christopher Shields notes two similar passages from Plato in his "Review of *Aristotle on Truth*". These are from *Cratylus* and the *Sophist*. Greek text is from J. Burnet, *Platonis opera*, vol. 1. Oxford: Clarendon Press, 1900 (repr. 1967). Cratylus 385b5-9:
Socrates: Then some statements are true, while others are false?
Hermogenes: Certainly.
Socrates: And those that say of the things that are that they are, are true, while those that say of the things that are that they are not, are false?
Hermogenes: Yes.
{ΣΩ.} Οὐκοῦν εἴη ἂν λόγος ἀληθής, ὁ δὲ ψευδής;
{ΕΡΜ.} Πάνυ γε.
{ΣΩ.} Ἆρ' οὖν οὗτος ὃς ἂν τὰ ὄντα λέγῃ ὡς ἔστιν, ἀληθής·
ὃς δ' ἂν ὡς οὐκ ἔστιν, ψευδής;
Sophist 263a11-b10:
Visitor: We also say that each piece of speech has to have some particular quality.
Theaetetus: Yes.
Visitor: What quality should we say each one of these has?
Theaetetus: The second one is false, I suppose, and the other one is true.
Visitor: And the true one says those that are, as they are, about you.
Theaetetus: Of course.
Visitor: And the false one says things different from those that are.
Theaetetus: Yes.
Visitor: So it says those that are not, but that they are.
Theaetetus: I suppose so.
{ΞΕ.} Ποιὸν δέ γέ τινά φαμεν ἀναγκαῖον ἕκαστον εἶναι τῶν λόγων.
{ΘΕΑΙ.} Ναί.
{ΞΕ.} Τούτων δὴ ποῖόν τινα ἑκάτερον φατέον εἶναι;
{ΘΕΑΙ.} Τὸν μὲν ψευδῆ που, τὸν δὲ ἀληθῆ.
{ΞΕ.} Λέγει δὲ αὐτῶν ὁ μὲν ἀληθὴς τὰ ὄντα ὡς ἔστιν περὶ σοῦ.
{ΘΕΑΙ.} Τί μήν;
{ΞΕ.} Ὁ δὲ δὴ ψευδὴς ἕτερα τῶν ὄντων.
{ΘΕΑΙ.} Ναί.
{ΞΕ.} Τὰ μὴ ὄντ' ἄρα ὡς ὄντα λέγει.
{ΘΕΑΙ.} Σχεδόν.
{ΕΡΜ.} Ναί

to him in any strong sense.[156] There is no mention of correspondence here; any notion of correspondence in this passage is implied by the reader's identifying what Aristotle says with some familiar notion of correspondence, and we should be wary of how this could lead to misinterpretation. The passage as written does not explicitly mention any specific relation between what is and what is said; it gives a definition of truth on which the truth of a statement depends on how things are, but there is nothing to indicate that there is a correspondence relation between statements and things, such that if the things and the statement are in this relation the statement is true, and if the things and the statement are not in this relation the statement is false. Adding this (correspondence) relation to what is said here tends to connote other conceptions than an unspecified isomorphism (I gave several examples of these other conceptions in the previous section). This passage gives the impression that if what we say happens to be the case, the statement is true. This *does* imply that truth is dependent on existence, so that what we say is true if it happens to be the case (a weak definition of "correspondence").[157] But it does *not* imply that Aristotle had anything in mind like (say) a structural correspondence between propositions and states of affairs.

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[156] On this passage, Hamlyn remarks, "There is nothing about correspondence here, and little perhaps that is illuminating either." (Hamlyn, 194)

[157] This also brings up the interesting problem of how and if Aristotle's theory of truth can be described as verificationist, such that correspondence would be the test whereby we could determine if *it is accurate to say that* something is true or false. While Hamlyn explicitly denies this, Dougherty specifies that if there is correspondence, a proposition is "held to be" true, whereas if there is not correspondence, a proposition is "held to be" false. This verificationist correspondence theory would hold that, in order to tell if a sentence is true, we must look to the things. But Aristotle's statement here does not give us any indication of *how to tell whether* a statement or true or not. It tells us *whether* a statement is true or not. It doesn't seem to matter whether we *know* a statement is true or false, just whether it is. Hamlyn sums up the problem nicely: "The statement 'A proposition is true if and only if it corresponds to the facts' is not an answer to the question 'How do we *know* when a proposition is true?'" (Hamlyn, 198). This epistemological problem is distinct from the problem of defining true and false statements, as how a statement (or thought) is true or false is distinct from whether we recognize it to be or not.

Turning to the *Categories*, we find additional nuances in Aristotle's concept of truth:

> For it is not because they themselves receive anything that statements and beliefs are said to be able to receive contraries, but because of what happened to something else. For it is because the actual thing exists or does not exist that the statement is said to be true or false, not because it is able itself to receive contraries.[158]

There are two major points to take from this passage. The first is a reiteration of the idea that the truth of statements is dependent on actual things. The second gives us something new to say about Aristotle's concept of truth, which is that the truth of a statement does not change of its own accord, but only when the things to which it refers change. Crivelli takes this to mean that Aristotle believes truth is not a genuine property, or that his theory is closer to a 'minimalist' theory of truth.[159] Of course, if the truth of a statement is dependent on how things actually are, then if those things change, the truth of the statement may also change in some relevant way. (The truth of "Socrates is a man" does not change if he changes location, but only if his manliness changes.) If we accept this minimal dependence between what is and what is said, it seems that truth must be a relational property for Aristotle; for if a property can change without any change to that of which it is a property (the statement), then that property is a relational property.

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[158] *Categories* 4b6-10. ὁ γὰρ λόγος καὶ ἡ δόξα οὐ τῷ αὐτὰ δέχεσθαί τι τῶν ἐναντίων εἶναι δεκτικὰ λέγεται, ἀλλὰ τῷ περὶ ἕτερόν τι τὸ πάθος γεγενῆσθαι· —τῷ γὰρ τὸ πρᾶγμα εἶναι ἢ μὴ εἶναι, τούτῳ καὶ ὁ λόγος ἀληθὴς ἢ ψευδὴς εἶναι λέγεται, οὐ τῷ αὐτὸν δεκτικὸν εἶναι τῶν ἐναντίων. One might argue that the usage of εἶναι in this passage is better translated in the veridical sense than in the existential; however, this would make the passage read as if Aristotle is supporting the view that something is true because a thing (πρᾶγμα) is true; truth would be dependent on truth as opposed to existence. I argue against this (Crivelli's) interpretation in what follows.

[159] Crivelli, *Aristotle on Truth*, p. 31.

Relations, according to Aristotle, "are spoken of in relation to correlatives that reciprocate" [*Cat.* 6b27]. The idea of reciprocation is explicitly defined further on in the *Categories* with specific regard to the reciprocity of truth and existence:

> For there being a man reciprocates as to implication of existence with the true statement about it: if there is a man, the statement whereby we say that there is a man is true, and reciprocally—since if the statement whereby we say that there is a man is true, there is a man. But whereas the true statement is in no way the cause of the actual thing's existence, the actual thing does seem in some way the cause of the statement's being true: it is because the actual thing exists or does not that the statement is called true or false.[160]

Here again, Aristotle states that truth is causally dependent on actual things, and specifies the reciprocity condition of being a relative. The distinction noted here between relational reciprocity in general and causal reciprocity in particular recalls the discussion of Chapter 2. There I discussed how it seems Aristotle contradicts his own claim that reciprocity is a necessary quality of relation, by specifying in *De Interpretatione* that the truth of "Homer is a poet" is no assurance of the existence of Homer. To solve this difficulty, we need only recall that the problem with asserting existence from a true statement is that the "is" is accidentally predicated of a subject in a true affirmation, and therefore the statement cannot simply be truncated to "Homer is". That Homer is is still not a result of there being a true statement about him.

[160] *Categories* 14b14-22. τὸ γὰρ εἶναι ἄνθρωπον ἀντιστρέφει κατὰ τὴν τοῦ εἶναι ἀκολούθησιν πρὸς τὸν ἀληθῆ περὶ αὐτοῦ λόγον· εἰ γὰρ ἔστιν ἄνθρωπος, ἀληθὴς ὁ λόγος ᾧ λέγομεν ὅτι ἔστιν ἄνθρωπος· καὶ ἀντιστρέφει γε, —εἰ γὰρ ἀληθὴς ὁ λόγος ᾧ λέγομεν ὅτι ἔστιν ἄνθρωπος, ἔστιν ἄνθρωπος·— ἔστι δὲ ὁ μὲν ἀληθὴς λόγος οὐδαμῶς αἴτιος τοῦ εἶναι τὸ πρᾶγμα, τὸ μέντοι πρᾶγμα φαίνεταί πως αἴτιον τοῦ εἶναι ἀληθῆ τὸν λόγον· τῷ γὰρ εἶναι τὸ πρᾶγμα ἢ μὴ ἀληθὴς ὁ λόγος ἢ ψευδὴς λέγεται.

Crivelli on Correspondence-as-Isomorphism

According to Crivelli, Aristotle's theory of truth "can be regarded as a correspondence theory of truth in that it can be regarded as taking the truth of an assertion to amount to a relation of isomorphism to reality."[161] On Crivelli's view, this isomorphism is not between the structure of the statement and the structure of some state of affairs. Rather, the state of affairs is considered a single object isomorphic to the assertion as a whole. This makes Crivelli's interpretation of Aristotle's theory of truth similarly applicable to all simple and complex things (*pragmata*), "mental items… and linguistic items"[162]. This allows Crivelli to claim—contrary to my interpretation in Chapter 3—that for Aristotle the existence of a thing is equivalent to its truth. However, as I argued in Chapter 3, since Aristotle describes false, existent things in *Metaphysics*, IV.29, 1024b17-26, Crivelli's interpretation must be rejected.

But first let's unpack what Crivelli takes "correspondence-as-isomorphism" to mean. Crivelli asserts that the correspondence-as-isomorphism theory of truth describes a theory meeting three specific conditions:

> … first, it provides a classification of beliefs (assertions); second, it maps one-to-one the classes of beliefs (assertions) onto characteristics that can hold of the item or items a belief (assertion) is about; third, it states that a belief (assertion) is true when and only when the characteristic on which the class it belongs to is mapped holds of the item or items it is about.[163]

Crivelli adds soon after that there is a stricter conception of a correspondence theory of truth, which Aristotle also holds:

[161] Crivelli, 129.
[162] Crivelli, 45.
[163] Crivelli, 23.

> Aristotle's theory of truth is a correspondence theory of truth also according to a different, stricter conception. This is because Aristotle's theory of truth describes each class of beliefs, or assertions, in such a way that each belief, or assertion 'mirrors' the characteristic on which the class to which it belongs is mapped.[164]

Crivelli's "correspondence-as-isomorphism" description of Aristotle's theory of truth, I believe, is tenable, at least when applied to beliefs and assertions, for it describes just that there is an isomorphism between a belief or assertion and what exists. This adequately accounts for the combinations I defined as truth-bearing in the third chapter, where I used the term "interweaving" to describe both the relation between subject and predicate and those things to which they refer. When these are related in ways that mirror one another, a correspondence relation holds between what is and what is said. The addition of "mirroring" to this definition is descriptive not only of linguistic truths but also of the looser definition of truth I argue that Aristotle applies to perceptions and *phantasmata* in the next chapter (more like accurate representation, or a mirroring between the content and the cause of a mental representation). This definition of Crivelli's is, however, revised later on in the book, where he expands the definition to include not only beliefs and assertions, but all "composite and non-composite items"; while Crivelli claims that the later definition can cover predicative assertions as well as existential (the condition to which Tarski claimed Aristotle's correspondence theory could not hold), it results in a circularity where truth is defined according to truth, and falsity according to falsity. Crivelli writes:

> The definition can then be paraphrased as follows: 'To say of a (composite or non-composite) item which in fact "is" in the sense of being true that it "is

[164] Crivelli, 24.

> not" in the sense of being false, or of a (composite or non-composite) item which in fact "is not" in the sense of being false that it "is" in the sense of being true, is false; to say of a (composite or non-composite) item which in fact "is" in the sense of being true that it "is" in the sense of being true, or of a (composite or non-composite) item which in fact "is not" in the sense of being false that it "is not" in the sense of being false, is true.'[165]

Crivelli is here thwarted by his commitment to the idea that simple objects as well as their representations have truth-values. While I believe we can expand the correspondence-as-isomorphism definition of truth to representations as well as beliefs and assertions, we must stop short of simple objects.[166] If Crivelli's interpretation of Aristotle's definition of truth is intended to apply to all of objects, mental items, and linguistic items, then it is, in effect, describing a relation of truth to truth, as opposed to a relation of truth to existence. In his description of correspondence-as-isomorphism, Crivelli makes the truth of beliefs and assertions dependent on a "mirroring" of what exists. However, by equating existence and truth in the case of objects, Crivelli makes the truth of beliefs and assertions just a mirroring of the truth of a thing. But if the quality of the thing is identical to the quality of the belief or assertion, I see no mirroring at all, assuming that a thing's being itself is not equivalent to its "mirroring" itself. Crivelli is committed to the theory that being = truth even so far as to say that the being of a state of affairs is a similar relational property to the truth of a statement, such that the being or

[165] Crivelli, 135.
[166] Crivelli's definition here would also allow for individual words (assuming they are "items" to have a truth-value, despite Aristotle's assertion at *De Interpretatione* 16a11 that they do not: "even goat stag signifies something but not, as yet, anything true or false—unless 'is' or 'is not' is added". Signification by a word is not a "mirroring", in the sense that a word would correspond to an object and therefore be true or false. In the case of beliefs and assertions, it is the relation between subject and predicate that is mirrored or corresponds, or doesn't; i.e., the difference between saying of what is that it is, as opposed to that it is not.

not being of a state of affairs might change without any change to the state of affairs itself.

> For whatever arguments show that an assertion can be true at one time and false at another without changing should be transferable to states of affairs and thus establish that a state of affairs can 'be' in the sense of being true at one time and 'not be' in the sense of being false at another without changing.[167]

In order to support this interpretation, Crivelli has to distinguish between the constituents of the state of affairs and the state of affairs itself. He uses the example of someone seated getting up, in such a way that it is not the state of affairs that gets up, but the individual.[168] The absurdity of the idea that a state of affairs could itself get up or not makes this interpretation seem prima facie a good one. But it isn't. According to Aristotle, we must always be able to replace our terms with their definitions to avoid mistakes of homonymy, and in the case of these states of affairs, *Socrates-sitting-down* and *Socrates-standing-up*, the difference is obvious. In the case of statements, on the other hand, the syntactic complex, "Socrates is sitting down" has not changed from one situation to the other, though its truth or falsity has. In the case of states of affairs, it really is the state of affairs that changes when one particular state of affairs (for example, *Socrates-sitting*) moves from being to not being—*what is* has changed. Existence is not an additional predicate on some ideal state of affairs which is at times exemplified and at

[167] Crivelli, 197.

[168] "…the change responsible for the assertion or belief that somebody is seated being true at one time and false at another is the getting up, and what gets up is not a state of affairs but the individual to which the assertion or belief refers," (Crivelli, 197). Crivelli maintains that the state of affairs 'Socrates is seated' is composed of the individual 'Socrates' and the universal 'seated'. The negative predication concerns the same state of affairs, (Crivelli, 12). The truth of a predication about the state of affairs depends on whether the state of affairs is or is not combined, (Crivelli, 12-13). He uses this to posit that, "a state of affairs can 'be' in the sense of being true at one time and 'not be' in the sense of being false at another without changing," (Crivelli, 197).

times not; there is no ideal state of affairs *Socrates-sitting* in addition to a particular man, Socrates, who is sitting. The interpretation stating that there is makes a state of affairs just like a natural kind, which, according to Crivelli, exists always.[169] Thus Crivelli is committed not only to the (already contentious) view that for Aristotle natural kinds exist eternally, but also to the unappealing view that for Aristotle states of affairs have basically the same ontological status as natural kinds.

Shields, in his review of Crivelli's book, makes note of but does not develop the oddity of thinking of Aristotle's theory of truth in this way, and notes that if it is possible that states of affairs themselves have truth values, it would be difficult to think of Aristotle's theory of truth as one of correspondence:

> Consider the state of affairs of *Socrates-being-seated-on-a-leather-sofa*. To many today it will seem a kind of category mistake to call this state of affairs true or false, or even to assess it for truth or falsity. *Socrates-being-seated-on-a-leather-sofa* seems a certain sort of structured entity, a complex pair of individuals and a nonsymmetric relation. Because such a complex is nowhere assertoric, it would seem odd to inquire whether it—the state of affairs, not a report of it—is true. Here Aristotle's theory of truth, if he may be said to have a theory of truth, will strike some modern readers as odd at best; and it ought to strike them, for the same reason, as unsuited to be co-opted as a forerunner to the correspondence theory.[170]

But this oddity is resolved if we do not consider objects (including states of affairs, maintaining Crivelli's inclusion of states of affairs as kinds of objects) to have truth values, a topic for the following chapter.

[169] Crivelli, 19.
[170] Shields, 244.

Correspondence and Things that Do Not Exist

When we consider Aristotle's correspondence theory of truth in relation to things that don't exist, the question quickly arises: to what does the truth-bearer correspond? If truth is dependent on existence, and truth and falsity are determined by a correspondence (or isomorphism) relation to what exists, then it would seem impossible that anything should be true that refers to something that does not exist. But I argue that Aristotle avoids this problem by holding that the correspondence relation, in speaking of non-existent things, is not between language and external objects, but between language and an affection of the soul. As a result, for Aristotle, it is possible to make both true and false statements about some general concept of a goat stag; about the putative goat stag *pragma*, however, it is only possible to make true denials—defined as a statement denying something of something, where the latter something is a goat stag.[171] That is, as I argued in Chapter 3, it is possible to make true simple and complex statements about a goat stag, provided we disambiguate "goat stag" to signify either the putative *pragma* or the concept.

In Chapter 2, I referred to a similar line of argument with regard to predicative assertions where the subject term refers to something that does not exist (without there specifying the correspondence relation that was to hold). It is impossible, on that interpretation, for the statement to have any truth-value at all. Effectively, what that interpretation says is that if there is nothing to which the predication corresponds, then it

[171] To be clear, the concept of a goat stag does exist; the goat stag does not. When I say that a goat stag does not exist, I mean that there is no extra-mental animal, the goat stag. What a goat stag *is*, is a concept; what it *is not* is an animal running around in the world. As regards complex statements, for instance, "If there were goat stags, they would have antlers", we would have to take each statement form on a case-by-case basis to determine what can be truly and falsely stated concerning something that does not exist. In this case, we would want to refer to Aristotle's discussion of conditional statements to which I referred in Chapter 2.

can have no truth-value whatever, for truth is a matter of correspondence. I argued against this interpretation, stating that the referent of the subject term is not a mind-independent thing that does not exist, but rather a thought, which *does* exist (though it is a thought of something that does not exist). The thought, I argued in Chapter 3, is a construction of the mind, a combination of simple thoughts into a complex thought that has no external exemplifier.

Although it may seem that for Aristotle a truth-bearer depends on what does not exist for its truth, it does not. When Aristotle speaks of things that do not exist, we should interpret him to mean things that do not exist in the ordinary sense, that is, as external, mind-independent material objects. The truth-bearer does not directly depend for its truth on a thing of this kind (which, after all, does not exist), but rather on the thought—which *does* exist.

As I discussed in the first chapter, names and verbs signify affections of the soul. It seems plausible, therefore, that Aristotle's notion of truth in language and thought would not skip the mediation of the external world by thought and perception, in such a way that the truth of a statement would depend directly to an external thing (*pragma*)—it does not. The truth of a perception or thought, on the other hand, depends on its accurately representing—exemplifying an isomorphic correspondence relation with—the *pragma*.[172] Where what is thought or perceived is identical to what exists (that is, in the

[172] Where there is no *pragma*, i.e., in the case of something that does not exist, it is not possible to have an accurate perception or simple thought of it. Such perceptions and thoughts would be false. As I have argued in previous chapters, however, the term "goat stag" itself is not false unless something is predicated of it. It is possible, therefore, to have a term that is not false symbolizing what is impossible to perceive except falsely—that which does not exist. This is a mere linguistic confusion. The term is judged to be false on a different standard than is the perception.

case where what is thought or perceived does exist and is *accurately* perceived or thought), whether we measure the assertion against the things or the thought does not matter, as they should be identical. If, however, the assertion refers to something that does not exist, the divide between its putative existence as a *pragma* and its real existence as a concept makes itself clearly evident. There is a thought of a goat stag about which I can make true or false statements, whereas there is no goat stag about which I could do the same.[173]

Conclusion

In this chapter I have reviewed several modern definitions of "correspondence" applied to a correspondence theory of truth, and examined the textual evidence for the interpretation on which Aristotle holds a correspondence theory. While there are many definitions of a "correspondence" theory of truth in modern philosophy, Aristotle's correspondence theory seems to represent only a weak version at most. It qualifies as a "correspondence" theory in a weak sense since it does make truth dependent on existence; but we should be wary of attributing additional implications of the word to Aristotle's theory. In the end, Crivelli's "correspondence-as-isomorphism" interpretation of Aristotle is most tenable in the original formulation, when he describes it as being applicable to beliefs and assertions. I suggest (and will argue in the following chapter) that it is also applicable to the looser definition of truth Aristotle applies to mental representations. However, Crivelli's commitment to the idea that existence is equivalent

[173] When I make the claim, for instance, that "a goat stag has four legs", I am speaking truly of the concept of a goat stag, one that has four conceptual legs. To attribute extramental material legs to the concept of a goat stag would be to speak falsely.

to truth in the case of simple objects leads him to expand the definition to be applicable to all composite or non-composite items. In so doing, he negates the "mirroring" aspect of his own definition.

My discussion of Crivelli's correspondence-as-isomorphism interpretation of Aristotle's theory of truth has brought us back to the original question I proposed to answer in this chapter—precisely, to what does something true correspond, if correspondence is the qualification that defines something as true? On Crivelli's account, if something does not exist, this is equivalent to saying it is not true. I argued that if existence is equivalent to truth, then the relation of a statement to what exists would be identity with respect to the property of truth, and not correspondence. On Crivelli's interpretation, it seems that Aristotle is going to run into trouble by defining existence as equivalent to truth, and then defining truth in terms of correspondence-as-isomorphism. I argue that it is Crivelli and not Aristotle who has this difficulty; for we should not interpret Aristotle to mean either that existence is equivalent to truth or that objects have a truth value.

Applying the correspondence theory of truth to assertions about what does not exist allowed me to further specify what exactly is to correspond to what when we claim that a correspondence relation exists between what exists and a truth-bearer. In the next chapter, I consider to what Aristotle applies a concept of truth (i.e., what he counts as truth bearers), and argue that with regard to non-standard truth-bearers (the most common truth-bearer discussed heretofore being beliefs and statements), he is actually using the term "true" with a looser connotation, to mean something more like "accurate

representation". Where simple objects are called truth-bearers, this is only because of their causal role in determining the truth of other things.

Chapter Five: Aristotle's Theories of Truth

The problems examined in the previous chapter revolved around the correspondence theory of truth: what "correspondence" connotes, whether Aristotle's theory of truth fits that description, and what is supposed to correspond to what on this model. The guiding questions were: (i) did Aristotle hold a correspondence theory of truth? And (ii) when one says true things about what does not exist, to what does the truth-bearer correspond? This is not only a problem for truth-bearing statements and judgments, but also for other truth-bearers. Aristotle also uses the terms "true" and "false" with respect to objects, perceptions and *phantasmata*. How does non-existence relate to the truth or falsity of these truth-bearers?

In this chapter, I focus on Aristotle's treatment of non-standard truth-bearers: objects, perceptions and *phantasmata*. While the truth-conditions of statements and thoughts of a certain type (judgments involving subjects and predicates) are often discussed, his views about truth with regard to objects, perceptions, and imaginations are less often considered. On close examination, these latter examples of truth-bearers don't seem to exemplify the theory of truth that might be extracted from Aristotle's text if we were to look only at the definition of truth applicable to combinations in thought and language. In fact, as I will show, there are notable differences among the ways in which Aristotle speaks of truth with respect to the various truth-bearers he identifies. As a result, the notions of truth applied to objects or perceptions are not subsumable under the same definition of truth as that which applies to subject-predicate combinations in language and thought, nor (I will argue) are the definitions of truth applied to objects and perceptions

consistent with each other. Aristotle uses a looser definition of truth with regard to the non-standard truth-bearers, which is something more like "accurate representation" in the cases of perception and *phantasmata*. With regard to objects, I reject Crivelli's interpretation that holds that Aristotle believed that truth and falsity are identical to existence and non-existence.

Truth with regard to Objects

I begin with Aristotle's views on truth with regard to objects. Under the category of objects I include simple and complex objects and also include (as a complex object) states of affairs. According to Crivelli, there are "certain objects whose nature is neither mental nor linguistic"[174], which are truth-bearers according to his interpretation of Aristotle. Among these objects are immaterial substances, possibly material substances,[175] and states of affairs. For all of these objects, Crivelli claims we should interpret their truth or falsity as equivalent to their existence or non-existence. In chapter 3, I argued that existence is not equivalent to truth with regard to objects or things (*pragmata*), for it is possible to have false things that exist. In maintaining this view, I disagree with the view of Crivelli. It will therefore be useful to begin my discussion by highlighting the main problems with Crivelli's account. The specific point on which I disagree with Crivelli is with regard to whether objects (of any sort) have a truth value that is equivalent to their existence, for Aristotle. I include states of affairs here as objects, maintaining Crivelli's definition of them as such. Crivelli defines a state of affairs as follows:

[174] Crivelli, 3
[175] Crivelli is very carefully non-committal on whether material substances can be true or false, focusing mainly on states of affairs.

> A state of affairs, as it is conceived of by Aristotle, is best understood as an object corresponding to a complete present-tense affirmative predicative assertion, and as being composed of the objects signified by the assertion's predicate and subject. [176]

Where I argued that there is a correspondence between the interweaving of things (that represented by a subject and a predicate) and the interweaving of terms (the subject and predicate), to call the former true is again to turn Aristotle's theory of truth into an identity theory; truth would correspond to truth. I maintain the distinction that one is true (the assertion), while the other simply exists (and existence is not equivalent to truth).

As evidence that Aristotle believes objects to have a truth value, Crivelli cites *Metaphysics*, IV.29, 1024b17-26. As I argued in chapter 3, the first set of examples of possible false objects Aristotle cites more closely resemble states of affairs than simple or complex objects. Of these states of affairs, some are false sometimes (your sitting), and some always. The example Aristotle gives of a thing that is always false is the diagonal's being commensurate. In this example the falsity of the object is due to its being excluded as a possible existent. The example of something that is false sometimes is your sitting. From this example alone, it seems, Crivelli derives his view that for Aristotle there is such a thing as a false state of affairs. However, as I argued in the previous chapter, with a correspondence-as-isomorphism theory of truth, there cannot be such a thing as a false state of affairs. In any case where truth is meant to be equivalent to existence, as Crivelli contends, we will end up with a circular definition of truth (where truth depends on truth, as opposed to existence).

[176] Crivelli, 5

In the previous chapter I argued that there is no correspondence between an ideal state of affairs (of the eternal, Platonic type, e.g. the state of affairs *Socrates-sitting-down*) and what actually is going on in the world at the moment. The corollary to this argument is that states of affairs are not truth-bearing in the same way as a statement about them would be; if truth is a relational property, and there are not two relata, truth considerations are thereby precluded at the level of states of affairs. This conclusion can be similarly applied to simple and complex objects.

Mark Wheeler is similarly suspicious of Crivelli's treatment of states of affairs as having truth values. In his review of *Aristotle on Truth*, he states:

> The chief problem in Chapter I, however, is Crivelli's proposed ontological scheme. Among objects, in addition to simple immaterial and composite material substances, Crivelli argues that Aristotle posits composite "states-of-affairs" that bear truth and falsehood, exhibit modal properties, and serve as objects of propositional attitudes. He relies on *Metaphysics*, 5.29, 1024b17-21, and 10.10, 1051a34-1051b17 for this claim, and it is the weakest point in the book. Crivelli's abstract, propositionally structured states-of-affairs do not resemble any of the familiar denizens of Aristotle's ontology, and the textual evidence he offers is insufficient, leaving it unclear how they would fit into Aristotle's general semantic theory.[177]

Mentioned also in the *Metaphysics* passage are objects that represent as existing things that do not exist, as well as existing things that by nature appear as things are not; in this sense an object may also be called false. But the fact that these objects exist to represent is evidence that their existence and their truth (or falsity) are not the same property. The examples Aristotle gives there are those of a sketch and dreams. What he means by falsity there is, I argue, that the representation is false (but existing), while the

[177] Review of *Aristotle on Truth* by Mark Wheeler, *Journal of the History of Philosophy*, Vol. 44, No 3, July 2006, 469-470, p. 469.

represented object does not exist (but is not false). The example of the sketch fits the first of two alternatives mentioned by Aristotle; it appears differently than what the thing depicted is like. Caston uses this passage to note that Aristotle's most general notion of truth seems to depend on a divergence of content and cause. And while he states that the cause can also be called false, it can only be so called by synecdoche, i.e., it is called false even though it is not a proper truth-bearer, but rather something that does not exist.

> We also find Aristotle appealing more generally to the divergence of cause and content to explain falsehood. In Metaphysics 5.29, for example, he says that a scene-painting or a dream are both "something, but not what they produce a phantasia of" (τι, ἀλλ' οὐχ ὧν ἐμποιεῖ τὴν φαντασίαν1024b23-24), and for this reason can be called false. Scene-paintings and dreams produce mental states that are not about themselves, but about something quite different, thus splitting content and cause. Accordingly, the resulting states will often be false; and their causes can be called false by synecdoche.[178]

The difference between calling the object false and its representation false is that the representation is distinguished from the object by the fact that it has a content, and this content can diverge from its cause. I agree with Caston's interpretation that the truth-bearer in these cases is called false where the content of the mental state caused by the sketch or dream does not exist. Where the content and cause are identical in form, e.g., if a sketch accurately depicts something that does or does not exist, the representation is true in a very qualified sense. We may say, for instance, that a portrait is a true likeness of Socrates. But the example of the sketch as a false object highlights how this particular form of representation is always false in many respects; for instance, it depicts Socrates sitting when he is, in fact, long dead. Unlike the sketch, on the other hand, an object itself

[178] Caston, Victor, "Why Aristotle Needs Imagination", p. 51.

has no content whatsoever; its content cannot, therefore, diverge from its cause. The object simply exists.

In Chapter 3, I examined Aristotle's concept of truth with regard to truth as a function of combination and separation. There, I argued that Aristotle takes combination or separation (of a particular sort) to be a necessary condition to describe something as true or false. Other things, for instance simple objects, were precluded from being truth-bearers for failing to meet this qualification. The theory of truth I was speaking of there is that which is most often discussed, for it maintains the common notion that proper truth-bearers are subject-predicate combinations (in thought or language). However, saying that an object (or thing) is true precludes maintaining this definition of truth generally. This is because objects (most obviously, simple objects) do not exemplify the kind of combination Aristotle requires for truth considerations (under the general theory earlier examined) to be applicable. If we are to have an Aristotelian theory of object truth at all, it seems object truth would have to be a very special case—in the sense that the truth of an object is markedly different from the truth of a statement. And it is not only that the truth of an object is proportionately simpler relative to the simplicity of the subject matter; rather, there is no mirroring or correspondence of an object unless it is one of the special objects Aristotle mentions, which are representative of something else (a sketch or dreams). An object with no represented content has nothing to mirror. The concept of truth as a relational property is inapplicable at the level of objects, as is the concept of truth as a function of combination and separation, as is the concept of truth as a convergence of content and cause. The only qualification left on which to measure the

truth and falsity of objects is their existence. However, the passage from 5.29 indicates that Aristotle conceives of false, existent things, which would not be possible if truth and existence were equivalent. Aristotle, as I have argued previously, does not equate truth and existence.

We therefore have two options when faced with the passage from the *Metaphysics* that suggests that Aristotle thought objects can be true or false: (i) to declare that it is a blip in the system (Aristotle was confused, the editors did something wrong, etc.), and that on his considered view there really is no such thing as a false object, or (ii) to define "truth" as it is used there as markedly different from the general Aristotelian theory of truth—that often described as a correspondence theory, and applied to combinations of a particular sort. Caston proposes the most reasonable solution, which I ultimately support: if we call an object "false," this is a synecdoche of our calling its *representation* false. This is not to say that Aristotle was confused, but that he applied the notion of truth most loosely to the case of objects. It is improper to call an *object* false in a strict sense, since it is the representation of the object that is false. Aristotle does not consistently apply a strict sense of "truth" or "falsity". My further discussion in this chapter supports the conclusion that Aristotle used the notion of truth more or less loosely, depending on the kind of truth-bearer to which it is applied. If a thing is describable as false, that does not mean that a perception of it is false, that a thought about it is false, or that a statement using it as the subject or predicate is false, for the notions of truth and falsity applied at any one level here are significantly different from those applied at another level. In the following section, I argue that Aristotle's notion of truth with respect to perceptibles also

differs significantly from the notion of truth he applies to objects, as well as to that he applies to statements and thoughts.

Truth with respect to Perceptions

According to the first chapter of *De Interpretatione*, affections of the soul are likenesses of things. However, the extent to which a perception is a likeness of a thing depends on what kind of perception we are talking about. Where their truth and falsity are concerned, special perceptibles are very different from common perceptibles, which are again different from incidental perceptibles. Aristotle claims that our perceptions of common perceptibles are most likely to be false, incidental perceptions next most likely, and special perceptions least likely. Aristotle summarizes their respective liability to be true or false in *De Anima* at 428b18-26:

> Perception of the special-objects is true or is liable to falsity to the least possible extent. Secondly {there is the perception} that those things which are incidental to these objects of perception are so; and here now it is possible to be in error, for we are not mistaken on the point that there is white, but about whether the white object is this thing or another we may be mistaken. Thirdly {there is perception} of the common-objects which follow upon the incidental-objects to which the special-objects belong (I mean, for example, movement and magnitude); and about these then it is most possible to be in error in sense-perception.[179]

The first line of this quotation is, I believe, potentially misleading. We should not interpret the second qualification on the perception of the special objects of sense (that they admit the least possible amount of falsehood) to indicate that Aristotle is stepping

[179] 428b18-25 ἡ αἴσθησις τῶν μὲν ἰδίων ἀληθής ἐστιν ἢ ὅτι ὀλίγιστον ἔχουσα τὸ ψεῦδος. δεύτερον δὲ τοῦ συμβεβηκέναι ταῦτα <ἃ συμβέβηκε τοῖς αἰσθητοῖς>· καὶ ἐνταῦθα ἤδη ἐνδέχεται διαψεύδεσθαι· ὅτι μὲν γὰρ λευκόν, οὐ ψεύδεται, εἰ δὲ τοῦτο τὸ λευκὸν ἢ ἄλλο τι, ψεύδεται. τρίτον δὲ τῶν κοινῶν καὶ ἑπομένων τοῖς συμβεβηκόσιν οἷς ὑπάρχει τὰ ἴδια (λέγω δ᾽ οἷον κίνησις καὶ μέγεθος) [ἃ συμβέβηκε τοῖς αἰσθητοῖς]· περὶ ἃ μάλιστα ἤδη ἔστιν ἀπατηθῆναι κατὰ τὴν αἴσθησιν

back from the original claim, which is that the perception of the special objects of sense is never in error, or always true. Aristotle states repeatedly elsewhere that perceptions of the special objects of sense are never in error, never false or always true.[180] That these perceptions "admit the least possible amount of falsehood" should not connote to us that Aristotle believes there is still some miniscule amount of falsehood sneaking into our perception of special sensibles; this would entail that Aristotle believe in such a thing as degrees of truth, which is an insupportable interpretation. Rather, these perceptions are the least likely to deviate from strict accuracy.

Caston dismisses the second part of this statement as inexplicable, at least on the assumption that we have a "pure" case of sensation:

> [Aristotle] begins by repeating the position he maintains elsewhere (including earlier in the chapter: 427b12, 428al1), namely, that sensation is always true. But he adds the qualification: "or it has falsehood to the least possible extent" (ἢ ὅτι ὀλίγιστον ἔχουσα τὸ ψεῦδος). Provided that we have a pure case of sensation, unadulterated by other mental processes, this qualification is inexplicable on Aristotle's account: sensation always corresponds to its cause.[181]

[180] See, for instance, *De Anima* 418a11-12 "I call special-object whatever cannot be perceived by another sense, and about which it is impossible to be deceived" λέγω δ' ἴδιον μὲν ὃ μὴ ἐνδέχεται ἑτέρᾳ αἰσθήσει αἰσθάνεσθαι, καὶ περὶ ὃ μὴ ἐνδέχεται ἀπατηθῆναι; *De Anima* 427b11-13 "for perception of the special-objects is always true and is found in all animals" ἡ μὲν γὰρ αἴσθησις τῶν ἰδίων ἀεὶ ἀληθής, καὶ πᾶσιν ὑπάρχει τοῖς ζῴοις; *De Anima* 428b27 "The first is true as long as perception is present" καὶ ἡ μὲν πρώτη παρούσης τῆς αἰσθήσεως ἀληθής; *Metaphysics* 1010b1-3 "Regarding the nature of truth, we must maintain that not everything which appears is true. Firstly, even if sensation—at least of the object special to the sense in question—is not false; still appearance is not the same as sensation." περὶ δὲ τῆς ἀληθείας, ὡς οὐ πᾶν τὸ φαινόμενον ἀληθές, πρῶτον μὲν ὅτι οὐδ' <εἰ> ἡ αἴσθησις <μὴ> ψευδὴς τοῦ γε ἰδίου ἐστίν, ἀλλ' ἡ φαντασία οὐ ταὐτὸν τῇ αἰσθήσει. See also *De Sensu* 442a29-442b13, where Aristotle discusses Democritus' view that all objects of sense are objects of touch.

[181] Caston, p. 53. Caston differentiates the "pure" sensation with that adulterated by other mental processes (*phantasia*). On Caston's interpretation, sensation "always corresponds to its cause" as long as other mental processes do not get involved. I infer that in such cases (for Caston's interpretation) it is not the sensation that is inaccurate; inaccuracy is introduced when the other mental process interferes. I agree.

As I see it, this qualification is not here contradicting the statement that the perception of special sensibles is always true; rather, it explains two different senses in which the perception may be thought to be false. Where Aristotle maintains that it is impossible to perceive the special sensibles falsely, I believe this is a result of his maintaining that it is impossible to be mistaken about the sensible *as the sensible*, a distinction he gives explicitly in *Metaphysics* IV.5, where he states that "not even at different moments does one sense disagree about the quality, but only about that to which the quality belongs".[182] Falsity is introduced when the perception is supposed to correspond to the object; that is, error is introduced where the perception presents itself as an accurate representation of the object, when in fact it is not. In these cases, perception of a special sensible is least likely to deviate from strict accuracy, when compared to perception of the common and incidental sensibles. In this way it is possible that the perception of a special sensible is always true (in that the sense never disagrees *with itself* about the quality, i.e., in an absurd case where one perceives accurately green and inaccurately blue), but sometimes false (i.e., the sense may disagree with itself about that to which the quality belongs, for incidental perceptibles are also perceived via proper senses). For instance, I might perceive green, but falsely perceive that the son of Diares has changed his hair colour. While an individual proper sense may not disagree with itself, the perceptual system (special perception, common perception, and incidental perception) may be in conflict. The object is the second relatum in the correspondence relation that we would expect to see, if perceptions are truth-bearers (and they are). The sliding scale of falsity with regard

[182] *Metaphysics*, 1010b20-1

to perceptions is to be interpreted as the frequency with which one falsely perceives something to hold of an object; the frequency of false perceptions of common and incidental sensibles is higher than the frequency of false perceptions of special sensibles.

Irving Block introduces two possible theories for why Aristotle would characterize our perceptions of the different kinds of perceptibles as having this sliding scale of falsity, and then rejects both of those theories. The first is the "sense-datum interpretation". On this interpretation, Block explains, Aristotle is distinguishing between perceptibles according to whether they are merely apprehended or involve judgment in some way.[183] The second theory is what he calls the "material-object interpretation", on which what we perceive is not just the sense-data, but the material-object. Block rejects both of these interpretations and substitutes what he refers to as a "teleological" theory of perception, whereby true perception is defined as normal, and the resulting hierarchy of the truths of perceptions is determined by how natural it is for our senses to perceive different kinds of perceptibles (i.e., by how far other objects deviate from the *telos* of the individual senses, whose final causes are to perceive the special sensibles).

> When all goes well, each organ and organism of nature fulfills its purpose successfully. So the eye, when working normally, sees accurately, i.e. it sees the true color of the object.[184]

On Block's interpretation, special sensibles are more likely to be perceived accurately because it is the nature of the eye to see colour. But this does not explain why our perception of incidental perceptibles is more likely to be true than our perception of

[183] Irving Block, "Truth and Error in Aristotle's Theory of Perception," in *The Philosophical Quarterly*, Vol. 11, No. 42 (Jan., 1961), pp. 1-9, p. 2.
[184] Block, 6.

common sensibles. If Block wishes his interpretation to be consistent, he would have to maintain that it is more natural to perceive the son of Cleon than it is to perceive movement.

But what is more important here is *how* or in what way perceptions are supposed to be true, which is with respect to our being mistaken about a perceptible, prior to making judgments. For all of special, incidental, and common perceptibles are *perceptibles*; and perception is, at least, not equivalent to judgment. If there is a correspondence theory of truth applicable to perceptions, then it seems reasonable that the truth of the perception is dependent on the existence of the object. The capacity for falsehood does not seem to be fully explained by the idea of the type of perceptible being less natural to the organ of sight. In *De Sensu*, Aristotle instead identifies common sensibles as the most liable to falsehood *for the reason that* they are perceived by more than one sense:

> For magnitude and figure, roughness and smoothness, and, moreover, the sharpness and bluntness found in solid bodies, are percepts common to all the senses, or if not to all, at least to sight and touch. This explains why it is that the senses are liable to err regarding them…[185]

This whole discussion of the relative truth and falsity of perceptions is only possible if we take as given that perceptions can be truth-bearing. The truth of a perception is not a result of combining terms in a manner that properly represents an interweaving of subjects and predicates in the world. Rather, a true perception is an accurate representation—e.g., the perception of blue *simpliciter*. Even with an incidental object of perception, the complexity of the incidental perceptible is not analogous to the

[185] *De Sensu*, 442b5-8. W.D. Ross, *Aristotle. Parva naturalia*. Oxford: Clarendon Press, 1955 (repr. 1970) γὰρ καὶ σχῆμα καὶ τὸ τραχὺ καὶ τὸ λεῖον, ἔτι δὲ τὸ ὀξὺ καὶ τὸ ἀμβλὺ τὸ ἐν τοῖς ὄγκοις, κοινὰ τῶν αἰσθήσεών ἐστιν, εἰ δὲ μὴ πασῶν, ἀλλ᾽ ὄψεώς γε καὶ ἁφῆς. διὸ καὶ περὶ μὲν τούτων ἀπατῶνται

interweaving subject-predicate relation. It follows that, with regard to perception, Aristotle is using a different definition of truth, where truth is opposed to error or deception (he also uses the term "false" to denote error or deception; this is just more evidence that the language of truth and falsity is here being applied differently). True perception, for Aristotle, is the accurate perception of what is actually there at the present time. This conception of truth differs from his conception of the truth of beliefs and statements, as there is no interweaving of the elements of a perception that must accurately reflect the interweaving of the elements represented.

One interesting thing about truth and perception is that perception is a relative, according to Aristotle [*Categories* 6b2]. If Aristotle conceives of perception as a relative, then we might think ourselves closer to defining a positive relation that could classify as a kind of correspondence between an object (here a perceptible object) and what is true of it (a perception). With this relation defined, a true perception could be described as one in which there is a correspondence between the perceptible as it is and its perception (the perceptible as it is perceived), and a false perception as one in which there is no such correspondence. The correspondence is not accidental, for the perceptible is the cause of the perception. (Later I will argue for the equivalence of the "cause" of a perception and its "object".) The perceptible is just what exists, and when it is accurately represented, the perception is true. And when we seem to have a perception of something that is not actually immediately present to the senses, the perception is false; the perception is not a "likeness" of what exists. However, there is a crucial difference: the truth of statements and statement-like thoughts requires some kind of combination, whereas it is possible to

misperceive one thing simply, such that a single perception can be false (unlike a single word).

Now what of the condition I set out in Chapter 3 for the particular type of combination necessary for something's bearing a truth value? There, I interpreted Aristotle to be saying that a combination, and one of a particular sort (the ὄνομᾶ-ῥῆμα sort), was a necessary condition for something to be a truth-bearer. But in the case of perceptions, that condition doesn't seem to be met;[186] a misperception is disanalogous to a false judgment. Perceiving "green" *simpliciter* does not automatically entail a judgment about a subject in propositional form. (Otherwise, perception would be nothing besides judgment.) While many prominent philosophers have argued that all perceptual content must have a propositional structure, I don't see any evidence of this theory in Aristotle. If a perception (an affection of the soul) is a likeness of a thing (*De Interpretatione* 1), then to assert that the perception has a propositional structure would imply that the perceptible also has a propositional structure. But blue does not have a propositional structure; therefore neither does the perception of it.

If it is possible to perceive something truly or falsely without putting that thing into a combination (i.e, without making a judgment about that thing in propositional form), then the definition of truth used for perception is not that used for thought or language; rather, there is a looser notion of truth that Aristotle uses for perception that is more akin to accurate representation. And this makes sense if we consider the fact that both the object and our way of interacting with the object are different. In the case of

[186] In the case of an incidental perceptible, e.g., the son of Cleon, there is yet no ὄνομᾶ-ῥῆμα relation.

perception, the perceiver perceives an object; in thought those objects are abstracted forms, and in language an affection of the soul is symbolized by a name or a verb. To say that a perception is true in a different sense than that in which an object or a statement is true is nothing remarkable; we already assume that an object is blue in a different way than our thought of something is blue, which is different again from how the word "blue" is blue; in the latter two cases, the blue is part of the content of the intentional structure, e.g., when I think "blue sky". This is not a literalist interpretation of Aristotle—the thought about something that is blue is not itself blue, which would presuppose that a thought is corporeal/material. It is blue insofar as its content or cause is blue—blue by synecdoche, we might say.

One of the arguments I have set out above states that a significant difference between the notion of truth that Aristotle applies to perceptions and that he applies to other things is that a simple perception is a possible truth-bearer. In order for there to exist the possibility of falsehood, some combination would be necessary, were the definition of truth assumed in Chapter 3 to apply. But I am arguing now that it does not; the truth applicable to perceptions is distinct. In the next section, I examine Aristotle's comments on *phantasia* and truth. I argue that Aristotle also uses a similar (that is, broader) definition of truth, more akin to accurate representation, with regard to *phantasia*.

Truth with respect to *phantasia*

There are what seem to be two conflicting treatments of "imagination" (*phantasia*) in *De Anima* III.[187] Specifically, Aristotle seems at one point to exclude an imagination from having a truth-value, for at 432a10-12 he states, "Imagination is different from assertion and denial; for what is true or false involves a synthesis of thoughts."[188] In this statement Aristotle seems to differentiate between imagination and statements on the basis that assertions and denials have truth-values (thereby excluding an imagination from being a truth-bearer). However, a few pages earlier, he says something that seems to indicate that an imagination *does* have a truth-value. Specifically, at 428a12 he asserts that, "imaginations are for the most part false."[189]

For the purpose of this discussion, I will use the indefinite article to refer to some particular exercise of the capacity of *phantasia*, i.e., a *phantasma*, analogous to how a perception is the result of a particular exercise of the capacity of perception. Aristotle uses *phantasia* for both the capacity of imagination as well as an exercise of that capacity. As an exercise of the capacity, I interpret Aristotle to be using *phantasia* as a synonym for *phantasma*, the internal object of which is a perception. Before I get into how an imagination can be true or false, I must try to explain what it is, though Aristotle notoriously never defines "*phantasia*". Aristotle ascribes two distinct properties to imaginations at 429a5: (i) they persist (presumably after the perception has ended) and

[187] These are pointed out by Joyce Engmann, "Imagination and Truth in Aristotle" in *Journal of the History of Philosophy*, Vol., 14, No. 3, July 1976, pp. 259-265
[188] *De Anima*, 432a10-12: ἔστι δ' ἡ φαντασία ἕτερον φάσεως καὶ ἀποφάσεως· συμπλοκὴ γὰρ νοημάτων ἐστὶ τὸ ἀληθὲς ἢ ψεῦδος.
[189] *De Anima*, 428a12: αἱ δὲ φαντασίαι γίνονται αἱ πλείους ψευδεῖς

(ii) they resemble the perception that caused them. For Aristotle, as a perception is a likeness of a thing, so an image is a likeness of a perception:

> …[imaginations] persist and are similar to perceptions,
> τὸ ἐμμένειν καὶ ὁμοίας εἶναι ταῖς αἰσθήσεσι.

The details of the concept of *phantasia* in Aristotle's texts have been a source of controversy in relatively recent literature, with many scholars contributing to the commentary on the topics of what *phantasia* is, what its function might be, and its relation to the other functions of the soul (thought and perception).[190] What is relevant to my discussion here are recent comments on how a *phantasma* can be true or false. Based on the bare description of *phantasia* I have above quoted, it seems that the truth of a *phantasma* will have something to do with its likeness to a sensation and with how that sensation remains in the sense when the object of sense is no longer present.

In *De Anima* III.3, Aristotle defines *phantasia* by demonstrating that there are functions of the soul that cannot be either perception or thought.[191] In its most general definition, *phantasia* is that which accounts for a set of phenomena that are the result of

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[190] See, for instance, J. Engmann, "Imagination and Truth in Aristotle"; D. Frede, "The Cognitive Role of *phantasia* in Aristotle," in M.C. Nussbaum and A.O. Rorty (eds.), *Essays on Aristotle's De Anima* (Oxford 1992), 279-95; K. Lycos, "Aristotle and Plato on 'Appearing',' *Mind* 73 (1964), 496-514; D. Modrak, "φαντασίᾳ Reconsidered," *Archiv fur Geschichteder Philosophie* 68 (1986), 47-69, and Aristotle: The Power of Perception (Chicago 1987), 81-110; M. C. Nussbaum, "The Role of *Phantasia* in Aristotle's Explanation of Action" in *Aristotle's De motu animalium* (Princeton 1978), 221-69; D. A. Rees, "Aristotle's Treatment of φαντασίᾳ" in J. P. Anton and G. L. Kustas (eds.), *Essays in Ancient Greek Philosophy* (Albany 1971), 491-504; M. Schofield, "Aristotle on the Imagination," in G. E. R. Lloyd and G. E. L. Owen (eds.), *Aristotle on Mind and the Senses* (Cambridge 1978), 99-141; G. Watson, "φαντασίᾳ in Aristotle, De anima 3.3," *Classical Quarterly* 32 (1982).100-13; M. V. Wedin, *Mind and Imagination in Aristotle* [New York: Yale University Press, 1988].

[191] As Caston notes, "Imagination, association, memory, expectation, reasoning, deliberation, desire, action, the passions, and dreams all require the operation of another mental state Aristotle calls "phantasia." And this, he goes on to argue in the bulk of De anima 3.3, cannot be identified with either sensation or conception, or understood on their model. *Phantasia* and all of the states just mentioned, in contrast, can be at variance with reality" Caston, p. 41. And as Watson notes, "Aristotle concludes that if nothing else has the characteristics set out except *phantasia*, and this is what has been said, *phantasia* will be a movement resulting from an actual perception." Watson, p. 107.

perception. *Phantasmata* are impossible without perceptions. *Phantasia* is like perception but not identical to it; Aristotle seems to characterize it here as the capacity for movement (caused by a perception) that has the possibility of bearing truth or falsehood:

> But since it is possible when one thing is moved for another to be moved by it, and since imagination is thought to be a kind of movement and not to occur apart from sense-perception but only in things which perceive and with respect to those things of which there is perception, since too it is possible for movement to occur as the result of the activity of perception, and this must be like the perception—this movement cannot exist apart from sense-perception or in things which do not perceive; and in respect of it, it is possible for its possessor to do and be affected by many things, and it may be both true and false.[192]

From this definition, it is clear that the translation "imagination" is overly narrow, according to our modern conceptions. But to provide a precise definition of the capacity of *phantasia*, its function, and its relation to perception and thought,[193] is not my present purpose. My focus is, rather, to establish that for Aristotle a *phantasma* is true or false in a way that is distinct from the way in which an object, a perception, a thought or a statement is true or false.

For a model of how a *phantasma* can be true or false, Caston's definition seems both sufficient and plausible: "Like an echo, the *phantasma* is only an indirect effect of the object of perception: the *phantasma* is directly caused by the sensory stimulation

[192] *De Anima*, 428b10-17: ἀλλ᾽ ἐπειδὴ ἔστι κινηθέντος τουδὶ κινεῖσθαι ἕτερον ὑπὸ τούτου, ἡ δὲ φαντασία κίνησίς τις δοκεῖ εἶναι καὶ οὐκ ἄνευ αἰσθήσεως γίνεσθαι ἀλλ᾽ αἰσθανομένοις καὶ ὧν αἴσθησις ἔστιν, ἔστι δὲ γίνεσθαι κίνησιν ὑπὸ τῆς ἐνεργείας τῆς αἰσθήσεως, καὶ ταύτην ὁμοίαν ἀνάγκη εἶναι τῇ αἰσθήσει, εἴη ἂν αὕτη ἡ κίνησις οὔτε ἄνευ αἰσθήσεως ἐνδεχομένη οὔτε μὴ αἰσθανομένοις ὑπάρχειν, καὶ πολλὰ κατ᾽ αὐτὴν καὶ ποιεῖν καὶ πάσχειν τὸ ἔχον, καὶ εἶναι καὶ ἀληθῆ καὶ ψευδῆ.

[193] Watson, for instance, claims that *phantasia* is responsible for a mutation of sense perceptions that provide material for thought: "*Phantasia* must then be involved in the mutation of sense-perceptions into *phantasmata*, which are then available for the activity of the intellective soul." Watson, 109.

(αἴσθημα), which in turn is directly caused by the object (αἰσθητόν)."[194] The truth of a *phantasma* will therefore depend on its relation to the sensory stimulation.[195]

On Caston's interpretation, the role of *phantasia* in Aristotle is to provide him with the means to account for error, a topic insufficiently addressed by his predecessors:

> As he recognizes himself at the outset of the chapter, the content of most intentional states can fail to correspond to what is in the world; and his account of sensation and conception precludes just such divergence. But he is also confident that *phantasia* can explain the possibility of error, and he regularly appeals to it in explaining the content of other intentional states.[196]

The possibility of being true and false explains why Aristotle posits *phantasia* in the first place. This possibility is an integral part of the definition of *phantasmata* in Aristotle, as opposed to an accidental quality of them.

While Caston gives us a solid account of what it means to say that a *phantasma* is true or false (i.e., the content diverges from the cause), Joyce Engmann gives a succinct and plausible account of what is actually going on in the relation between the senses and the imagination, particularly when we consider the imagination as a truth-bearer. The

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[194] Caston, p. 48. Cf. Wedin's definition: "imagination is a movement resulting from an αἴσθημα which is one sort of movemet involved in the activity of perception." Wedin, Michael, *Mind and Imagination in Aristotle*, p. 40.

[195] Caston states that divergence between content and cause explains the falsity of a *phantasma* The corresponding statement for truth would say that the convergence of content and cause defines the truth of a *phantasma*. He also states that the cause of a *phantasia* is a perception. (See note above.) I must infer (i.e., it is a valid logical deduction from Caston's explicitly stated premises) that on Caston's reading, the content of a true *phantasma* is identical to its cause, i.e., a perception,--not the external world. The *phantasma,* as he states, is not caused by the external world; the *phantasma* is only an "indirect" effect of the object of perception (the external world); the object of perception (the external world) is *not* the proximate cause of a *phantasma*.

[196] Caston, 22. See also p. 42-3: "By construing 'perceiving' and 'thinking' more narrowly than his predecessors, he leaves room for error; and by invoking a new mental state whose content can be false as well as true and used in other mental states, he provides a basis for explaining error—and content—quite generally."

truth of an imagination, Engmann claims, is dependent on the movement in the sense-organ resulting from sensation still being present. She states,

> Imagination is therefore only true when the original movement in the sense-organ of which imagination is a continuation is still present, i.e., while the perceptible thing which is the content of the imagination, and is capable of being imagined because it has set up a movement in the sense-organs, is still present to the senses. This is why most cases of imagination are false (428a12).[197]

Extrapolating from this theory, we might suppose that the truth of an imagination is dependent on its corresponding to a perception. But Engmann seems to be making a stronger statement, which is that it must not only correspond to some sensation, but to a present or very recent one. And if the content of the *phantasma* is a perception, and the perception is the passive reception of a sensible form, then the *phantasma* might be said to correspond directly to something in the world; but to speak accurately, we must recall that its content is not the object in the world but a perception.[198] The qualification that makes an imagination true is not whether it corresponds to a potential perception, but to an actual present one. As Aristotle states at 428b27, "The first is true as long as perception is present."[199] "The first" in this quotation is the movement (*phantasma*) caused by a proper sensible.[200] While the perceptible is being perceived, the

[197] Engmann, 262.
[198] An alternative view would be that the *phantasma* initially has the same content as the perception that causes it, but then diverges (since it is not responsive to or constrained by an external object that is causing it, unlike perception). On this view, however, not just the particular content of the *phantasma* but the *kind* of content of the *phantasma* must change. For if the content of the *phantasma* is initially something in the world, and it is liable to change without the world changing, then as the content of the *phantasma* diverges from something in the world, so does the object of *phantasia* generally. I am uncomfortable with this shift in the possible contents of *phantasmata*; it seems more plausible to say that that (i) the content of a *phantasma* is always a perception, (ii) when the perception is present, the content of the perception and the content of the corresponding *phantasma* are identical *in form*.
[199] *De Anima* 428b27: καὶ ἡ μὲν πρώτη παρούσης τῆς αἰσθήσεως ἀληθής
[200] The Smith translation supplies, "the first kind of derived motion".

corresponding *phantasma* is accurate. This is how Engmann attempts to account for the falsity of a dream-image; though it may exist as I dream it, it is still false insofar as it is not an accurate reflection of a current perception.[201]

Engmann uses these observations to conclude that Aristotle's treatment of truth with regard to imagination is different from his "normal" conception of truth, especially in that,

> …it is possible for simple thoughts, or rather, images, to be true or false, and the element of assertion which he normally makes to be characteristic of that to which the predicates "true" and "false" properly apply is allowed to be absent.[202]

Caston agrees that Aristotle uses the terms "true" and "false" in a less restricted sense when he is talking about *phantasmata* than when he is talking about assertions:

> Aristotle often uses 'false' in a way that could only apply to propositional contents, i.e., those contents which involve predication and negation ("combination and separation")—see esp. De an. 3.6, 430bl-2; Categ. 4, 2a8-9; De interp. 1, 16a9-16;Metaph. 6.4, 1027b18-19;cf. De an. 3.6, 430a26-28; 3.8, 432al 1; Metaph.9.10, passim. But he cannot have this restricted sense in mind when speaking about *phantasmata*, some of which do not involve predication (De an. 3.8, 432al0-14). Such a *phantasma* might be true or false of an object—or perhaps more vaguely, accurately or inaccurately represent an object - without having full propositional content itself.[203]

The truth of a *phantasma*, contrary to the truth of a statement or judgment, does not require combination or separation—that is, the definition of truth for *phantasmata* differs significantly, in that it requires no propositional content. Here, the way Aristotle refers to

[201] Engmann, 264.
[202] Engmann, 265.
[203] Caston, footnote 53, p. 44-5. I do not believe that Caston is hedging by introducing the word "full" into this formulation. Rather, it seems to me most plausible that the "fullness" that the proposition would have is only partially fulfilled by a *phantasma*; while a *phantasma* also represents, and while it may represent a subject or predicate, it does not represent with full propositional structure—i.e., subject and predicate in a specific relation.

truth again denotes a broader, looser notion of truth, more like accurate representation. There are still two things here—the *phantasma* and its content—such that truth may still be said to be a relational property for *phantasmata* and their contents; but a *phantasma* does not require combination to be considered a truth-bearer.

One possible objection to this characterization of the truth-bearing mechanism of *phantasia* is that the content of a *phantasma* is not a perception, or that the *phantasma* itself does not have a content. It would be, rather, just a movement that happens along with perception. As Wedin states,

> From the fact that imagination or φαντασία occurs only in what is capable of perception, it does not follow that φαντασία occurs only relative to what is an object of perception… On the other hand, Aristotle is not imposing the severe requirement that whatever is an object of the imagination must also be an object of perception. Indeed, he is not even talking about *objects of* the imagination but only about its occurrence *relative* to objects of perception.[204]

But if *phantasmata* can be true or false, there must be *something* on which their truth or falseness depends. This I am claiming is the perception that caused the movement in the first place. The fact that it is the perception and not the object itself that Aristotle states to be the cause of *phantasia* means that the perceptual object is a more direct object of *phantasia* than is the external object. On Wedin's reading, "the perception-induced *movement* may be true or false."[205] However, he also attributes a representational role to *phantasia*, specifically in the representation of an object (such that *phantasia* does have a content).[206] But he later denies it having a content once again, equating its failure to have an object with its incompleteness as a faculty of the soul… "imagination has no object at

[204] Wedin, 26.
[205] Wedin, 27.
[206] "In its general [re]-presentational role, imagination will be involved in any intentional act that requires [re]presentation of an object." Wedin, 40.

all. It fails, in short, to satisfy a necessary condition of full facultyhood."[207] He dismisses the mention of objects of imagination at 450a24 as a possible textual corruption, concluding, finally, that the role of imagination is to represent objects of perception.[208] We must assume that *phantasia*, on Wedin's account, represents objects of perception in a slightly different way than perception does,[209] since it is the role of *perception* to represent objects of perception. But Wedin will still run into difficulty if he is here ascribing identity to the object of imagination and the object of perception. This identity should indicate that in every case, the *phantasma* is true when the perception is true. However, Aristotle claims (as noted above) that the *phantasma* does not necessarily correspond to the perception; only in the case of current perceptions is the derived movement (*phantasma*) necessarily true. Where correspondence is lacking, so is identity. (And if there were an identity of objects, according to Wedin's assertion that a faculty is defined according to its object, the faculties of imagination and perception would also

[207] Wedin, 58. The texts Wedin uses to support his assertion that for Aristotle a faculty must have an object only imply this conclusion, at best, those passages being 402b9-16 and 415a14-22. I give here the Hamlyn translations for the reader's convenience:
402b19-16: "Furthermore, if there are not many souls but only parts, should we inquire into the whole soul or its parts? It is difficult too to decide which of these are really different from each other, and whether we must inquire into the parts first or their functions, e.g. thinking or the intellect, and perceiving or that which can perceive; and similarly for the rest also. And if the functions come first, the question might be raised whether we should inquire into the corresponding objects before these, e.g. the object of perception before that which can perceive and the object of thought before the intellect."
415a14-22: "Anyone who is going to engage in inquiry about these must grasp what each of them is and then proceed to investigate what follows and the rest. But if we must say what each of them is, e.g. what is the faculty of thought or of perception or of nutrition, we must again first say what thinking and perceiving are; for activities and actions are in respect of definition prior to their potentialities. And if this is so, and if again, prior to them, we should have considered their correlative objects, then we should for the same reason determine first about them, e.g. about nourishment and the objects of perception and thought."
[208] Wedin, 62-3
[209] He mentions on page 89, for instance, the perception (αἴσθημα) of a lover, as well as the "*phantasma* of the lover", stating here that imagination in this case is "like a weak perception". The possibility of a phrase such as this (the fact that the *phantasma* is "of" something) indicates that contrary to Wedin's strong assertion that *phantasia* has no object, it in fact does.

have to be identical—they are obviously not.) I therefore find Caston's interpretation more plausible, specifically that perception and *phantasia* are analogous at least in the respect that perception has as an object (content) what directly causes it (the αἰσθητόν), while *phantasia*'s object is what directly causes *it*—the αἴσθημα, or sensory stimulation.[210] The demand that Wedin makes on Aristotle, that he refer to the object of *phantasia* as another sort of "–τόν" (the "φανταστὸν", possibly occurring at 450a24, depending on the editor)[211] would only add a superfluous term to what is already specified to be the αἴσθημα, and this term also serves to indicate the close ties between perception and *phantasia*.

Wedin's conclusions on the truth of *phantasmata* are, on the other hand, sound. He notes that Aristotle, with regard to *phantasia*, disregards his own assertions with respect to truth being a combination of thoughts. Wedin expresses this with the premise, "If S is true or false, then S involves combination of thoughts" and then, substituting in a notion of imagination (that is it not a combination of thoughts), arrives at the necessary conclusion that, if this premise is true, so is "If S is [an instance of] imagination, then S is neither true nor false."[212] Wedin concludes that,

[210] I am, here, equating causality with object, and I believe it is justified *only* with regard to the intentional structures I am discussing, e.g.., perception, thought, *phantasia*. I say "directly" because the perceptible is a cause of a perception, and therefore the cause of a *phantasma* in an indirect sense. The cause of a *phantasma*, and its content, is the perception. Caston's conception of Aristotle's looser definition of truth—that of a divergence between content and cause—I take to refer to the direct, or proximate cause.
[211] Wedin argues: "Aristotle is not sparing with the form. Besides "αἰσθητόν" (object of perception), "νοητόν" (object of thought) and "ὀρεκτόν" (object of desire), "μνημονευτόν" (object of memory) occurs in *De Memoria* at 449b29 and 450a24 (and also in *Rhetorica* 1367a24 and 1370b1), and "ἐπιστητόν" (object of knowledge), a favored expression in *Categoriae* VII, occurs unproblematically in *De Anima* at 430a5, 431b23 and b27. The "φανταστὸν", on the other hand, makes no uncontested appearance in the corpus."
[212] Wedin, 124.

> Aristotle is only denying imagination the kind of truth or falsity that involves combination. He is, in other words, denying propositional truth and falsity to instances of imagination but not, or at least not there, true-of and false-of.[213]

Yet we saw earlier that Aristotle explicitly ascribes the property of being a truth-bearer to *phantasmata*; for he states of *phantasia* that "it may be both true and false" (428a15).

In the case of *phantasia*, I believe the definition of truth we are dealing with is that of the *Metaphysics* 1051b17-25. Since a *phantasia* is not a combination, the definition of truth applied to incomposites applies to it (and, similarly, to perception).

> With regard to *incomposites*, what is being or not being, and truth or falsity? A thing of this sort is not composite, so as to be when it is compounded, and not to be if it is separated, like the white wood or the incommensurability of the diagonal; nor will truth and falsity be still present in the same way as in the previous cases. In fact, as truth is not the same in these cases, so also being is not the same; but truth or falsity is as follows—contact and assertion are truth (assertion not being the same as affirmation), and ignorance is non-contact.[214]

This definition for the truth of incomposites, however, does not hold for things that have nothing to contact. There still must be *two things*, one that is true or false, and the other that is contacted or not contacted. Thus we can infer: (1) that there is an object of *phantasia*, that which is contacted or not, and (2) that the definition of truth for perceptions and *phantasmata* still does not hold for simple objects.

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[213] Wedin, 124.

[214] *Metaphysics*, 1052b17-25: περὶ δὲ δὴ τὰ ἀσύνθετα τί τὸ εἶναι ἢ μὴ εἶναι καὶ τὸ ἀληθὲς καὶ τὸ ψεῦδος; οὐ γάρ ἐστι σύνθετον, ὥστε εἶναι μὲν ὅταν συγκέηται, μὴ εἶναι δὲ ἐὰν διῃρημένον ᾖ, ὥσπερ τὸ λευκὸν <τὸ> ξύλον ἢ τὸ ἀσύμμετρον τὴν διάμετρον· οὐδὲ τὸ ἀληθὲς καὶ τὸ ψεῦδος ὁμοίως ἔτι ὑπάρξει καὶ ἐπ' ἐκείνων. ἢ ὥσπερ οὐδὲ τὸ ἀληθὲς ἐπὶ τούτων τὸ αὐτό, οὕτως οὐδὲ τὸ εἶναι, ἀλλ' ἔστι τὸ μὲν ἀληθὲς ἢ ψεῦδος, τὸ μὲν θιγεῖν καὶ φάναι ἀληθές (οὐ γὰρ ταὐτὸ κατάφασις καὶ φάσις), τὸ δ' ἀγνοεῖν μὴ θιγγάνειν

Conclusion

In the end, it seems that Aristotle applies the concept of truth differently depending on the type of thing which is said to be true. The definition of truth for assertions in thought and language, I believe, was covered well enough in the previous chapters, and the truth of complex thoughts was examined in detail in Chapter 3. In both of these cases, I have argued, truth bearers have truth values only when they involve a particular kind of combination (subject and predicate). With regard to perception and *phantasia,* Aristotle uses a looser notion of truth to describe a correspondence between something and its representation. But it does not make sense, I argue, to extend even this loose notion of truth to simple objects, for simple objects are that on which every other truth is dependent. To think of them as having truth themselves would eliminate the basis on which all other truths in some way depend. For true perceptions correspond to existing things, true imaginations to perceptions (and thus secondarily to existing things), and true assertive thoughts and statements to existing things as well (whether they be external existents or affections of the soul, as in the case of the goat stag). To say that truth is the same as existence for simple objects only confuses things: then we would have a relational property where there is no relation (except perhaps that of self-identity). While perceptions and imaginations might be said to be true in a sense (though in a very different sense than that in which a true statement is true), their truth is still relational; the definition of "truth" Crivelli applies to simple objects is not.

It is with regard to attributing truth to simple objects that I believe Crivelli goes wrong. For he even attributes a truth-value to material substances: "A material substance

is false… when and only when this material substance does not exist, i.e. when and only when its form is divided from its matter."[215] The problem with this account is that on it there doesn't seem to be any kind of thing that could be false. This would be equivalent to attributing to Aristotle the independent existence of a species without any instances, and thus Crivelli skirts dangerously on the border of Platonic territory. Even a thought of something that does not exist (as a *pragma*) has matter. The material of such a thought would be the thoughts from which it is composed. Crivelli is, in essence, charging things that don't exist with being false for having the *wrong kind* of matter. However, Aristotle's definition of matter is broad enough to include even the affection of the soul "goat stag" in the class of material things. Otherwise, anything we define as not existing, in the sense of being separated from matter, would have to be pure actuality—and then the only thing that would not exist would be pure form, i.e., an unmoved mover.

The power of the soul to combine thoughts (*noemata*) makes the thoughts capable of becoming something else (through combination or separation). That is, thoughts, should they come to be combined, are the material from which a new thought is formed[216], and this form is imposed by some faculty of thought. Thus a goat stag, though it does not exist in the sense Aristotle means by defining it as not existing (that is, in the sense of being a *pragma*), yet has matter and form. In Chapter 3, I described how this occurs according to Aristotle, i.e., when the thoughts of "goat" and "stag" come to be combined. Those thoughts provide the material for a new unified form imposed on them

[215] Crivelli, 18.
[216] This makes Aristotelian concepts sound very much like Lockean ideas. I believe that the comparison applies, but can only support it here by noting that both philosophers attribute to humanity a capacity to combine thoughts.

by the faculty of thought (νοῦς). Under Crivelli's definition of non-existence, the only thing that does not exist is something whose form is divided from its matter; but a thought (for instance, the thought "goat stag") has both form and matter. This definition of non-existence is dependent on an assumption that privileges matter in the common contemporary sense of the term, and basically claims that what does not exist (as a *pragma*) does not exist. As a concept, the form of a goat stag is divided from the material of a *pragma*; however, it is yet material. The thought is what is symbolized by the name "goat stag", and this symbolization is already assumed to exist if there is to be such a thing as an "empty" term. It is to the problematic topic of "empty terms" that I now turn.

Chapter Six: "Empty" Terms in Aristotle

How can Aristotelian linguistics explain the existence of empty terms, and how do they function in a truth-evaluable statement? In common recent usage an "empty term" is just the linguistic correlate of a thing that does not exist—that is, it is the word used to indicate something that does not exist. At least, that is the definition assumed by the authors whose views I argue against in this chapter. I argue that these terms are not, in fact, "empty" for Aristotle, for on his view they do signify. Rather, it is the class referred to by the term that is empty (i.e., its extension). That is, we need to distinguish, based on the assertion in the first chapter of *De Interpretatione*, between what a term signifies (an affection of the soul) and to what a term refers (the thing, according to the common conception of reference). In the case of something that does not exist, according to these definitions, a term *signifies* an affection of the soul that does not have an extramental likeness, but the same term does not *refer*. I believe that the fact that a term signifies is reason enough to claim it is not "empty." If, as Aristotle maintains in *De Int.* 1, a term signifies an affection of the soul, as opposed to referring directly to an extramental object, *every* term should fail to refer (in the modern sense of the term "refer", which connotes direct reference to an external object). The whole so-called problem of empty terms arises from a conception of direct term-to-thing reference that is not Aristotle's, and so it is misguided to attempt to provide an Aristotelian solution to it.

I have been using the term "reference" up to this point to describe the relation between a word and what it points to, which is the affection of the soul it symbolizes (that

is, I have been using "reference" as equivalent to "symbolization" or "signification").[217] In the first chapter I argued that "to signify something" (σημαίνει τι) and "to become a symbol" (γένηται σύμβολον) are used interchangeably in *De Interpretatione*. I deny that either of these terms is synonymous with "revealing something" (δηλοῦσί τι), as Noriega-Olmos claims, (see Chapter 1, footnote 7, quoting Noriega-Olmos, p. 60.) When using the term "refer", I use it also interchangeably with "signify" and "symbolize". My use of the term coincides with the modern definition in so far as it denotes direct signification of an object; my use of the term diverges from the modern definition *if* that modern definition includes the specification that the object we signify is external and unmediated by perception or thought. I argue that it is the latter definition that must be assumed in order to conceive of such a thing as "empty" terms, and that to apply this problem to Aristotle is essentially to equivocate on the meaning of the term "reference"—as that which specifies direct signification, it is unproblematic., but as that which specifies direct signification and additionally specifies the type of object signified, the term becomes inapplicable to Aristotle.

The account I am developing may raise a general concern about the prospect of solipsism. If Aristotle believes that words signify only affections of the soul and never refer directly to mind-independent things, then we might accuse him of suggesting that we can only talk about the contents of our own minds. I theorize that Aristotle can avoid

[217] According to Frege, the referent (that which the linguistic sign "designates") is that which we intend to designate when we speak (as opposed to an idea of the thing) (Gottlob Frege, *On Sense and Reference*, tr. Max Black, *The Philosophical Review*, Vol. 57, No. 3, 1948, pp. 209-230, p. 214). He then adds the qualification, however, that this is true "provided such reference exists". Later, he defines the referent of a sentence as its truth-value. The nuances of this account can't be delved into here. Let it suffice to say that what I am calling the referent is that which is signified by a term.

this undesirable inference by recalling that the affections of the soul that we symbolize with language are *likenesses* of things, in the sense of being identical in form. There is, therefore, a significant way in which we are referring (indirectly) to the external world when we speak; that is, by virtue of our referring directly to something identical in form. By recognizing that the form of the affection of the soul is identical to the form of the external object (in the case where something exists), Aristotle can avoid the worry of solipsism.

Aristotle uses the term "signify" (σημαίνω) in many different contexts throughout the corpus. It is not only words that signify; he also applies the term to anything that is a sign of something else. For instance, in the *Categories*, substances signify a certain 'this', and Aristotle uses "substance" here interchangeably with a word signifying a substance[218]; in the *Posterior Analytics*, both names and accounts signify,[219] and what an account signifies is different if the thing exists or does not (see the discussion of nominal versus essential definitions in Chapter 2); there, he also specifies that it is possible to signify things that do not exist[220]; In *Problems*, Aristotle discusses how frogs signify that

[218] *Categories* 3b10-16 Every substance seems to signify a certain 'this'. As regards the primary substances, it is indisputably true that each of them signifies a certain 'this'; for the thing revealed is individual and numerically one. But as regards the secondary substances, though it appears from the form of the name—when one speaks of man or animal—that a secondary substance likewise signifies a certain 'this', this is not really true; rather, it signifies a certain qualification—for the subject is not, as the primary substance is, one, but man and animal are said of many things.
Πᾶσα δὲ οὐσία δοκεῖ τόδε τι σημαίνειν. ἐπὶ μὲν οὖν τῶν πρώτων οὐσιῶν ἀναμφισβήτητον καὶ ἀληθές ἐστιν ὅτι τόδε τι σημαίνει· ἄτομον γὰρ καὶ ἓν ἀριθμῷ τὸ δηλούμενόν ἐστιν. ἐπὶ δὲ τῶν δευτέρων οὐσιῶν φαίνεται μὲν ὁμοίως τῷ σχήματι τῆς προσηγορίας τόδε τι σημαίνειν, ὅταν εἴπῃ ἄνθρωπον ἢ ζῷον· οὐ μὴν ἀληθές γε, ἀλλὰ μᾶλλον ποιόν ἄνθρωπον ἢ ζῷον· οὐ μὴν ἀληθές γε, ἀλλὰ μᾶλλον ποιόν τι σημαίνει,
See also *Posterior Analytics*, 83a25-35
[219] *Posterior Analytics* 92b6-8: "you may know what the account or the name signifies when I say goat stag, but it is impossible to know what a goat stag is."
ἀλλὰ τί μὲν σημαίνει ὁ λόγος ἢ τὸ ὄνομα, ὅταν εἴπω τραγέλαφος, τί δ᾽ ἐστὶ τραγέλα-
φος ἀδύνατον εἰδέναι
[220] *Posterior Analytics* 92b28-29:

the season is moist.[221] For my purposes, it is important to take away that what does not exist is properly signified, according to Aristotle, as he states in the *Posterior Analytics*, and of which he gives the example of the goat stag in *De Interpretatione* (the example used by the commentators I discuss here): "'goat stag' signifies something", in the same way that "human being" does.[222] I argue in favour of the authority of *De Interpretatione*, where Aristotle states that what a name signifies is an affection of the soul, rather than the extramental thing;[223] otherwise, terms referring to non-existent things would not signify.

The divergence from this notion by commentators, who hold a concept of reference such that the term refers directly to an extramental thing, is embedded in the conception of the problem of empty terms. An examination of how Aristotle explains

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For, first, there would be definitions even of non-substances, and of things that are not—for one can signify even things that are not.
πρῶτον μὲν γὰρ καὶ μὴ οὐσιῶν ἂν εἴη καὶ τῶν μὴ ὄντων· σημαίνειν γὰρ ἔστι καὶ τὰ μὴ ὄντα.

[221] *Problems* 862a10-16: Why is it that those years are unhealthy in which small toad-like frogs are produced in abundance? Is it because everything flourishes in its natural environment, and these frogs are naturally moist and so signify that the year is moist and damp? Now such years are unhealthy; for then the body being moist contains abundant excretion, which is a cause of diseases.
Διὰ τί γίνεται τὰ ἔτη νοσώδη, ὅταν γένηται φορὰ τῶν μικρῶν βατράχων τῶν φρυνοειδῶν; ἢ ὅτι ἕκαστον εὐσθενεῖ ἐν τῇ οἰκείᾳ χώρᾳ τῆς φύσεως; καὶ ταῦτα δὴ φύσει ἐστὶν ὑγρά, ὥστε ἔπομβρον καὶ ὑγρὸν σημαίνει τὸν ἐνιαυτὸν γίνεσθαι. τὰ δὲ τοιαῦτα ἔτη νοσώδη ἐστίν· ὑγρὰγὰρ τὰ σώματα ὄντα πολὺ ἔχει τὸ περίττωμα, ὅ ἐστι τῶν νόσων αἴτιον.

[222] *De Interpretatione* 16a16-18: A sign of this is that even 'goat stag' signifies something but not, as yet, anything true or false—unless 'is' or 'is not' is added (either simply or with reference to time).
σημεῖον δ' ἐστὶ τοῦδε· καὶ γὰρ ὁ τραγέλαφος σημαίνει μέν τι, οὔπω δὲ ἀληθὲς ἢ ψεῦδος, ἐὰν μὴ τὸ εἶναι ἢ μὴ εἶναι προστεθῇ ἢ ἁπλῶς ἢ κατὰ χρόνον.
16b28-30: I mean that human being, for instance, signifies something, but not that it is or is not (though it will be an affirmation or negation if something is added)
λέγω δέ, οἷον ἄνθρωπος σημαίνει τι, ἀλλ' οὐχ ὅτι ἔστιν ἢ οὐκ ἔστιν (ἀλλ' ἔσται κατάφασις ἢ ἀπόφασις ἐάν τι προστεθῇ)·

[223] Boethius has a similar interpretation in his commentary on *De Interpretatione*, where he assumes that names and verbs signify affections of the soul. There he argues that by an affection of the soul, Aristotle meant only to include objects of thought, rather than both objects of thought and of perception. This quotation is included as a fragment in *The Complete Works of Aristotle*: "In his work *On Justice* he [sc. Aristotle] makes it clear that nouns and verbs are not sounds that signify objects of perception; he says: 'the objects of thought and the objects of perception are from the start distinct in their natures'." Latin from *In Libro De Interpretatione Editio Secundo* in *Boetii Opera Omnia* ed. J.P. Migne 1891, p. 406. Sensuum quidem non esse significativas voces nomina et verba in opera de justitia declarat dicens: φύσει γάρ διηνεχθησαντατε νοήματα καὶ τὰ αἰσθήματα, quae interpretari Latine potest hoc modo: Natura enim sunt diversa intellectus et sensus.

complex terms and thoughts, specifically what we use to represent or symbolize things that don't exist, results in the conclusion that there is not really a problem here for Aristotle. Nevertheless, several recent commentators have maintained that empty terms present some special problem for Aristotle's account. In this chapter, I examine their views and show why they are wrong.

Introduction to Empty Terms with reference to Aristotle

"Goat stag" is widely taken to be Aristotle's primary example of what is often called an "empty term" (for instance, by Crivelli, Charles, and Noriega-Olmos, whose accounts I examine in this chapter). What an empty term is, is not clearly defined by these authors; we might say that the "empty" term is one that does not refer. However, what we mean by "reference" here is ambiguous. These authors err, I argue, by equating an empty term (in the modern sense) with a term signifying something that does not exist (in the Aristotelian sense); that is, by assuming from the outset that "goat stag" is an empty term. In chapter one, I argued that for Aristotle if we call a term a name (ὄνομα), that is equivalent to saying that there is something that it symbolizes (specifically, an affection of the soul). If we equate reference with symbolization (as I have been doing), then no term that is not nonsensical would be empty. If by "reference" we mean reference to an external object, then we skip a step in Aristotle's account of language; the word would refer directly to an external object, and not to the affection of the soul which is the external object's likeness. Yet on Aristotle's account, as I have argued it should be understood, meaningful words always "refer" in the first instance to affections of the soul.

It could be argued that since the affection of the soul and the external object are alike, it does not matter to which the word refers; thoughts and external things would be interchangeable as the objects signified by linguistic expressions. Simon Noriega-Olmos seems to exemplify this line of reasoning when he declares in a footnote that,

> Simple thoughts either grasp the essence of an object or do not grasp it. For that reason there are no 'false', i.e. wrong, thoughts. Thoughts are proper representations or no thoughts at all. [*De an.* 430a26-27].[224]

But here Noriega-Olmos is referring to only a very specific kind of thought (*noêsis*). This conclusion about simple thoughts excludes the goat stag from being one; for according to this account, the simple thought of a goat stag would not be a proper representation, and so a goat stag would be impossible to think about. Here the simple thought seems to be differentiated on the basis that it is the intellectual grasp of the essence of some natural kind. I argue that the fact that we cannot grasp the essence of goat stag in a single simple act of *noêsis* does not preclude us from thinking about it in some other sense. Otherwise (i.e., if there were no thought at all that was not a proper representation), it would be impossible to think of anything that does not exist.

If we follow the line of reasoning that makes thoughts and extramental essences interchangeable as linguistic referents, we thereby preclude the possibility of signifying through language something that has no essence. What we can express in language, I argue, is for Aristotle a larger set of things than what is grasped in its essence by the intellect, and this is the natural inference to make when we acknowledge the existence of terms with nominal but no essential definitions. We do think of things that do not exist. If

[224] Noriega-Olmos, footnote 235, 129.

not everything expressed in language is a symbolization of what is grasped in an act of *noêsis*, then the two things are not interchangeable as linguistic referents; the problem of defining what the immediate linguistic referent is for Aristotle is relevant precisely because thoughts and things are not interchangeable in this sense, and the precondition for conceiving of the problem of empty terms is the fact that there are thoughts expressed in language that do not result from an intellectual grasp of an essence.

In chapter three, I argued that the complex term "goat stag" arises from a unification in thought of the forms of a goat and a stag, making it a complex, unified thought. I also examined how with complexity we start to add other qualifications to our subject matter—there, specifically, to differentiate what is fictional from what is true or false. At the outset, we seem to be tangled up in the problems of sorting out what it is that is simple, what is complex, what is a unity, and what sort of thing the object of thought is supposed to be. Surely, the external object is not a simple thing, and as such the thought of it should not be simple, unless what we mean by "simple" is that it is naturally unified, as opposed to unified by convention (in the sense of "putting together" [συν+τίθημι]) in thought or language). But if something (the referent) is unified, it seems a trivial matter whether the unification came about as a result of nature or convention (at least as far as we are concerned). As I concluded in chapter 3, what we signify by the term "goat stag" is a unity; what is combined is combined in thought into a unity, which we symbolize by the name.[225]

[225] Noriega-Olmos agrees that what we signify is a unity, and that the unity is a result of thought (or, the "cognitive apparatus"): "Moreover, if we consider that we signify non-existing entities such as goat stag, it appears that (d) our cognitive apparatus has the power to create objects of signification that are 'something and one', and that (e) the things that 'are' need not be the forms of substances and external objects. It

I do not believe that unity is the differentia we are looking for in order to distinguish between terms that have an extramental referent and those that refer to affections of the soul only. Nor do I believe there is a clear definition of "simple" we can use to distinguish empty from non-empty terms. If simplicity is not equivalent to unity, then the only difference between "simple" thoughts (ones that "grasp the essence of an object", on Noriega-Olmos' account) and complex ones would be that the former refer to something with an essence—namely, an extramental object. The natural inference from this would be to define complex thoughts as those that do not grasp the essence of an extramental object. While I argued in Chapter 3 that what is symbolized by the term "goat stag" is a complex thought, this in no way means that we can define complexity of a thought according to the non-existence of what it is supposed to represent; rather, simplicity vs. complexity is unrelated to whether something has an essence or does not. There are complex, existent states of affairs which we can accurately represent by a thought and symbolize in language (consider, for instance, a murder and the term "murder"); and not all non-existent things represented in thought are complex (for instance, the example of Socrates in Chapter 2—while surely complex as a person, he is not complex according to the definition of being a combination of thought).

Simplicity, complexity, and unity of objects referred to (extramental or mental) are therefore not helpful for defining an "empty" term—for these things do not provide any way to differentiate terms that are empty from those that are not. Rather, what an

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appears that what is available for us to signify is what is in our soul and that a thing in the soul, *qua significatum*, is a 'something' that is 'one'." (Noriega-Olmos, 67-8)

empty term is seems at first reducible to another expression of the definition of non-existence I settled on in the first chapter—a term that refers to something that is not currently existing as a *pragma*.

But I think we must add a qualification here. If Socrates no longer exists (for the reason that he is dead), can we really call the term "Socrates" empty? Is the result of Socrates' death that his name loses significance? It seems to me that this is the first indication that what we are calling "empty terms" are not, in fact, empty. We may, rather, define Socrates while he is alive by a certain set of qualities, and define him after he dies according to the same set of qualities, adding one more—dead. But a non-empty definition is not sufficient to declare a term non-empty; the terms in the definition refer to a real quality of the particular person, Socrates. If we say that the empty term "does not refer", we don't mean that there is nothing that the word signifies; we mean rather that the affection of the soul that it symbolizes does not represent an external object.

Another way to define empty terms would be to say that the "empty" term has no essential definition—since the affection of the soul it symbolizes represents nothing with an essence. An empty term has only a nominal definition. I agree with Noriega-Olmos where he notes that the nominal definition of an empty term should be unified, as is the thought it represents.

> What is then the kind of unity proper to non-existent things or lexical entities and things given nominal definitions? Quite obviously it is not an ontological unity, but a logical or linguistic unity, i.e. a unity to be found in the structure or syntax of the accounts of 'triangle' (what the word signifies), 'not-man', and 'goat stag'. The question about the unity of 'goat stag', therefore, boils down to the question about the unity of its nominal definition.[226]

[226] Noriega-Olmos, 70.

The question about the unity of "goat stag" does boil down to the question about the unity of its nominal definition. In what follows I will look at three attempts to define "goat stag" (as the primary example of an empty term) and the problems with these definitions. First, Paolo Crivelli construes empty terms in Aristotle as analogous to terms signifying multiple objects, unified by a connective particle, and argues that this conception of unity by conjunction differs from the concept of unity necessary for such a word as "goat stag" to have a unified nominal definition. David Charles' account builds on Crivelli's, adding a relation between those multiple objects rather than a connective particle; and his account fails for the same reason as Crivelli's, precisely because there is a disanalogy between terms with multiple significants and empty terms (no matter how the multiple significants are related). Finally, Noriega-Olmos' account gives a nominal definition of "goat stag" using differentiae he takes to refer directly to extramental existents, and misses the mark for that reason (the differentiae included in the definition do not, in fact, refer directly to extramental predicates, for no word does according to Aristotle). He criticizes his own definition for this reason; however, if we do not conceive of a "half-goat" (attributed to the concept of a fictional animal) as a goat cut in half, Noriega-Olmos' definition (where "goat stag" is a "half-goat, half-stag animal") remains plausible as a candidate for a unified, nominal definition of "goat stag". The trouble comes, as we will see, when he attempts to define things that do not exist as *linguistic* constructions.

Empty Terms vs. Terms with Multiple Significants: Response to Crivelli

According to some of the scholars who have reviewed Crivelli's *Aristotle on Truth*, his views on how Aristotle might deal with empty terms are the least satisfying part of his book. Alex Orenstein, for instance, says that "we are to some extent at a loss in discussing how Aristotle's theory of truth should deal with empty terms and in particular with empty singular names."[227] Jean-Baptiste Gourinat attempts to pinpoint the problem with Crivelli's interpretation of empty terms, asserting that the particular difficulty Crivelli runs into is that he seems to go back and forth on whether "goat stag" is an empty term at all[228]—if the goat stag is a "non-being", then "goat stag" is an empty term; however, Crivelli's interpretation is that the goat stag (as a non-being) is actually two beings in relation (the term is, similarly, two terms in relation); and two beings in relation are not a non-being. Crivelli requires the interpretation of the goat stag as a non-being to distinguish between empty and non-empty terms, which he does, and further, he uses the distinction in his definition of assertions. In order to understand this dissatisfaction with Crivelli's views on this topic, we need first to understand what these views are and how he arrived at them.

[227] Review of *Aristotle on Truth* by Alex Orenstein, *The Review of Metaphysics*, Vol. 59, No. 4 (June, 2006) p. 875-877.

[228] Review of *Aristotle on Truth* by Jean-Baptiste Gourinat, *The Classical Review*, Vol. 56, No. 1 (2006) p. 65-66. "A.'s theory of truth is a correspondence theory of truth, a relation of isomorphism between truth-bearers and states of affairs. Ascribing such a theory to A. is coherent with the thesis that he acknowledges 'states of affairs' (hence, its pertinence depends on the pertinence of the previous point) and has as a consequence that there must be no 'vacuous' or 'empty' terms: this is endorsed by C., assuming that 'goat stag' is not an empty term, but that sentences mentioning 'goat stag' are composite assertions dealing with two subjects (as in the hypothesis in Int. 8 of someone giving the name 'cloak' to 'horse' and 'man'). However, C. is not at ease, p. 162 n. 39, when dealing with A.'s assertion that goat stag is 'known as a non-being', which rather seems to indicate that 'goat stag' is an empty term."

Contrary to my interpretation of Aristotle in Chapter 2, Crivelli interprets Aristotle as holding that an assertion with a non-referring subject term is not an assertion at all. Using the example of the goat stag as an empty term, Crivelli asserts:

> [Aristotle] is probably committed to the view that in every predicative assertion both the predicate and the subject signify existent items of the appropriate kinds, i.e. are 'non-empty'.[229]

Using the examples of statements, 'A goatstag is white' or 'A goatstag is a goatstag', Crivelli says that:

> These utterances are not genuine predicative assertions. Rather, they are composite assertions, i.e. utterances equivalent to utterances constructed from several assertions linked by connective particles. In some cases, what on the surface appears to be a contradictory pair of predicative assertions will really be a pair of composite assertions which are both false.[230]

This view is immediately suspect. For one thing, composite assertions should be genuine predicative assertions. To say that they are not would seem to imply that they have no truth-value; however, what Crivelli is describing here is a composite assertion, where two false assertions are conjoined. Such a statement certainly would have a truth-value (false). Also, to decompose the subject term into its constituent parts would alter its meaning entirely, for certainly "a goat stag is white" is not equivalent to saying "a goat is white and a stag is white". However, this is just what Crivelli maintains, both in his book and also in a more recent statement of his view, in 2009, in a chapter in *A Companion to Aristotle*:

> no utterance of "goat stag" signifies a universal *goat stag* because there is no such universal. However, some utterances of "goat stag" signify the universal *goat* and the universal *stag*. Any sentence containing an

[229] Crivelli, 159.
[230] Crivelli, 153.

> utterance of "goat stag" is semantically complex and is equivalent to a sentence consisting of two or more sentences which are linked by conjunctions and concern the universal *goat* and the universal *stag*.[231]

He comes to this conclusion by analogy with Aristotle's example at *De Int*. 18a23. Here Aristotle is attempting to define what it means to be a single affirmation, and hypothesizes about what would happen if the subject term of a proposition were not in fact singular, but indicated more than one subject. In particular, he examines the possibility that the term "cloak" actually means "horse and man", and concludes that in this case a single affirmation in which "cloak" was the subject term would actually turn out to be not a singular assertion, but multiple assertions, such that "a cloak is white" would be equivalent to saying "a horse is white and a man is white":

> Suppose, for example, that one gave the name cloak to horse and man; 'a cloak is white' would not be a single affirmation. For to say this is no different from saying a horse and a man is white, and this is no different from saying a horse is white and a man is white.[232]

According to Crivelli,

> since Aristotle never states that expressions like 'cloak' behave differently from expressions like 'goatstag', there is some likelihood in assuming that Aristotle would endorse a generalization of his remarks about an utterance of 'A cloak is white' that applies to every utterance that looks like a predicative assertion whose would-be subject or would-be predicate is 'empty'.[233]

But this just does not work. The 'cloak' example gives us an example of what would happen if we were to refer to two things by one name. This is more like referring to my

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[231] Paolo Crivelli, "Aristotle on Signification and Truth" in *A Companion to Aristotle*, Georgios Anagnostopoulos, ed. (West Sussex: Blackwell, 2009), 89.
[232] 18a19-23. οἷον εἴ τις θεῖτο ὄνομα ἱμάτιον ἵππῳ καὶ ἀνθρώπῳ, τὸ ἔστιν ἱμάτιον λευκόν, αὕτη οὐ μία κατάφασις [οὐδὲ ἀπόφασις μία]· οὐδὲν γὰρ διαφέρει τοῦτο εἰπεῖν ἢ ἔστιν ἵππος καὶ ἄνθρωπος λευκός, τοῦτο δ' οὐδὲν διαφέρει τοῦ εἰπεῖν ἔστιν ἵππος λευκὸς καὶ ἔστιν ἄνθρωπος λευκός
[233] Crivelli, *Aristotle on Truth*, 175.

friends Bill and Jane as "a couple" than it is like using an empty term. When we replace the term "cloak" with its definition, "horse and man", what we have are two names with *kath' hauto* significance abbreviated by one name. In the case of a complex term, however, the elements of that complex term have no *kath' hauto* significance; Aristotle repeats this point many times in *De Interpretatione* and the *Poetics*. As I quoted already in Chapter 3:[234]

> A name is a spoken sound significant by convention, without time, none of whose parts is significant in separation. For in Kallippos the 'ippos' does not signify anything in its own right, as it does in the phrase 'kalos ippos' (beautiful horse). Not that it is the same with complex names as with simple ones: in the latter the part is in no way significant, in the former it has some force but is not significant of anything in separation, for example the 'boat' in 'pirate-boat'.[235]

In this passage, Aristotle claims that composite parts of words do *not* signify '*kath' hauto'*;[236] this indicates to us that there is some positive quality of being 'in virtue of itself' which the parts of composite terms fail to exemplify. For Aristotle, this marks a departure from Plato's opposition of *kath' hauto* to *pros allo*. In the *Sophist*, Plato sets up a distinction between *kath' hauto* and *pros allo* that would lead us to conclude that any part of discourse must be either one or the other, each defining some definite quality. At 255c the Visitor places these two possible qualities in direct opposition, implying that anything non-independent would therefore be relative.

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[234] See also *Poetics* 1457a31-5 and 1457a12-14.

[235] *De Int.* 16a19-26 Ὄνομα μὲν οὖν ἐστὶ φωνὴ σημαντικὴ κατὰ συνθήκην ἄνευ χρόνου, ἧς μηδὲν μέρος ἐστὶ σημαντικὸν κεχωρισμένον· ἐν γὰρ τῷ Κάλλιππος τὸ ιππος οὐδὲν καθ' αὑτὸ σημαίνει, ὥσπερ ἐν τῷ λόγῳ τῷ καλὸς ἵππος. οὐ μὴν οὐδ' ὥσπερ ἐν τοῖς ἁπλοῖς ὀνόμασιν, οὕτως ἔχει καὶ ἐν τοῖς πεπλεγμένοις· ἐν ἐκείνοις μὲν γὰρ οὐδαμῶς τὸ μέρος σημαντικόν, ἐν δὲ τούτοις βούλεται μέν, ἀλλ' οὐδενὸς κεχωρισμένον, οἷον ἐν τῷ ἐπακτροκέλης τὸ κελης.

[236] It is possible to interpret this passage as claiming that the parts of complex terms that would be significant in their own right if used in separation do not signify in their own right as part of the complex term. In this case, the composite parts of words still do not signify *kath' hauto*.

> Visitor: But I think you'll admit that some of those which are are said by themselves, but some are always said in relation to other things.
> Theaetetus: Of course.[237] [*Sophist* 255c]

Aristotle, on the other hand, makes no such distinction when he attempts to define what it is to be *kath' hauto* in the *Metaphysics*, V.18. Rather, he gives several examples of things which are said to be *kath' hauto*, allowing the definition to be just the commonality between these several examples. We must note here that if a thing has an attribute by virtue of one of its parts, that thing exemplifies that attribute *kath' hauto*, but in a complex term the parts expressed nothing *kath' hauto*. The passage reads:

> Therefore 'in virtue of itself' must have several meanings. It applies to (1) the essence of each thing, e.g. Callias is in virtue of himself Callias and the essence of Callias; (2) whatever is present in the 'what', e.g. Callias is in virtue of himself an animal. For 'animal' is present in the formula that defines him; Callias is a particular animal.—(3) Whatever attribute a thing receives in itself directly or in one of its parts, e.g. a surface is white in virtue of itself, and a man is alive in virtue of himself; for the soul, in which life directly resides, is a part of the man.—(4) That which has no cause other than itself; man has more than one cause—animal, two-footed—but man is man in virtue of himself.—(5) Whatever attributes belong to a thing alone and *qua* alone; hence also that which exists separately is 'in virtue of itself'.[238]

Crivelli, in order to maintain his interpretation, would have to posit that there exist such things as assertions where subject terms signify something but not *kath' hauto*; that is, the subject term would signify nothing in virtue of itself. I do not believe we have any reason

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[237] *Sophist* 255c: {ΞΕ.} Ἀλλ' οἶμαί σε συγχωρεῖν τῶν ὄντων τὰ μὲν αὐτὰ καθ' αὑτά, τὰ δὲ πρὸς ἄλλα ἀεὶ λέγεσθαι.
{ΘΕΑΙ.} Τί δ' οὔ;

[238] *Metaphysics*, 1022a25-35 ὥστε καὶ τὸ καθ' αὑτὸ πολλαχῶς ἀνάγκη λέγεσθαι. ἓν μὲν γὰρ καθ' αὑτὸ τὸ τί ἦν εἶναι ἑκάστῳ, οἷον ὁ Καλλίας καθ' αὑτὸν Καλλίας καὶ τὸ τί ἦν εἶναι Καλλίᾳ· ἓν δὲ ὅσα ἐν τῷ τί ἐστιν ὑπάρχει, οἷον ζῷον ὁ Καλλίας καθ' αὑτόν· ἐν γὰρ τῷ λόγῳ ἐνυπάρχει τὸ ζῷον· ζῷον γάρ τι ὁ Καλλίας. ἔτι δὲ εἰ ἐν αὑτῷ δέδεκται πρώτῳ ἢ τῶν αὑτοῦ τινί, οἷον ἡ ἐπιφάνεια λευκὴ καθ' ἑαυτήν, καὶ ζῇ ὁ ἄνθρωπος καθ' αὑτόν· ἡ γὰρ ψυχὴ μέρος τι τοῦ ἀνθρώπου, ἐν ᾗ πρώτῃ τὸ ζῆν. ἔτι οὗ μὴ ἔστιν ἄλλο αἴτιον· τοῦ γὰρ ἀνθρώπου πολλὰ αἴτια, τὸ ζῷον, τὸ δίπουν, ἀλλ' ὅμως καθ' αὑτὸν ἄνθρωπος ὁ ἄνθρωπός ἐστιν. ἔτι ὅσα μόνῳ ὑπάρχει καὶ ᾗ μόνον δι' αὐτὸ κεχωρισμένον καθ' αὑτό

to think that Aristotle would allow for truth-bearing predications to have subject terms that either "signify nothing" or only "have some force" but signify nothing in themselves. Crivelli is aware that the terms composing "goatstag" have no independent significance when used in a compound term,[239] but does not factor this observation into his interpretation of Aristotle on the topic of empty terms.

Empty Terms vs. Terms with Multiple Significants in Relation: Response to Charles

In *Aristotle on Meaning and Essence,* David Charles advances an account of Aristotle's views on "empty terms" that is essentially the same as Crivelli's. Charles, however, provides a more expansive and plausible defense of the account, but one that is still not adequate.

Charles also uses the cloak example as an analogy to the 'empty' term 'goat stag'; however, he attempts to explain how it is possible for the components of the compound term to have independent significance. He does this by positing that the compound term can be reduced to two significant terms in relation.

> Indeed, it is not even clear whether 'Kallippos' is used as an example of a simple name or a compound one. However, his brief remarks suggest that in compound names the parts contribute to the significance of the compound whole, which is to be determined by the significance of the parts plus their mode of combination.[240]

I do not agree that it is unclear whether Aristotle is using 'Kallippos' as a compound name or a simple one. Again, the difference between the 'cloak' example and the 'goat

[239] He states in the same chapter, "Every uttered compound noun (like some utterances of "blueberry" and "goatstag") is an uttered noun, and therefore has no part that is conventionally significant on its own." (Crivelli, "Aristotle on Signification and Truth", 106.)
[240] Charles, David. *Aristotle on Meaning and Essence*, p. 88.

stag' example is that when 'cloak' is replaced with its definition, it becomes two independently significant terms conjoined. Charles seems to want to assume that 'Kallipolis' is a compound name, whereas I would think that whether it is simple or not would depend on Aristotle's definition of the unity. On Aristotle's account, a name is a name by virtue of its referring to one thing. There is a single man, Kallippos, to whom the name refers, and thus it is a name for Aristotle. Similarly, the term 'goat stag' is intended to refer to one thing, and thus, I would think, would also be considered a unity by Aristotle; the single name may be complex, but it is one name by virtue of its designating one thing. We might think that since it is possible to distinguish parts of the thing that it would be divisible, and therefore would not meet Aristotle's definition of unity given in *Metaphysics* X. There, Aristotle defines "one" as,

> The naturally continuous, the whole, the individual, and the universal. And all these are one because in some cases the movement, in others the thought or the formula, is indivisible.[241]

If we think that the thought itself is divisible, even into non-significant parts, then we might have reason to think that compound terms are not unities. But if we demand that they be divisible into *significant* parts, then compound terms are *not* divisible, and therefore *are* unities. Here I must refer back to Chapter 1, where I gave the two senses of "ἀδιαίρετον" Aristotle gives in *De Anima*. At 430b6-7 Aristotle states that "ἀδιαίρετον" may mean either that something is incapable of division, or that it is not actually

[241] *Metaphysics*, 1052a35-1052b1 τό τε συνεχὲς φύσει καὶ τὸ ὅλον, καὶ τὸ καθ' ἕκαστον καὶ τὸ καθόλου, πάντα δὲ ταῦτα ἓν τῷ ἀδιαίρετον εἶναι τῶν μὲν τὴν κίνησιν τῶν δὲ τὴν νόησιν ἢ τὸν λόγον. We might also translate ἀδιαίρετον as "undivided".

divided.[242] It is obvious that compound terms like 'goat stag' or 'Kallippos' are not actually divided, and would therefore be counted as unities. If divisibility demands they be divisible into significant parts, then they are also indivisible. Even if Aristotle means here that the thought or the account of something is only undivided (rather than indivisible), this is still reason to question whether something that is undivided can be made equivalent to something that is divided.

On Charles' account, the thought of a goat stag can be divided, so that the proposition "Goat stags do not exist" more properly states, "It is not the case that there are animals which are the offspring of a goat and a stag".[243] However, all that Charles has done here is replace the term with a proposed definition. And to replace a term with its definition is not to divide it. If providing a definition for a term were equivalent to dividing it, all terms would be divisible.

The way the division works, in Charles' argument, is that the thought of a goat stag is reducible to two or more thoughts in a given relation:

> The immediate significance of 'goatstag' would be determined by the content of the compound thought (θ), with which it is conventionally correlated. The content of this thought will in turn be fixed by the thought contents of simple thoughts θ_1 and θ_2 which are placed (by the thinker) in relation R (e.g. offspring of).[244]

This would make sense for the 'cloak' example. Two thoughts, horse and man, are related by a conjunction. In the goat stag example, the component thoughts Charles proposes are those of a goat and a stag, with a relation of being the offspring of both. On this account,

[242] 430b6-7 "Since the word 'ἀδιαίρετον' has two senses, i.e., may mean either 'not capable of being divided' or 'not actually divided'…" (τὸ δ' ἀδιαίρετον ἐπεὶ διχῶς, ἢ δυνάμει ἢ ἐνεργείᾳ)
[243] Charles, 92.
[244] Charles, 89.

the thought of any individual would be divisible, and our thought of an individual "Bob" would be *equivalent* to our thought of "the guy who is the offspring of Ray and Sherry". Not only would I argue that the content of the thought "Bob" is not this sort of definition, I also argue that this is not a division at all, and that Bob is, like Kallippos and the goat stag, a unity in thought. When combined, the thoughts of 'goat' and 'stag' lose their *kath' hauto* significance in order to form the unity 'goat stag'; they become undivided and (if by divisible we mean divisible into independently significant parts) indivisible. The significance of a term is not determined by the significance of its parts and their mode of combination. Again, we have no way to distinguish empty and non-empty terms.

Empty Terms vs. Things That Don't Exist: Response to Noriega-Olmos

Noriega-Olmos' account of empty terms in Aristotle works from the following definition of "goat stag" which he attributes to Aristotle:

> Ndf.: Goat stag is a half-goat half-stag animal.[245]

After introducing this definition, Noriega-Olmos attempts to show how the definition of an empty term differs from definitions of non-empty terms, and why this definition is troublesome.

> The trouble with this definition is, however, that it supposes 'half-goat' and 'half-stag' to be properties, although they are not properties of any kind. 'Half-goat', and *mutatis mutandis* 'half-stag', is simply the association of the substance 'goat' with the property 'half'. That association renders the idea of a goat considered in its half, something that cannot obtain because a goat deprived of one of its halves would not be a substance. Such a thing would not be a half of anything because a half of a goat taken apart from it, in Aristotle's ontological terms, would not be anything but a chunk of matter.[246]

[245] Noriega-Olmos, 72.
[246] Noriega-Olmos, 72.

Thus, Noriega-Olmos proposes a definition of "goat stag", then criticizes it. The form of his definition suggests that the nominal definition of "goat stag" combines the genus "animal" with the differentiae "half-goat" and "half-stag". This is why, I imagine, he then takes these terms to suggest properties. But, he declares, "half-goat" is no property at all. It would be, rather, a substance and a property—for according to Noriega-Olmos, a goat is a substance, a species of animal, and half is a property. (This itself is troublesome, for half, if it is a property, is a relational property, on Aristotle's account, rather than a quality—there can be no half without reference to something that is halved.) He finally rejects the existence of a half-goat on the basis that half a goat would not be a substance, but a chunk of matter.

The final step of Noriega-Olmos' argument rejecting the "half-goat half-stag animal" definition of "goat stag" has some obvious difficulties. First, to say that half of a substance would not be anything is incoherent; he himself states that half of a substance would be a chunk of matter. (Chunks of matter exist and are not, therefore, "not anything"). He makes this point in order to affirm that there is no such thing as half of a substance, to render the term "half-goat" incoherent, for the former term would contradict the latter (not only does the property not obtain, but it *cannot*, on Noriega-Olmos' account[247]). But his definition relies on the idea that the term "half-goat" is equivalent to "half of a goat"—and the goat stag would therefore be something Frankensteined together from mutilated goat and stag parts. In fact, I can imagine half of a goat; while it is true that it is not a substance (assuming that a substance is a particular individual whose

[247] Noriega-Olmos, 72.

substantiality depends on its being alive), it is still something. The fact that "half-goat" symbolizes a chunk of matter rather than a substance does not make the term incoherent.

As noted, Noriega-Olmos defines the term "half-goat" as equivalent to a "goat considered in its half". But this is not normally what we think of when we say that something is "half-goat"; the term "half-goat" does not, in fact, inspire the thought of half of a goat. Habitual associations and conventional usage instead have resulted in the term inspiring the thought of some animal conceived by a goat and something else, resulting in the animal being genetically half-goat—this is, in fact, the assumption Charles makes when he defines the goat stag as the offspring of a goat and a stag. The term "half-goat" is therefore not a substance with a property. Whereas Noriega-Olmos asserts that "Half-goat… can neither be a substance, nor an ontological property", this statement is easily falsifiable—all it would require is some interspecies breeding. The term does not signify, as he claims, a substance with a property; rather, it signifies some property of the (in the case of the goat stag, fictional) animal.

Noriega-Olmos uses this example to conclude that the unity of the goat stag is linguistic rather than ontological; the predicates combined in the nominal definition are equivalent to the goat stag itself, i.e., the thing is its definition. His conclusion on empty terms stemming from this argument is that

> Empty terms are then combinations of existent entities that do not obtain, and their definitions present those combinations as if they obtained, as if the terms of the *definiens* stood for essential properties of substances. Empty terms are, therefore, linguistic constructions, products of linguistic devices and capacities.[248]

[248] Noriega-Olmos, 72.

This seems a rather trivial conclusion—we could define any term at all as a linguistic construction. I assume that what he means by "empty terms" in the final sentence are, rather, terms that refer to things that don't exist (in the sense of "refer" that assumes that terms refer directly to things). The first part of this definition recalls my argument from Chapter 3, that the fictional animal goat stag is spoken of homonymously to a goat stag having an essence (i.e., one that would exist). But here we also have the idea that the goat stag is nothing besides a name (he claims here that empty terms *are* "combinations of existent entities"); earlier I quoted him as saying that there is no thought of something that does not exist—"simple thoughts either grasp the essence of an object or do not grasp it… thoughts are proper representations or no thoughts at all." According to Noriega-Olmos, a goat stag is a *linguistic* construction. This account precludes the prior combination in thought of something having the properties of both a goat and a stag—the concept of goat stag, an affection of the soul—and makes the creation of the term "goat stag" equivalent to the creation of the goat stag itself (the symbol and what it symbolizes would arise together in the act of naming or defining). However, as I also argued in Chapter 3, according to Aristotle in every case that which unifies is thought. A goat stag can be a unity in thought independently of whether some predicates are placed together in the syntax proper to a definition.

Conclusion

So what is to be done about these empty terms? Can Aristotle account for them at all? I have maintained that he either can or doesn't need to, and that by simply replacing the term with its definition we might accurately make a statement about a goat stag. For the

term is only empty if by "empty" we mean that it does not refer to an extramental object. On Aristotle's account, however, all terms would be empty if we demand that they refer directly[249] to extramental reality; terms signify affections of the soul. A term that refers (in the modern sense) to nothing still signifies something. In my mind the term "empty" implies that there is absolutely nothing at all to which the term refers; however, this is only the case if we assume that "reference" denotes the relation of a term to an existent, unmediated by an affection of the soul. I submit that since, for Aristotle, terms signify affections of the soul rather than referring directly to extramental reality, no term that signifies an affection of the soul is empty. Such non-empty terms are significant (even if the affection of the soul they signify has no extramental thing of which it is a likeness), are capable of being (at least nominally) defined, and have material and form. The class of extramental material things to which the term might be thought to refer is empty, but the term is not (on the usual meaning of the term "empty"). Thus, there are two conditions that make it possible to construct the true phrase, "A goat stag does not exist": (1) that the subject-term signifies and (2) that what is signified has no extramental likeness.

As I have argued, what is immediately signified by a term is, for Aristotle, an affection of the soul. The concept of reference on which there is a problem of empty terms makes the term rather directly refer to the extramental object. The definition of a term as "empty" or "non-empty", on my interpretation, depends on whether it signifies or does not—and if it did not signify, it would not be a term (See Chapter 1). The so-called problem of empty terms, therefore, is really not a problem at all for Aristotle. As I noted

[249] I use the term "directly" in order not to preclude a sort of indirect reference to an external object, which is referred to indirectly by virtue of its being identical in form to the direct referent.

in chapter one, for Aristotle a sound becomes a name when it becomes a symbol, and so every name is a symbol *of something*. That something renders the term non-empty.

The account of the reference of terms that makes linguistic items directly correspond to extramental reality (that is, the definition that leads to there being a problem of empty terms) would seem attractive, if we were to maintain that there is an isomorphic structure between thought and the extramental realm. But the fact that we can think of things that don't exist ought to lead us to question the idea that there need be an isomorphism between thought and what is thought about. In some cases, what is thought about does not exist, and to think about it does not give it existence. To maintain that there is always an isomorphism between thought and what exists, we would have to be able to identify something that exists corresponding to every thought. That is, we would either have to admit that goat stags somehow exist in reality or have to deny that we could have a concept of 'goat stag'. Both of these options are implausible.

In chapter three, I examined the notion that particular terms are themselves false. There, I concluded that there is no such thing as a false term, for Aristotle. The contemporary problem of empty terms looks to be, in the end, a quite similar problem. In both cases, the qualifiers in question ("false", "empty") are used to indicate that the term has no extramental correlate. And when we attempt to form assertions using terms that are "empty", the truth or falsity of the assertion is not already determined by that term's "emptiness". The term "goat stag" is not a falsehood waiting to happen. The nominal definitions I have examined in this chapter do not, under scrutiny, support the argument that assertions with an "empty" term as subject or predicate are definitively false. Thus it

is possible, according to Aristotle, to speak truly of fictional things such as goat stags—things that do not, in the ordinary sense of the word, exist.

Concluding Remarks

What does not exist, though it might at first seem to cause trouble for particular interpretations of Aristotle, in fact provides us with evidence of the consistency of his thought. In the preceding pages, I have considered interpretations of Aristotle relating to his theories of language, logic, psychology and metaphysics. When applied to things that do not exist, these seemingly disparate theories seem to achieve a better unification.

This is most evident, I argue, in the summary of the hierarchy of representations Aristotle presents in *De Interpretatione*, chapter one. In my first chapter, I discussed how it is possible to speak of things that do not exist, which required an outline of how linguistic representations are dependent on the existence of their referents. In the second chapter, I showed that the logical inferences we are capable of making with regard to what does not exist require we differentiate between what is signified by a name, when it refers to something that does or does not exist—specifically whether what it refers to has an essential or only a nominal definition. That is, Aristotle's concepts both of definitions and of logical consequence depend on the ontological status of what is signified by names. In the third chapter, I argued for a particular psychological account of how it is possible to create concepts of what does not exist and to name them. The correspondence theory of truth I outlined in the fourth chapter is a reflection of how Aristotle's concept of truth is dependent on metaphysics, and the different truth-bearers I surveyed in Chapter five demonstrate the links between his psychology and theory of truth.

Over the course of the preceding chapters I have argued for some controversial interpretations of Aristotle's texts. My conclusion that what a word refers to primarily is

an affection of the soul is certainly not a universally accepted interpretation of Aristotle. When we take into account what does not exist, however, this conclusion seems unavoidable. For in the case of what does not exist, a word can only refer to an affection of the soul, since there is no thing to which it can refer. We are, therefore, faced with two possibilities: (i) Aristotle held different theories of linguistic signification for what does and what does not exist; or (ii) when Aristotle seems to speak of signification as a direct relationship between a word and a thing, this is a shorthand for a more complex theory. I support the latter interpretation, for the reason that Aristotle never characterizes what does not exist as an exception to a theory, but rather always accounts for what does not exist using the established premises of that theory.

I have also argued against the application of some modern concepts to Aristotle's thought. Aristotle never speaks of an "empty term". When we attempt to apply such modern concepts in interpreting Aristotle, it is imperative that we ensure the same basic assumptions also apply; for empty terms, we must account for the differences between Aristotelian and modern conceptions of existence, psychological and linguistic representation. I have argued that these are, in fact, different. When these differences are accounted for, the problem disappears.

Taking things that do not exist as the focus of my study—as opposed to the exceptional case within another focus—has allowed me to (i) bring to light some otherwise neglected points in Aristotle's work; (ii) outline the connections between seemingly disparate Aristotelian theories (metaphysics, psychology, language and logic); and (iii) provide some fodder for rethinking some basic features of modern interpretations

of Aristotle. I have demonstrated that things that do not exist are not much of a problem for Aristotle; his theories are sufficiently nuanced and consistent to account for these presumed exceptions. As objects of thought, represented in language, we may speak of things that don't exist, truly or falsely.

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