

Daniel Heller-Roazen

No One's Ways

An Essay on Infinite Naming

ZONE BOOKS

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CHAPTER ONE

A Guest's Gift

"No one is altogether nameless," declares the king of an island at the fringes of the world. He means less to state a principle than to issue a command to the stranger who has arrived, uninvited, at his court: that man must identify himself. Yet the seafarer knows how to elude the sovereign. Once before, on another distant island, he vanquished a more fearsome host, a brute who killed his guests and ate them raw. That one had also demanded that his guest name himself. To him, the voyager spoke these famous lines: "*Outis* is my name. My father and mother call me / *Outis*, as do all the others who are my companions."¹

Everyone knows what happened next. The host accepted the man's words and, in exchange for them, presented his guest with a gift of his own. He promised he would eat *Outis* last, after finishing off each of his companions. Yet the guest kept him from keeping his word. The seafarer had given his host wine, taken from some of the unlucky people whom he and his men had visited. The giant host knew nothing of its powers and, overcome by what he drank, fell asleep soon after uttering his promise — or his threat. Then the men, united in a common cause, gouged out their captor's eye with a burning stake. Woken in agony, the once indomitable host cried out for help. His neighbors, alarmed, rushed to the edge of his cave, asking what had befallen him. But now the wounded giant could not see his guest, nor could he, as he discovered, truly name him.

The mariner had anticipated the terms by which the neighbors would offer help to their friend.² Incredulous, they ask: "Surely no mortal against your will can be driving your sleep off? / Surely none can be killing you by force or treachery?"³ The sightless host seeks to give them an answer, but

even as he summons his foe's name to his friends, its two syllables fall apart. He took *Outis* to be a name like any other, which refers to an individual. In repetition, however, it sounds as neither name nor noun but indefinite pronoun, composed of two words, which must lack any referent. *Oūtis*, in the Cyclops' mouth, becomes *óú tis*, "no one." In Homeric Greek, the idiom of the hero and the giant, the pseudo-name "No One" and the pronoun "no one," *Outis* and *óú tis*, are almost identical in sound. Only a difference in accentuation separates them. It is enough to save the wily guest.

Yet there is more to the deceit of *Outis* than this shifting of accents. When the neighbors wonder whether there could be anyone doing violence to their friend, they also echo the guest's words, although they cannot know it. Two parts of speech shift in a second movement, the inverse of the first. An indefinite pronoun calls to mind a noun and name. Asking whether there is "not someone" (*mē tis*) doing harm to their friend, the neighbors employ an interrogative expression that is nearly indistinguishable in sound from the word *mētis*, that is, "cunning."⁴ Once again, a difference of accentuation alone separates these two expressions. The visitor thus reveals himself to be worthy of his self-made mask. To the blind host who stands before him as to those who are too distant to see him, the seafarer, by the cunning of words alone, renders himself positively nameless.

The ruse combines several meanings that are, in form and force, distinct. In the simplest sense, the word—or non-word—*Outis* effectively denies two complete propositions. When the neighbors hear this term uttered by their wounded friend, they draw a valid, if erroneous, inference. They conclude that the following sentences are true: it is not the case that someone has woken their friend; it is not the case that someone is "killing" him "by force or by treachery."⁵ It is as if, in response to their hypotheses, their friend had merely exclaimed: "No!" But the word or non-word *Outis* also works by a second means. It can be heard as the denial of not two statements but a single predicate. The maimed giant also suggests this much. "Good friends," he exclaims, "*Oú tis* [that is, No One] is killing me!" Those assembled outside his cave can hardly be faulted for concluding that the property of "being harmed" does not apply to him. Yet the expression can also be perceived in a further sense. *Outis* alludes to a third possibility of language: the assertion of a present lack, or a privation. There

is not anyone, in this sense, behind the giant's cries, the cause of his pain being missing.

Yet the meaning of the pseudonym is also simpler and more extreme. Beyond the invalidation of the proposition, the negation of the predicate and the suggestion of a privation, a fourth layer of speech may be discerned in it. It is that enclosed in the expression *ou tis* when understood, in the most literal, if barely grammatical, sense, as the refusal of the indefinite article "a" or "one": as "not-any," "not-one," or "non-one." Everything follows from this act of language, which constitutes the most minimal and extreme of affirmations, as well as the most far-reaching and excessive of negations. Long before being received at the island court and being called upon to reveal his unknown name, the guest has monstrously distorted the monarch's apparently self-evident thesis that "no one [*ou . . . tis*] is altogether nameless." Nameless because called "No One," the seafarer has shown that proposition to be both true and false. He may well, then, satisfy the king's explicit demand. He has already revealed its foundation to be insecure.

The man's response so perfectly overturns the sovereign principle of identification that one may wonder whether he did not, in fact, invent the tale of *Outis* in response to the king's insistent demand that he reveal himself. The guest, of course, presents the story of his voyages as no more than a recollection. Yet no one survives to attest to its truth or falsity, and when the man finally reveals his famous name, only he himself can judge its worth. The son of Laertes alone knows when and why he chose to twist *Odysseus* into *Outis*. What is certain is that the man of many ways claims to have accomplished a great deed: becoming positively anonymous while continuing to bear a name, if not, in fact, while bearing the dismembered parts of his own name, *Outis* being perhaps a distortion of the syllables of *Odysseus*.⁶ The ingenious hero would have saved himself by a single act of speech: adding the particle "no," "not-," or "non-" (*ou*) to the indefinite pronoun "a," "one," or "someone" (*tis*). This act is simple yet profoundly perplexing in sense and effects. In it, an entire company of linguistic shadows comes loose. They are the most indeterminate of spoken beings: meanings more tenuous and more fleeting even than that of being "a" or "one," for that, precisely, they are not.

In its extreme uncertainty, the name *Outis* illustrates a fundamental rule of language. Every time the particle “not-” or “non-” is attached to a given word, the same event in speech may be discerned. One term is denied; its denotations are suppressed. Yet in that refusal, a realm of sense is also disclosed: one that has no positive designation, although it is delimited. Something is named, yet the nature of the naming remains opaque. Among the many tidings that Odysseus brings back from his twenty years of wanderings at sea, there is the news of this strange possibility of speech, which lends a word, by the most minimal of changes, an unfamiliar form. To exhaust its indefinite meanings, one would need to traverse the entire domain of signification that a given expression implicitly excludes. Perhaps a god could do it. Yet in the non-man’s cave, as at the king’s court, none is present.

The thinkers who came after Odysseus did not forget the lesson in naming that he taught. From Aristotle and his commentators in Greek and Arabic, in Latin and in more modern languages, to the masters of the medieval universities and their early modern successors, from Kant and Hegel to those who sought to explore the possibility of cognition after them, thinkers would return to the power that the seafarer made his own: to designate by naming “indistinctly” or “indefinitely,” as Aristotle would hold, or to reason by judging “infinitely,” as Kant and his followers would maintain. In many tongues, and in implicit and explicit reference to diverse grammars, philosophers would assess the power of a particle as modest as *ou*, *mē*, *lā*, *ghayr*, *nicht-*, or *non-*. In the theory of such expressions of affirmative refusal, speech and thought would find themselves at disconcerting crossings. Words, becoming non-words, seem to evoke beings that are, in themselves, barely definable; thinking, striving to catch up with the rule-bound faculty of speech that always accompanies it, runs the risk of losing itself in the subtleties of grammar. But in lingering on the possibility of speaking by speaking of the *non-*, philosophers would reach many of their most far-reaching inventions. These include the doctrines of affirmation and negation, contrariety and contradiction; the theory of the types and orders of predicable properties; the concept of the merely thought “thing,” in its distinction to being and non-being alike; an account of a judgment from which the possibility of absolute knowledge may be derived; and a

logic of cognition in which Being itself originates in a point graspable solely as “non-nothing.”

The adventures of the *non-* in philosophy deserve to be reconstructed because of their intrinsic historical importance. Yet there is also more. In their complications, their tensions and their equivocations, the theories of non-words illustrate the ways in which the facts of natural grammars may be an incitement for thinking. Speaking without being aware of the rules by which we speak, reasoning in given languages without reflecting on the logics that they imply, we are able to make use of a capacity that is obscure to us, without examining it as such. But we are also capable of bending our thinking back upon its idiom, listening to the system of constraints that our words and phrases exhibit. That is the way of *Outis*. It consists in grasping hold of a language, albeit in part and in particles, rendering its structural equivocations and consequences explicit, while putting them to a new use. If this path has long attracted thinkers, it is because it promises, in earnestness or in treachery, a major accomplishment: to cast light on the central and unsurpassable presupposition of reason, which, without knowing exactly what we name, we designate as “language.” The fable of the guest’s gift to his host is also exemplary in this respect. In it, no more — and no less — than an analysis of speech allows a speaker to elude captivity and death. A thinking use of grammar leads out of the cave.

Whether deception or resource, trick or treasure, the guest’s gift draws on a possibility that persists, in different ways, in every language. Non-’s sense is lodged in our reason and our speech, as if in accordance with some unknown law of logic or grammar, if not both. This, too, is why it demands scrutiny, even if it threatens those who would attend to it, like the hero’s foes, with the many dangers of its snares.

In the Voice

The book by Aristotle known today as *On Interpretation* opens with a simple but perplexing claim: there are “things in the voice [*ta en tē phōnē*],” the reader learns, that stand in need of study.¹ One might wonder about the “voice” that Aristotle evokes. What is it, one could ask, and how has it come to contain what the philosopher perceives in it? Aristotle’s subsequent reflections, however, bear not on the container but its contents. His very first words suggest that he will treat the terms now called “parts of speech,” for he states that he will define the “noun” or “name” (*onoma*) and the “verb” (*rhēma*). Yet he then declares that he intends to investigate four more complex beings: “negation, affirmation, statement and sentence.”² On their own, he argues, words are signs of soundless “impressions” (*pathēmata*) made upon the soul.³ Aristotle observes that he has explored this subject elsewhere. His reference appears to be to his psychological writings, which offer studies of sensible impressions of various kinds; yet the reader also knows that in the *Categories*, Aristotle explored the varieties of names, enumerating the ways in which things can be said to be. Now his task will be to show how it is that, from individual nouns and verbs, whole phrases can be formed. For the first time in his works on language, Aristotle will treat a fundamental question: truth and falsity. In isolation, a name or verb may signify something, but it “has no truth or falsity to it [*oute gar pseudos oute alēthes pō*].” Only when incorporated into a sentence, in “combination and division,” can a “thing in the voice” be considered true or false.⁴

Sentences are to constitute the ultimate subjects of this treatise. To reach them, however, Aristotle must first clear the field of inquiry of

troublesome elements of speech. There is, it seems, vocal clutter to be set aside. The philosopher begins at the beginning, offering a summary account of the types of words. Then he advances to the level of the sentence (*logos*), considered as “a significant spoken sound some part of which is significant in separation.”⁵ He is quick to add that not all sentences need occupy his attention, since only some of their number may be said to be either true or false. “Every sentence is significant,” he reasons, “but not every sentence is a statement-making [*apophantikos*] sentence.” Only in “statement-making sentences” is there truth and falsity.⁶ A prayer, for instance, “is a sentence, but it is neither true or false.”⁷ Aristotle gives no other examples of sentences shorn of truth or falsity, but he suggests that there are many more. He points, in passing, to “rhetoric” and “poetics,” which study such sentences in detail. Soon he takes a further step. He reveals that the “statement-making sentence” is a kind of genus, of which there are two species: affirmation (*kataphasis*) and negation (*apophasis*). “An affirmation is a statement affirming something of something; a negation is a statement denying something of something.”⁸ Aristotle thus defines the statement as the composition of two major units. The first signifies a certain thing; the second points to a property that the thing does, or does not, possess. In the terminology imposed on a long tradition by Aristotle and his successors, the statement consists of a subject and a predicate. In an affirmation, the predicate is affirmed of the subject; in a negation, the predicate is denied of it.

On Interpretation develops a theory of such predicative statements. With the *Categories*, it lays the foundation for an elaborate doctrine of the forms of argument and the possibilities of reasoned demonstration. From the *Prior Analytics* to the *Posterior Analytics* and the *Sophistical Refutations*, an entire system of deduction is constructed on the basis of the principles laid down in this discussion of “things in the voice.” In time, it was to become perhaps the single most lasting and influential account of the forms of certain proof ever to be conceived. For centuries, scientific arguments advanced in the traditions deriving from Greek culture would strive to adhere to it. That the field of Aristotelian demonstration is limited becomes apparent early in this book. Implicitly, the philosopher suggests that affirmations and negations will be formulated in the present tense and

in the third person. Certain types of terms, moreover, will be excluded as a rule from the phrases contained in Aristotle's proofs. The philosopher's paradigmatic demonstrations, unlike those of many of his successors, will include neither proper names, such as "Plato," "Socrates," or "Callias," nor demonstrative pronouns, such as "here," "then," "that," or "this."¹⁰ Singular terms, in principle, cannot be parts of Aristotle's proofs.¹⁰ Conversely, terms whose meanings are so general that they cannot be defined by more expansive properties also exceed the limits of this system.¹¹ There is, in other words, not only a lower but also an upper edge to Aristotle's proofs. Their argumentation must advance within the domain set out by two borders, renouncing recourse to terms that designate things that are either unique or absolutely general. Demonstration must content itself with "things in the voice" of an intermediary nature.

There is a reason for this restriction, and it follows from the aims of the system in which the theory of the statement-making sentence is a part. Aristotle's aspiration in his works on language and demonstration is to provide a doctrine of not the single phrase but the ordered sequence of related phrases; his interest, that is, lies in not the *logismos*, or "reasoning" in itself, but the *sullogismos*, syllogism, "joined reasoning," or chain of propositions. In this chain, there are, he writes, to be three predicative statements, bound together by one relation of formally necessary implication. As a first example, one may evoke the first and simplest of the syllogistic "figures" (*skhēmata*) enumerated by the philosopher. This is the form of argumentation known to the logical tradition by the name of "Barbara," and that may be exemplified by an Aristotelian reasoning on the nature of certain vegetative things: "If every broad-leafed plant is deciduous and every vine is broad-leafed, then every vine is deciduous."¹² Aristotle also proposes an abstract account of this form of deduction, in which single letters take the place of entire terms: "If *A* is predicated of every *B*, and *B* is predicated of every *C*, then *A* is predicated of every *C*."¹³ Here, a single hypothetical particle ("If") and two paratactic conjunctions ("and" and "then") frame three predications: (1) *A* is predicated of every *B*; (2) *B* is predicated of every *C*; (3) *A* is predicated of every *C*.

It has been observed that "in formulating syllogisms with the help of letters, Aristotle always puts the predicate in the first place and the subject

in the second. He never says 'All *B* is *A*,' but uses instead the expression '*A* is predicated of all *B*' or more often '*A* belongs to all *B*.'"¹⁴ Were one to place the subject in the first position in the statement, one would obtain a more immediately comprehensible logical theorem: "If all *B* is *A*, and all *C* is *B*, then all *C* is *A*." Less obvious are the shifting roles that logical terms play in the three steps of this syllogism. A moment's attention suffices to observe, however, that the term that, in the first sentence, is in the place of subject (namely, *B*) passes, in the second sentence, to the place of predicate. In other words, from "every broad-leafed plant is deciduous" to "every vine is broad-leafed," the same expression — "broad-leafed" — changes logical position. This is not a curiosity of the first syllogistic figure but a constant in this type of classical reasoning. Each of the three forms of Aristotelian deduction demands such a variety of displacement; there is always one term that must appear first as a subject and, later, as a predicate.¹⁵ Such movements, however, come at a price. The terms included in syllogisms must, by nature, be neutral with respect to their possible positions, in the sense that they must be able to function both as subjects and as predicates. Homogeneity between subject and predicate is a formal necessity.¹⁶

From this principle, one may infer the rule that dictates that singular and absolutely general terms must be excluded from the field of proof. A proper name, such as "Socrates," may appear as the subject of a statement, as when one asserts, "Socrates possesses wisdom." Yet the proper name of Plato's teacher may not function as a predicate. One cannot claim that the property of being "Socrates" belongs to any class of beings, because the proper name, by nature, designates an individual, rather than some characteristic shared by many things. This is also why expressions of exceptional generality must lie beyond the domain of syllogistic reasoning. "Substance," for example, might be considered to be a term of this kind. Although it may be predicated of anything that exists, "substance" cannot easily be defined with respect to some greater idea of which it would be a species. By definition, a highest genus cannot exhibit features more general than itself, and one therefore has no ground to transfer such a term, in a deduction, from the position of predicate to that of subject. Like proper names, the designations of the most universal of things must therefore exceed the reach of ordered "statement-making sentences."

When Aristotle sets out to consider what is “in the voice” in *On Interpretation*, his aim is to account for the ways in which words may enter into predicative assertions that respect such formal limitations. At first glance, the difference between nouns (or names) and verbs might appear to pose certain difficulties for his theory, for a simple reason: in the symbolic form in which Aristotle presents the types of syllogistic reasoning, the terms in the position of subject and predicate are all nouns, or adjectives easily transformable into nouns when necessary. “Broad-leaved plant” and “deciduous” are both susceptible to being treated as the subjects of sentences; one may assert either that “every broad-leaved plant” possesses a certain quality, or that “every deciduous plant” exhibits a certain property. One might consider verbs, however, to be of a fundamentally different nature. In the statement, “Every man walks,” for instance, one may discern a subject (“every man”) and a predicate (“walks”); but the predicate is not of such a kind as to be immediately convertible, in English or in classical Greek, into a subject. Our grammar forbids us from forming a sentence in which “walks” would, in turn, become the subject of the verb, for (barring discourse about terms placed in quotation marks) one cannot say: “Every walks is. . . .”

Aristotle suggests a solution to this problem, arguing that the grammatical asymmetry of noun and verb belies a logical homogeneity. “There is no difference,” he argues, “between saying ‘a man walks’ [*anthrōpon badizei*] and ‘a man is walking’ [*anthrōpon badizonta einai*].”¹⁷ Then it is but a step to a second glossing, which may be taken to be logically equivalent to the first, even if its grammatical form would appear to be distinct. “A man is walking” can be understood to be synonymous with the statement “a man is a walking thing,” or the predicative claim, “a man is something that walks.” In his *Metaphysics*, Aristotle repeats this argument. “There is no difference between ‘a man is ailing’ and ‘a man ails,’ nor between ‘a man is walking’ (or ‘cutting’) and ‘a man walks’ (or ‘cuts’); and similarly in the other cases.”¹⁸ Beneath apparent grammatical diversity, there is, therefore, an identity of thought content that the philosopher brings to light. Once again, “a man ails” may be taken as synonymous with “a man is ailing” and, by extension, “a man is a thing that ails,” just as “a man cuts” can be taken as shorthand for “a man is cutting” and “a man is a cutting thing.” Through this analysis,

two-term assertions can be rewritten as three-term ones. A sentence composed of a noun and a verb can be rephrased as one with two nouns, linked by the joining verb, or “copula,” “is.”¹⁹ Within the noun-verb phrase, Aristotle, in short, locates a structure of tacit predication. Even where there appears to be only a subject and a verb, two terms lie concealed. One is the subject; the other is the predicate. A “statement-making sentence” may be present in implicit as well as explicit form.

In considering the varieties of subjects and predicates, however, Aristotle encounters a perplexing phenomenon of speech. He observes that there are some things “in the voice” for which there exists no name: anonymous beings, which he will soon succeed in naming. To recover the conditions of their appearance, one must recall the treatise’s argument. In the second chapter of *On Interpretation*, Aristotle distinguishes nouns, verbs, and conjunctions from “the inarticulate noises [*agrammatōi psophoi*] of beasts.” He notes that whereas linguistic sounds are significant “by convention,” animal cries are meaningful “by nature.”²⁰ He adds that, within the field of spoken sounds, one may divide the class of nouns (or names) into the simple, such as “boat,” and the complex, such as “pirate-boat.” If one examines these expressions closely, one will observe that both are composite in character, in that they consist of a multitude of lesser sounds. Yet there is a notable difference between them. Whereas the parts of complex designations (such as the units “pirate” and “boat”) are meaningful in isolation, the parts of simple names have no significance in themselves.²¹ One may ask after the nature of the “part” (*meros*) that Aristotle here evokes. His argument seems to hold both for individual syllables and for those “smallest parts of the voice” that the ancient grammarians would define as “letters.”²² Without lingering on these details, however, Aristotle passes from names to verbs. In his third chapter, he presents the verb as similar in meaning to the name, while manifesting a supplementary feature: that of signifying a certain time, or, as the scholars of language would later say, exhibiting a tense.²³

Yet Aristotle now makes an unexpected concession. He admits that there are certain expressions that defy the analysis that he proposes: words that would appear to be names and verbs and yet that cannot be viewed as either one or the other. His example for the class of names is the queer term “not-man” or “non-man” (*ouk anthrōpos*). There is no reason to assume

that such an expression was any more customary in Aristotle's language than it is today in English. The question of the reasons that prompt the philosopher to summon it, therefore, is difficult to answer. Evoking the expression "non-man," Aristotle comments: "It is not a name, nor is there any correct name for it. It is neither a phrase nor a negation. Let us call it an indefinite name [*onoma aoriston*]."²⁴ Aristotle's reasoning is worth unfolding. He first suggests that one might consider the strange term "non-man" to be a name. Perhaps this is because "non-man" does not belong to either of the two parts of speech that Aristotle posits, in addition to names, in *On Interpretation*. "Non-man" is not a particle (*syndesmos*), for it will not bind two words, as would a conjunction or a preposition; nor may it be considered a verb, for it fails to signify any "time," not being tensed. Nonetheless, Aristotle's first point is clear: "non-man" is no name. Such a consideration might lead one to view "non-man" as shorthand for a statement of negation, if one takes into account three grammatical features of the ancient Greek language in which Aristotle wrote his work. First, a subject, if implied, need not be explicitly stated; second, one may construct a full sentence by purely nominal means, simply by joining subject and predicate, without any mention of the verb "to be"; and, third, in the absence of a single word for the indefinite article in ancient Greek, the sense of the English word "a" can be implicit where its presence is not explicitly marked. Aristotle's first public might have taken the utterance "not-man" to abbreviate a complete sentence, such as "[He is] not [a] man," or "[It is] not [a] man." Aristotle, however, also expressly excludes this interpretation: "not-man" or "non-man," he states, "is neither a phrase nor a negation." Yet, after having asserted that "non-man is not a name [*to de ouk anthrōpos ouk onoma*]," he corrects himself, declaring this expression to be some variety of name, for which there is no "correct name," and which he now distinguishes by virtue of being "indeterminate" or "indefinite" (*aoriston*).²⁵

The reader of *On Interpretation* soon learns that such indefiniteness is not restricted to the field of names. In the chapter of his treatise dedicated to verbs, Aristotle calls to mind similar expressions, writing: "non-recoverers' [*oukh' hygainei*] and 'non-ails' [*ou kamnei*] I do not call verbs. For though they additionally signify time and always hold of something, yet there is a difference — for which there is no name. Let us call them indefinite verbs

[*aoriston rhēma*].”²⁶ Once more, the reader might be forgiven for taking such utterances as “non-recovers” (which might also translated as “not-recovers”) and “non-ails” (or “not-ails”) as verbs, for they are manifestly neither particles nor nouns, and Aristotle has not allowed for any parts of speech beyond these three. The philosopher also admits that such terms, while functioning to designate, do “additionally signify time,” making of them verbs of a kind. Yet they exhibit a “difference” (*diaphora*) for which “there is,” he repeats, “no name.” Speakers of Greek might again take such utterances, despite their brevity, as phrases; “non-recovers” or “not-recovers,” for example, might well be a complete sentence, which one might render into English as “[He] does not recover,” and the Greek “non-ails” or “not-ails” might be taken to be synonymous with “[He] does not ail.” Yet it appears that Aristotle has a different interpretation in mind. Even as he treated “non-man” as a single “indefinite name,” so he now advances that “non-recovers” (or “not-recovers”) and “non-ails” (or “not-ails”) are examples of a category of speech that has yet to be discerned: that of the indeterminate or “indefinite verb.”

There are several ways to address the difficulties raised by such terms. The simplest would be to ask about their sense, or — to evoke a term whose form reflects the question it is to name — their non-sense. One could, in other words, examine Aristotle’s language, and the languages that we still, at least in part, employ today, posing a simple question. Under what conditions may one call anything a “non-man”? What does one mean in speaking of “non-healing” and “non-ailing”? This would be to take the path of grammatical inquiry. Another possibility is to put such questions to Aristotle himself. For what reason does he take such terms to be remarkable? One may recall that the aim of *On Interpretation* is hardly “interpretative” in any narrow sense, and the examples of indefinite words Aristotle offers are not citations of any identifiable discourse. If such expressions matter to him, one might surmise, it is for reasons pertaining to the architecture of his doctrine. Noting that the ultimate object of this work is the “statement-making sentence,” one could wager that the indefinite name and verb are best situated in the theory of proof that Aristotle means to found.

Perhaps expressions such as “non-man” and “non-heals” are to be elements in a system containing statements of many types, some of which

will involve indefinite terms. The argument seems plausible, but Aristotle's own books would appear to belie it. Soon after Aristotle names the unnamed name and the unnamed verb, he sets them aside. When, in his more advanced works on demonstration, he presents the forms of valid reasoning, he offers many examples of statements embedded in three-part syllogisms; but those statements, as a rule, include no indefinite expressions.²⁷ The Aristotelian branches of philosophy respect this limitation. Neither the philosopher's biology nor his astronomy, neither his doctrine of the virtues nor his theory of the natural world appears to bear, in any major way, on things namable solely by non-names and non-verbs. It is all the more remarkable, for this reason, that in his book on what is "in the voice," Aristotle should have drawn such attention to these designations. It seems that he found something to be pondered in the words to which, for the sake of his new science, he was soon to bid farewell. He summoned their indefiniteness to the ear and to the mind, even if he could not dispel it, as if anticipating that it would linger yet.

S	C	O	N	T	R	A	R	I	A	E	S		
S V B A L T E R N A E	OMNIS uoluptas bonū est.				CONTRARIAE OPPOSITAE	OMNIS uoluptas bonū n̄ est							
	VNIUERSALE DEDICATIUM					VNIUERSALE ABDICATIUM							
	Pariculare Dedicatuum					Pariculare abdicatuum							
	Quaedā uoluptas bonū ē					Quaedā uoluptas n̄ ē bonum							
	S	V	B	C	O	N	T	R	A	R	I	A	E

Apuleian Square of Opposition, ninth century (University of Pennsylvania Libraries, Lawrence J. Schoenberg Collection, LJS 101, fol 54v).

Square Necessities

A reader of *On Interpretation* might well anticipate that Aristotle's first treatment of indefinite terms would also be his last. Yet long after their appearance and disappearance has receded from view, words such as "non-man" and "non-ails" return in the philosopher's first book on sentences. Having discussed the name and verb in isolation, Aristotle offers an account of their combinations in the affirmation and the negation, proposing certain principles that he takes to be fundamental in valid reasoning. He explains that where an affirmation and a negation bear on the same subject, considered with respect to the same predicate, they enter into the relationship of contradiction (*antiphasis*). "For every affirmation, there is an opposite negation; for every negation, there is an opposite affirmation. Let us call an affirmation and a negation which are opposite a contradiction."¹ Appealing to the rule of thinking that would in the modern age be called "the principle of bivalence," Aristotle stipulates that whenever a statement, whether affirmative or negative, bears on general subjects belonging to the past or present, it must necessarily be either true or false.² Next he formulates the related principle that would later be known as the "law of the excluded middle": where two statements are contradictory among themselves, "it is always necessary for one to be true and the other to be false."³ Having established these basic points, Aristotle concedes, however, that contradiction is not always easily identifiable, for speech contains several varieties of opposition. Misled by language, one might take one kind of contrariety for another.

To ward off the possibility of confusion, Aristotle offers a systematic account of the relations that obtain between opposing sentences. His

discussion was to constitute a crucial chapter in the history of the theory of the statement. By late antiquity, it acquired a fixed shape. The principles of *On Interpretation* were to be projected, for the purposes of teaching, onto the surface of an imagined square. The earliest recorded account of this geometrical figure dates from the second century CE, when the teachings of Aristotle were transmitted in a simple and abbreviated form. A Latin treatise, *On Interpretation*, traditionally attributed to the rhetorician and poet Apuleius of Madaura, proposes a simple paradigm for the predicative statement: "Every pleasure is good" (*Omnis voluptas bonum est*). Following Aristotle, the Roman author observes that one may relate this assertion to three others: "Every pleasure is not good" (*Omnis voluptas bonum non est*); "Some pleasure is good" (*Quaedam voluptas bonum est*); "Some pleasure is not good" (*Quaedam voluptas bonum non est*). He then comments:

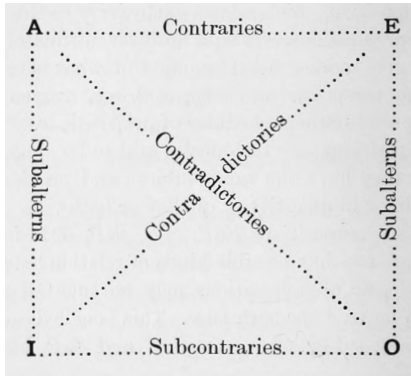
Now it is time to discuss how those four propositions are related to one another — and it is useful to consider them in a squared figure. So, as is written below, let there be affirmative and negative universals on the top line, e.g., "Every pleasure is good," "Every pleasure is not good." These may be said to be inconsistent [*incongruae*] with one another. Likewise on the bottom line, under each of them, let the particulars be written, e.g., "Some pleasure is good," "Some pleasure is not good." These may be said to be nearly equal to one another. Then let the oblique angular lines be drawn, one stretching from the universal dedicative to the particular abdicative, the other from the particular dedicative to the universal abdicative. Those [pairs of propositions], which are opposite to one another in both quantity and quality, may be called alternates [*alterutrae*], because it is indeed necessary that one or the other be true, which is said to be a complete and total conflict.⁴

The late antique author's "squared figure" exhibits several noteworthy traits. In each of its four right angles, a predicative assertion is to be inscribed. The two upper vertices will contain two universal statements: that is, two sentences bearing on a subject qualified by the determiner "every." "Every pleasure is good" will be written in the upper left, and "Every pleasure is not good" in the upper right. The two lower vertices of the square exhibit statements that will be considered to be "particular" in the sense that they bear on an indeterminate quantity of subjects, a

quantity to be designated by the determiner “some.” The sentence, “Some pleasure is good,” will be inscribed in the lower left corner, and “Some pleasure is not good” will then be written to its right. The horizontal lines of the square will thus trace a movement in quality, from “is” (*est*) to “is not” (*non est*), or, in other words, from affirmation to negation. The vertical lines of the square will convey a passage in quantity: from universal to particular, that is, from “every” (*omnis*) to “some” (*quaedam*).

The Greek and Latin traditions, as they are preserved today, contain no earlier example of such a square of logical opposition. Galen’s *Institutio logica*, a handbook contemporaneous with the Roman *On Interpretation*, presents similar teachings; but in it, the geometrical figure is lacking.⁵ There are certainly points of detail and terminology that distinguish the theory of the Latin *On Interpretation* from that presented in Aristotle’s distant model. Whereas the Greek philosopher speaks of “affirmation” and “negation,” the Roman calls to mind “dedicative” and “abdicative” “propositions.”⁶ Moreover, as a universal negative statement, Aristotle proposed a sentence of the form: “No pleasure is good.” The Roman author maintains that the universal negative statement exhibits a different structure: “Every pleasure is not good.” What may be most consequential is that the Roman author recasts the grammatical form of the particular negative statement that is inscribed in the square’s bottom right corner, thus deciding, to a large degree, on the logical syntax by which it would be subsequently known. Where Aristotle would have written, “Not some pleasure is good,” Apuleius suggests instead “Some pleasure is not good.”⁷ Nonetheless, the Roman square illustrates the fundamental lineaments of the Aristotelian doctrine, and the quadrilateral figure attributed to Apuleius was to become a standard element in the instruction of philosophy for centuries to come.

Later it would become common practice to assign to each vertex of the square a single letter, drawn from the vowels of the Latin words *affirmo* and *nego*, “I state” and “I deny.” Moving from left to right and from top to bottom, one would then read four alphabetic symbols: A, E, I, and O. The relations that hold between sentences could be written, in abbreviated form, as correspondences between letters. For the link exhibited by the vertical lines tying A and I, on the one hand, and E and O, on the other,



Square of Opposition, from John Neville Keynes, *Studies and Exercises in Formal Logic* (London: MacMillan & Co., 1884).

the philosophers of the Latin tradition would speak of “subalternation.” They would argue that, in each case, a lower or “subaltern” sentence, such as I or O, is true if the corresponding higher or “superaltern,” such as A or E, is also true; furthermore, they would reason, if the superaltern is true, the subaltern, too, must also be true. For the relation exhibited by the two diagonals — A and O on the one hand, and E and I on the other — philosophers would speak of “contradiction.” Of each such pairs of sentences, one must be true and one must be false. These are, in Roman terms, the two sets of “alternate” propositions in a relation of “complete and total conflict.” Finally, it would be maintained that the horizontal lines of the square represent relations between two logical varieties of contrariety (*enantiōsis*, or *oppositio contraria*). A and E would be considered “contrary” sentences in the narrow sense, while I and O would rather be qualified as “subcontraries.” It would be said that by nature, two contraries cannot both be true, although they may both be false. Symmetrically, one would add, two subcontraries cannot both be false, although they may both be true.⁸

There can be little doubt that this geometrical figure possesses one pedagogical virtue: it renders the logical relation of contradiction unmistakable to the eye. A glance at the square’s lines suffices to identify the special variety of opposition that defines the two contrasting statements of which only one is true and only one is false — and to observe that this opposition holds solely between sentences linked by the shape’s diagonals. To this degree, the diagram proposed in the Roman treatise well serves to present the teachings contained in Aristotle’s *On Interpretation*. But the

geometrical figure is also faithful to its distant source in a less obvious sense. If contradiction is readily identifiable on its reasoned surface, it is because of its difference with respect to contrariety and subcontrariety. Contradiction, in other words, emerges from a background of other oppositions. Necessity may well dictate, as Aristotle maintains, that for every affirmation, there is a corresponding negation, and that for every negation, there is a corresponding affirmation. The figure's four lines suggest that such necessities presuppose a further principle, which remains unspoken. Contradiction, to be immediately intelligible, requires the definition of contrariety. Visibly, if silently, the horizontal beams support the two diagonals.

This fact is troubling to the theory of the predicative statement, for a simple reason that is nowhere exhibited on the surface of this square: contrariety is a concept far more difficult to master than contradiction. One may well consider the sentences "Every pleasure is good" and "Every pleasure is not good" to be exemplary contraries, if one defines them, as does Aristotle, as two sentences that cannot both be true. One may also concede, with the Greek philosopher, that there is a different but related form of opposition linking two sentences that cannot both be false, that is, the "subcontraries" I and O: in the Roman square, "Some pleasure is good" and "Some pleasure is not good." Nonetheless, there are also more obscure types of contrariety. Even if one accepts the constraints of the Aristotelian exercise and refuses to introduce any fundamentally new terms into the exemplary predicative assertions, one can summon a type of opposition that is absent from the square. To do so, one need interfere neither with the movement in quantity from "every" to "some" nor with the passage in quality from affirmation to negation. A simpler act suffices to evoke a contrariety on which the Roman logician does not linger. One need only introduce a "non-" or "not-" (*non-*) before subjects and predicates. For example, one may place "non-" or "not-" before the term "pleasure" and the term "good." Then one will produce two new, if perplexing, contraries of the sentence "Every pleasure is good": "Every non-pleasure is good" and "Every pleasure is non-good."

A reader of Aristotle's *On Interpretation* might have expected the ancient philosopher to deny the sense of such predicative statements, or to say

nothing of them, even if they are grammatically admissible in Greek. Aristotle's initial remarks on indefinite names and verbs seem to be conclusive. Yet several chapters later, the philosopher's argument takes a new turn. Appearing to restate a point already proposed and defended, he observes: "Now, an affirmation signifies something about something, this last being either a name, or a non-name [or 'not-name']; and what is affirmed must be one thing about one thing."⁹ As if to explain the curious term "non-name" (*to anōnymon*), Aristotle adds: "Names and non-names have already been discussed. For I do not call 'non-man' a name but an indefinite name — for what it signifies is in a way one thing, but indefinite — just as I do not call 'non-recover' [or 'not-recovers or 'does-not-recover'] a verb, but an indefinite verb."¹⁰ Without underlining the fact, Aristotle now specifies that an affirmation may bear on indefinite as well as definite predicates. Yet lest the point be lost on his readership, he continues: "Every affirmation and negation consists of a name and a verb, or an indefinite name and a verb."¹¹ That is a new proposition in the argument of the treatise, and Aristotle, as if aware of the bewilderment it might provoke, hastens to offer some examples. He explains that the sentence "Man is just" has its negation in its contradictory: "Man is not just." Yet "Man is just" also has a contrary in the sentence "Man is non-just," a sentence that, in turn, has its own contradictory in the statement: "Man is not non-just."

Aristotle explains the matter further in Book I of the *Prior Analytics*. "In establishing or refuting," he then writes, "it makes some difference whether we suppose the expressions 'not to be this' and 'to be non-this' are identical or different in meaning, e.g., 'not to be white' and 'to be non-white.'"¹² As if anticipating the perplexity of his readers, he settles the question: "They do not mean the same thing, nor is 'to be non-white' the negation of 'to be white,' for that is 'not to be white.'"¹³ Chapter 10 of *On Interpretation* contains a systematic classification and enumeration of the correlated sentences that illustrate this principle. After having propounded the theses from which the Roman author would draw his square diagram, Aristotle furnishes the elements of another order of related predicative statements. It has been observed that they compose a second set of propositional relations, which may also be projected onto a figure: a square of logical negation.¹⁴

Again, four predicative assertions will be inscribed in four vertices. "Man is just" will be written the position of A, in the upper left corner. To its right, one can then notate E, its contrary: "Man is non-just." In the lower left corner, one can then place I: "Man is not non-just." To its right, finally, one will find O, its contrary: "Man is not just." Once again, two "oblique angular lines" will draw out two relations of contradiction: "Man is just" (A) has its contradictory in "Man is not just" (O); "Man is non-just" (E) has its contradictory in "Man is not non-just" (I). Contrariety, a second time, will be exhibited by the square's two horizontal lines. Yet the truth is that the possibilities of contrariety are more numerous and more polymorphic than such a square of negation would suggest. The reason is simple: one may also place "not" or "non" before the subject, in addition to the predicate. Then, as Aristotle explains, one obtains more predicative statements. Indefiniteness begins to flower. Once one admits "non-names" in the position of subject and predicate, a total of six sentences can be formed: "Man is non-just," "Man is not non-just," "Non-man is just," "Non-man is not just," "Non-man is not-just," and "Non-man is not non-just."

One might object that in such developments, Aristotle's clarity of reasoning is equaled only by the obscurity of his paradigmatic statements. For what, exactly, does the sentence "Non-man is not non-just" mean? Aristotle offers no answer to this question, and for a reason. His aim is not to explain the meaning of such an assertion on its own but to establish its relations to the other statements that variously oppose it. He concentrates, therefore, on the regularities of sense that contrasting sentences will exhibit by virtue of their logical structure. He continues to argue for the distinction between contradiction and contrariety, enjoining the reader not to mistake negation for the affirmation of an indefinite predicate. "A is not B" must not be confused with "A is non-B"; the statement "Man is not just" must not be mistaken, in other words, for "Man is non-just." Their difference comes to light when one compares the statement "Man is just" to "Man is non-just," or "Non-man is just."

Between the truth conditions of such sentences, a relation may be observed. An affirmation of an indefinite predicate, such as "Man is non-just" (*S is non-P*) implies the truth of what one might call its "propositional contrary," that is, the negation, "Man is not just" (*S is not P*). As Aristotle

explains in the *Prior Analytics*, "If it is true to say 'it is non-white,' it is true to say 'it is not white'; for it is impossible that a thing should simultaneously be white and be non-white; consequently, if the affirmation does not belong, the denial must belong."¹⁵ The converse, however, does not hold. From the denial that a thing possesses a definite property, one may not derive the affirmation of the correspondingly indefinite property, since one cannot be certain that, if "It is not white," then "It is non-white," or "It is not non-white." According to the "subaltern" relation of contraries, a thing may be neither "white" nor "non-white," yet it cannot possess both such properties at once. Lawrence Horn has noted that this distinction between the consequences of not possessing a property and possessing a non-property, in addition to being in itself "insightful and internally consistent," has been echoed often in modern attempts to grasp the order of natural languages, from Jespersen's distinction between "nexal negation" (*not happy*) and "special negation" (*unhappy*) to Von Wright's opposition of "weak" negation, which implies a contradictory, and "strong" negation, which implies a contrary, and "Jackendorff's semantic revision of Klima's categories of sentential vs. constituent negation."¹⁶

Following Aristotle, the classical Roman square of logical opposition, articulated in its four propositions of "Every . . . is," "No . . . is," "Some . . . is" and "Some is not . . .," refrains from offering a full account of indefinite predicative assertions. The contrarieties that such sentences exhibit are both simpler and more obscure than those exhibited on the classical square, which limits itself to contrasting such statements as "Every . . . is" and "No . . . is," and "Some is . . ." and "Some . . . is not." One might argue that indefinite properties, being producible by the mere affixation of a *non-* to subject or to predicate, constitute the source of a contrariety so simple that the philosopher need hardly consider them in detail. Yet the minimalism of the "non-" or "not-" (*ou* or *non*) conceals a logical question of great magnitude. What is the exact nature of the relation between such statements as "Some pleasure is good" and "Some pleasure is non-good," or between "Some non-pleasure is good" and "Some non-pleasure is non-good"? It cannot be negation, as Aristotle declares. "It is clear," he writes in the *Prior Analytics*, "that 'it is non-good' is not the negation of 'it is good.'"¹⁷ The negation would be "It is not good." There then remains the question of what exactly

the predicate “non-good” may mean and, more generally, of what relation a predicative statement bears to the contraries that indefinitely oppose it.

Matters would be simpler were it possible, for the purposes of reasoning, to set aside all indefinite terms, be they “names” or “verbs.” Beyond the theory of contrariety and contradiction, however, such expressions return again in this doctrine of the statement-making sentence. As evidence, it suffices to consider the rules that logicians treat as principles of “obversion.” These rules dictate that from statements of the kinds exhibited on the square of opposition, one may draw certain inferences, such that the truth of consequent will follow necessarily from that of the antecedent. From a proposition such as “Every pleasure is good,” one may infer the proposition “No pleasure is non-good”: from a universal affirmative (A), one may, that is, derive a universal negative (E). In the same way, one may infer a universal affirmative (A) from a universal negative (E), since from the statement, “No pleasure is evil,” one may deduce this fact: “Every pleasure is non-evil.” One can also treat particular or “indefinite” propositions in such a manner, at least if one admits a restricted interpretation of “some,” meaning “some, but not all.” If it is true that only “some pleasure is good,” then it is also true that “some pleasure is non-good”; if it is the case that only “some pleasure is non-good,” then it is the case that “some pleasure is good.”¹⁸ Such “immediate consequences” reveal the existence of hidden links tying statements with definite terms to statements with indefinite ones.¹⁹ Any clear separation between the two forms, therefore, grows uncertain. Even where sentences bearing on such subjects as “non-pleasure,” “non-man” and “non-just” would appear to be absent, statements about such indefinite terms may still legitimately be inferred.

Despite his recurrent attention to such varieties of speech in his work on words, statements, truth, and the forms of certain proof, Aristotle retreats from proposing a full analysis of indefinite terms. Strictly speaking, he advances only a single affirmative thesis about them. It is striking that he does so almost as an afterthought and in passing. “What an indefinite name [or noun] signifies,” he writes, “is, in some manner, a single thing” (*hen gar sēmainei kai to aoriston*).²⁰ Aristotle offers no evidence in support of this claim, nor does he provide a commentary upon it. This principle appears as something like an axiom in his argument, allowing him to

include such terms as “non-man,” “non-just,” “non-ails,” and “non-recovers” in a theory from which they might otherwise have been excluded. That the indefinite term signifies something, and that the “something” in question is, “in some manner,” one, remains a decisive yet obscure postulate, which ushers into this doctrine a logical matter whose exact nature is far from clear. It is telling that the name given by Aristotle to such terms seems to illustrate the very difficulty it must designate. The attribute “indefinite” (*aoriston*) is almost indefinite in form. One might wager that it constitutes a name for the “non-definite”: some contrary of the definite, which does not, however, entail its negation.

The truth is that in *On Interpretation*, the word “indefinite” constitutes less the name of a concept than the index of a difficulty, which troubles the theory of terms, sentences, and the regularities of truth and falsity that are to hold between forms of stated opposition. As a double of the name and verb that compose the statement, as an undefined variation of the contrariety illustrated on the square of opposition, as an uncertain term in a consequent, which is derivable from the simplest antecedent, the indefinite term — whether noun or verb, non-subject or non-predicate — exhibits the same impenetrability. It certainly cannot be placed outside the domain of rational language, like animal noises, which are significant by nature; nor can it be excluded, like the prayer and the exclamation, from the field of utterances that philosophy, being concerned with true sayings, takes into account. Indefinite expressions therefore appear and reappear in Aristotle’s theory, being the witnesses to a possibility of speech that he neither fully integrates nor altogether excludes. The philosopher, of course, was not the first to have noted the indeterminacy of such words. Centuries before he evoked the difficulty of defining the meaning of an expression as “non-man,” a nameless bard had sung of the glory and the cunning of a man of many ways, who, to save his life, knew to name himself “non-one,” “not one,” or “no one.” Odysseus, as every Greek well knew, had truncated his own name and twisted it into *Outis*. In listening attentively to what is in the voice, however, Aristotle made of that strange mask the subject of a new question for thinking. Drawing out the troubling consequences of the existence of non-words, he became the first to name the indefiniteness that he heard, to transcribe it and to interpret it. He was not to be the last.

Varieties of Indefiniteness

The place of indefinite names and verbs in Aristotle's doctrine of language is modest, yet it is precisely defined. When the philosopher calls to mind such expressions as "non-man" and "non-just," it is to clarify related logical matters, such as the theory of contradiction and the types of contrariety, and to account for the relations among well-formed statements. Aristotle's followers were long to respect this delimitation of the spoken indefinite. In Greek and, later, in Syriac, Arabic, Hebrew, and Latin, they evoked such terms above all in the theory of the predicative statement. Thanks to their labors, indefinite terms would acquire a definite position on the squares of logical opposition and in the principles that they were to illustrate. Behind the systematic inquiry into the regularities of logical form, however, there lurked a persistent question: what does it mean for a term to be "indefinite"? Aristotle's word for this uncertain state is *aoriston*, which can be opposed to *horismenos*, as "limitless," "boundless," or "unenclosed," may be distinguished from "limited," "bounded," and "enclosed." It is perhaps in this sense that Thucydides recounted that the Athenians accused the Megarians of "pushing their cultivation into . . . unenclosed land on the border," or, as Hobbes has it, "having tilled . . . ground unset out with bounds"; the territory designated as "unenclosed," or "unset out with bounds," in Greek, is *aoriston*.¹ It is certain that, when Aristotle employs this expression, he summons the "indeterminate" condition of being without any perceptible boundary. Yet the vanishing of a contour brings several possibilities into view.

Aristotle's works furnish precious tools for the definition of the indefinite. They are not all present in the treatise on sentences in which