Phenomenology and Ancient Greek Philosophy:
Methodological Protocols and One Specimen of Interpretation

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ABSTRACT: Sedimented in the "empty intention" moment of intentionality's normative reference to intuitive fulfillment is the schema of pure concepts separated from intuition, a schema that is constitutive of symbolic cognition in Cartesian science (the *mathesis universalis*). Fully developed, this schema originates the notion of a formal ontology, whose formal object—the "something in general"—is materially indeterminate in a way that no being in ancient Greek ontology ever was. Three methodological protocols related to overcoming the historical bias inseparable from Husserl's concept of intentionality are presented for the phenomenological interpretation of ancient Greek thought. One, the privilege of the logical structure of the Aristotelian predication behind Husserl's concept of categorial intentionality shouldn't be taken as exemplary of the universal structure of the intelligibility of unity across all historical epochs, particularly when it comes to the whole-part intelligibility of unity for ancient Greek mathematical thought and Plato's ontology. Two, Husserlian intentionality should not be used as the guiding clue for interpreting ancient Greek ontology. And, three, characterizing the formality of ancient Greek ontology in terms of a formal ontology and its object, the "something in general," is illegitimate. One specimen of phenomenological interpretation, guided by these protocols, is presented of Plato's eidetic account of the intelligibility proper to the three kinds of eidetic unity and their opposite in *Sophist*, 253d-e.

KEYWORDS: collective unity, number, eidetic number, form, mereology, Gadamer, Jacob Klein, Heidegger, Husserl, Plato, Aristotle

Introduction
Phenomenology and Ancient Greek Philosophy: Three Interpretative Strands

Hans-Georg Gadamer tells the story that Heidegger in the 1920s once asked his students in a seminar on Husserl's *Logical Investigations* who was "the first to recognize the Aristotelian insight that Being is not a genus?"[1] Gadamer relates that there were all sorts of answers, and that he "cheekily proposed the answer that it was Leibniz, in view of his concept of monads," to which Heidegger responded that "that would have been a happy event, if he would have understood that. No, it was Husserl." And Dorian Cairns reports that in a conversation in 1931, "Husserl characterized Heidegger's Aristotle interpretation as a reading back into Aristotle of an attempt to answer a question which first arose in

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[1] Hans-Georg Gadamer, "Erinnerungen an Heideggers Anfänge," in *Gesammelte Werke*, Band 10 (Tübingen: J.C.B Mohr (Paul Siebeck), 1995), 3-13, here 6.

Husserl's philosophy."[2] These two anecdotes are emblematic of one of the two well-known strands in the history of the phenomenological interpretation of ancient Greek philosophy, namely Heidegger's use of Husserl's phenomenology, or more precisely, of a key concept in that phenomenology – the intentionality operative in categorial intuition – as the guiding clue for his interpretation of Aristotle. The other well-known strand concerns Heidegger's use of his interpretation of Aristotle as the guiding clue for his interpretation of Plato, according to "the old principle of hermeneutics, namely that interpretation should proceed from the clear into the obscure."[3] Aristotle's clarity relative to Plato being evident for Heidegger in the fact that "What Aristotle said is what Plato placed at his disposal, only it is said more radically and developed more scientifically" (ibid.).

In addition to these two familiar strands of the phenomenological interpretation of ancient Greek philosophy I want to present a third, much less familiar strand, one that I will argue is best understood as a fundamental critique of both these familiar strands. The basis of this strand is a two-part study, completed in 1934 and published in 1936, titled "Die grischische Logistik und die Entstehung der Algebra."[4] Its author, Jacob Klein, a Russian Jew from Courland (present day Latvia), then and now is almost as obscure as the journal that published his study, *Quellen und Studien zur Geschichte der Mathematik, Astronomie und Physik*. Klein attended many of Heidegger's lectures at Marburg in the 1920s, along with his close friends at the time Hans-Georg Gadamer and Leo Strauss. Klein

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[2] Dorian Cairns, *Conversations with Husserl and Fink* (The Hague: Martinus Nijhoff, 1976), 5.

[3] Martin Heidegger, Plato's *Sophist*, trans. R. Rojcewicz and André Schuwer (Bloomington: Indiana University Press, 1997), 8. Hereafter cited as "Heidegger's *Sophist*."

[4] Jacob Klein, "Die griechische Logistik und die Entstehung der Algebra," *Quellen und Studien zur Geschichte der Mathematik, Astronomie und Physik,* Abteilung B: *Studien*, vol. 3, no. I (1934), 18–105 (Part I), and no. II (1936), 122–235 (Part II); English translation: *Greek Mathematical Thought and the Origin of Algebra*, trans. Eva Brann (Cambridge, Mass.: MIT Press, 1969; reprint: New York: Dover, 1992). Hereafter cited as "*GMT*."

was also an intimate of the Husserl family. Klein's study, in effect, challenges both of the presuppositions behind Heidegger's phenomenological interpretation of Plato and Aristotle: namely, (1) that Husserl's notion of categorial intentionality is capable of providing the hermeneutical key for interpreting Aristotle and Plato and (2) that Aristotle's account of the mode of being of the kinds (γένη) and forms (εἴδη) is clearer and therefore philosophically superior to Plato's.

Point of Departure of Jacob Klein's Critique of Heidegger's Interpretation of Plato

Klein's argument, unpacked phenomenologically, takes issue with Husserl's concept of intentionality as an appropriate guiding clue for interpreting Greek thought generally and Plato's thought in particular. The problem with Husserl's concept in this regard is twofold.

On the one hand, the normative (rule governed) dimension of the notion of "empty intention," which is inseparable from Husserl's account of intentionality's essential structure, brings with it a presupposition rooted in the symbolic mathematics that is the sine qua non for the early modern project of a *mathesis universalis*. The presupposition is semantic, in the sense that the very notion of an empty intention with a rule-like structure governing the conditions of its intentional object's intuitive fulfillment is tied to a specific kind of object. The object in question here, in turn, is inseparable from Husserl's characterization of the object of formal ontology, the *Etwas überhaupt* (something in general), as the proper object of the *mathesis universalis*. Because both this presupposition and its ontological basis are characteristic of a conceptuality whose historical inception occurred in the 17th century, the extent to which they are inseparable from Husserl's concept of intentionality is precisely the extent to which this concept is an unsuitable guiding clue for interpreting ancient Greek philosophy from its own (4th century B.C.)

conceptual level.

On the other hand, Husserl's concept of intentionality, as it functions in his account of categorial intuition, presupposes the Aristotelian logic of predication, and with that a whole-part structure grounded in individual objects conceived of as ontologically independent. Because for Klein the whole-part structure of Plato's logic is grounded in an ontology whose basis is a multitude of objects, that is, a plurality of objects foundationally inseparable from one another, each one of which is accordingly not independent of the others, categorial intentionality is conceptually blind to both Plato's logic and the ontology underlying it.

The first problem with Heidegger's hermeneutical employment of Husserl's concept of intentionality thus concerns the modern philosophical presuppositions that are inseparable from and therefore "sedimented" in it. These presuppositions are a problem for Klein because the notion of the intuitively empty, rule governed conceptual reference determinative of the "consciousness of" constitutive of intentional directedness, as well as the notion of an intentional object that is formal in the sense of being materially indeterminate, are foreign to the philosophy of Plato and Aristotle. The second problem concerns the logical structure of the Aristotelian predication behind Husserl's concept of categorial intentionality, which cannot but privilege Aristotle's logic over Plato's dialectic. These historical and systematic presuppositions behind Heidegger's interpretation of Plato and Aristotle are addressed in Klein's interpretation of their philosophies. Klein does so in a manner that endeavors to neutralize these presuppositions by striving to interpret the "formality" proper to Plato's and Aristotle's accounts of the kinds and forms (γένη and εἴδη) from its own conceptual level in each of their philosophies, rather than from the conceptual level of the formality constitutive of modern philosophy and mathematics.

To accomplish this, Klein adopts a twofold strategy. First, he rejects the argument behind Heidegger's privileging of Aristotle's philosophy over Plato's, that it is clearer and more scientific, and maintains instead that Aristotle's thought is most appropriately presented as emerging from out of its Platonic context. Second, rather than employ categorial intentionality as the guiding clue to interpret both Aristotle and Plato, and therewith—like Heidegger—to privilege in his interpretation of their thought the whole-part structure of predicative λόγος, Klein employs as his guiding thread the whole-part structure of what Husserl called in his first work the "authentic" or "proper" (*eigentlich*) structure of number,[5] in order to interpret both the concept and being of number in Plato and Aristotle.

The Non-Predicative Whole-Part Structure of Husserl's Authentic (eigentlich) *Number as Guiding Clue for Klein's Interpretation of Ancient Greek Ἀριθμὸς*

Number (*Anzahl*) in its proper (*eigentlich*) sense for Husserl is not symbolic. That is, it is not characterized as number in the symbolic sense by the association of a concept with a sign or by a sense perceptible numeral that refers only indirectly, if at all, to the exact amount of a counted or a countable totality of units. Rather, the proper sense of number according to Husserl is characterized by the immediate and "collective" unification of a concrete multitude of units or ones—that composes its parts—by the number in question, which composes its whole. This mode of unification is such that the numerical unity that encompasses each one of those parts as their whole is something that nevertheless cannot be predicated of each of the parts individually. For instance, because the whole of the unity of the number two encompasses and therefore collectively unifies each of the

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[5] Edmund Husserl, *Philosophie der Arithmetik*, ed. Lothar Eley, Husserliana XII (The Hague: Nijhoff, 1970); English translation: *The Philosophy of Arithmetic*, trans. Dallas Willard (Dordrecht: Kluwer, 2003), Chapter I.

ones belonging to the multitude that compose the number two's parts, the whole of the number two's unity cannot be predicated of either of these parts taken singly. This is the case, because each part is exactly one, not two. Therefore, only when both are taken together can these parts be said to belong to the whole of the number that unifies them. Precisely this state of affairs, then, is behind number's whole-part structure, a structure that at the same time exceeds the limits of the intelligibility that is made possible by the whole-part structure of predicative λόγος. For in accordance with the whole-part structure of predication, the part is a part of the whole in the sense that the whole can be predicated of it, e.g., the horse *is* an animal, the dog *is* an animal. This state of affairs is unlike the relation of the parts of a number to its structural whole, about which it cannot be said, for instance, that "one *is* a two," or that "one *is* a three." Moreover, from the perspective of predicative λόγος, when the "being one" of the structural unity of the numerical whole that collectively encompasses the multitude of its parts is stressed, it cannot but seem to predicate mistakenly unity to something that by definition is more than one, namely the multitude that belongs most properly to number.[6]

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[6] Aristotle's answer to the question that he maintains is unanswered in Plato's generic account of number, namely, *what* it is that is responsible for the unity proper to number, begins by posing it only for *actually* counted multitudes. Such multitudes, as multitudes of homogeneous ones, comprise a unity insofar as each multitude is measured by its own one. Therefore, there is no collective unity, no being one of a multitude beyond the many ones that compose it. Thus, Aristotle writes:

> We speak of one and many in just the way one might say one and ones, or a white thing and white things, or speak of the things measured off in relation to their measure; in this way, too, manifold things are spoken of, for each number is many because its consists of ones and because each number is measured by the one, and is many as opposed to the one and not to the few. In this sense, then, even two are many, but this not as a multitude having an excess either in relation to anything or simply, but as the first multitude. (*Metaphysics* I 6, 1056b 23-24)

Counting presupposes the homogeneity of that which is counted, which means that in counting one and the same thing is fixed upon, such that its definite amount is arrived at only after *one and the same thing* has been counted over. The "one," then, does *not* have priority in counting as the superiority of a genus over a species, but rather in its character as the "measure (μέτρον)" by which the definite amount of a multitude is determined. The one is not a "something common (κοινόν)" (*Metaphysics* I 1, 1053 a 14) over or alongside of the many things that are counted, for "[i]t is clear that the one signifies a measure" (*Metaphysics* N 1, 1087b 33). Any specific number is therefore "a multitude measured by the one" (*Metaphysics* I 6, 1057 a 3

The non-predicative whole-part structure characteristic of Husserl's account of the proper structure of number is exhibited according to Klein by the concept and being of number (ἀριθμός) in ancient Greek arithmetic and logistic. Klein's interpretation of ancient Greek philosophy hinges on precisely this structure, which he argues presents the key to interpreting Plato's philosophy, Aristotle's critical response to that philosophy, as well as the fundamental difference in concept formation in ancient Greek and early modern philosophy. Methodologically, the latter point is the crucial one. This is the case, because so long as the modern, symbolic concept of number (*Zahl*) guides the interpretation of ancient Greek philosophy, not just the problematic behind the meaning of mathematical unity and multiplicity in ancient Greek mathematics will remain inaccessible, but likewise also the problematic behind the meaning of the unity and multiplicity of being in ancient Greek philosophy will remain so.

Once these problematics come into view, the entire axis not only of Plato's philosophy but of Aristotle's critical departure from it shifts from the standard view. Regarding the former, the real locus of the participation (μέθεξις) problem turns out to be accounting for the one and the many structure exhibited by the community of forms (κοινωνία τῶν εἰδῶν), the structure of which the participation of many sensible beings in the unity of a single form is but a derivative reflection. With respect to the latter, the real target of Aristotle's critique of the Platonic separation (χωρισμός) thesis emerges to be not the one form's putative separation from the many sensible beings but the irreducibility of

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f.). As such, its "thinghood (οὐσία)" is the multitude of units as such, in the precise sense of the "how many" it indicates. Thus, οὐσία is understood here by Aristotle to be derived, insofar as that *what* each number is, is not something that is separate or detached from the definite amount of homogeneous units it delimits. Thus, for example, "six" units are not "two times three" or "three time two" units, but rather precisely "once six" (*Metaphysics* Δ 14, 1020b 7f.). For Aristotle, then, there is no such thing as *the six*, with an intelligible being that would be distinct from the many hexads that delimit this or that multitude of "once six" units.

the common (κοινόν) unity of the kinds (γένη) and forms (εἴδη) to the kinds and forms that they encompass and therefore with which they are in community. As I will be show below, the irreducibility of the collective unity that structures the whole of non-symbolic numbers in relation to the units that compose their parts in Husserl's account is analogous, according to Klein, to the unity or whole of an εἶδος or γένος in relation to the εἴδη that, as its parts, participate in the unity of the εἶδος or γένος. And I will also show that precisely the collective unity of the whole structures, albeit in different ways, the kinds of eidetic unity in the *Sophist* 253 d-e. Klein's discovery of the analogical relationship between the collective unity of their parts that compose mathematical numbers with the common unity that composes the κοινωνία τῶν εἰδῶν forms the basis of his phenomenological interpretation of Aristotle's report that for Plato and the Platonists the εἴδη were in some sense numbers.[7] The phenomenological nature of this account having its basis, as mentioned earlier, in Husserl's account of the non-predicative collective unity of number (*Anzahl*).

Crucial to Klein's interpretation are the portions of Aristotle's *Metaphysics* (Books Alpha, Mu, and Nu) that zero in on the whole-part structure of number behind Plato's account of the common unity responsible for the unity of a multitude that is constitutive of the participation problem. The capital instance of this, on Klein's view, is the unity of the whole of the γένος Being, which is common to the γένη Motion and Rest without being identical with them. On Klein's view, the zeal with which Aristotle criticizes what he reports is the Platonic thesis that the forms are in some sense numbers signals both the importance of the whole-part structure of number in Plato's philosophy and Aristotle's rejection of it as a suitable account of the mode of being of the forms.

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[7] See *Metaphysics A* 6, 987 b, *A* 8, 1073 a, *M* 8, 1084, *N* 3, 1090 b, and *Physics* Γ 6, 206b.

*Husserl's Doctrine of Intentionality as the Fullest Expression of
the Cartesian Separation of Pure Concepts and Intuition*

According to Klein, the 17th century presupposition guiding Husserl's account of intentionality concerns the Cartesian separation of pure concepts from intuition. This separation reaches its fullest expression in Husserl's phenomenological doctrine of intentionality. Husserl's notion of an intuitively "empty" conscious intention that nevertheless somehow predelineates the conditions of its intuitive "fulfillment" in an intentional object transcendent to that empty intention presupposes precisely the epistemological separation between the mind's pure concepts and intuition that is constitutive of Cartesian science. Significantly, Husserl initially encountered this separation in his first work, the *Philosophy of Arithmetic*, in the course of his search for the intuitive referent proper to the symbolic concept of number in universal arithmetic. On Klein's view, this was neither an accident nor an indication of Husserl's direct influence by Descartes. Rather, it was the direct consequence of two presuppositions, one mathematical and the other philosophical. The mathematical presupposition, which Husserl took over from his mathematical teacher Karl Weierstrass, is that the symbolic numbers of universal analysis originate from and therefore ultimately refer to numbers in the proper sense. The philosophical presupposition, which he took over from his philosophical teacher, Franz Brentano, being that symbolic presentations (*Vorstellung*) are surrogates for authentic presentations. The fact that Husserl abandoned both of these presuppositions even before finishing that first work,[8] because he soon discovered that neither descriptive psychology nor logic could discover in the indeterminacy of the unity of symbolic numbers a reference to the whole-part unity of determinate numbers, does not

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[8] See Dallas Willard,"Husserl on a Logic that Failed," *The Philosophical Review*, LXXXIX, No. 1 (January 1980): 46-64. See also, Burt Hopkins, *The Origin of the Logic of Symbolic Mathematics. Edmund Husserl and Jacob Klein*, (Bloomington: Indiana University Press, 2011): Ch. 13. Hereafter cited as "Origin."

detract from the lasting influence of the schema behind it on Husserl's concept of intentionality, the central notion of his thought. In particular, its two crucial notions are at play in Husserl's doctrine of intentionality. On the one hand, there is the idea that the meaning of indeterminate concepts that are divorced from intuition is nevertheless something that originates in some intuition. On the other hand, there is the idea that somehow inseparable from the consciousness of those concepts there is a reference that predelineates or otherwise articulates the rules that govern the conditions for recognizing in intuition their non-conceptual referent.

Now even though Husserl eventually extended the notion of 'empty intention' beyond the realm of signitive meaning and therefore beyond the realm of his original encounter with it in mathematically symbolic meaning, he nevertheless retained the idea that all empty intentions somehow predelineate, as it were, the rules for their fulfillment in the intuition of their intentional objects. On Klein's view this is problematic, because the source of the original predelineation is the syntactical "rules of the game" governing the meaningful combination of mathematical symbols. These rules, or better, their normative structure, have their basis in the symbolic techniques of calculation constitutive of modern mathematics. The intentional object realized by the correct application of the calculative norms is therefore a mathematical construction, indeed, a formalized mathematical construction. In Husserl's mature phenomenological terminology, the mathematically formalized intentional object is characterized as "formal ontological," in the precise sense of it being empty of any material ontological content. Husserl captures its objective indeterminacy succinctly with the term he uses to designate it, "*Etwas überhaupt*" (something in general).

Husserl's Problematical Extension of the Normative Character
of Empty Intentions beyond the Signitively Symbolic

According to Klein, Husserl in effect extends normative referentiality beyond syntactically determined symbolic empty intentions. Husserl does so by extending the characterization of the phenomenologically peculiar "consciousness of" proper to any empty intention to include empty intentions that are not intrinsically signitive. Thus, in addition to empty intentions that syntactically predelineate the conditions for the intuitive givenness (in acts of fulfilment) of its intentional object, non-syntactically structured intentions such as perception, memory, imagination, etc., are likewise are characterized by Husserl as having moments of empty intentions. For Klein, this extension of the normative beyond the syntactical is problematical, both in-itself phenomenologically and in the case of Heidegger's use of Husserl's formulation of intentionality as the guiding clue for interpreting Aristotle. What is in-itself phenomenologically problematical is that the extension overdetermines the "consciousness of" moment of intentional directness in modes of intentionality that are not rule governed, e.g., perceptual, memorial, imaginative, and temporal modes of intentionality. While what is hermeneutically problematical is that the conceptuality behind this overdetermination belongs to a distinctively modern mode of cognition, namely, the rule governed symbolic cognition operative in modern mathematics. This fact, therefore, makes Husserl's notion of intentionality and the conceptuality behind it unsuitable as a guiding clue for interpreting pre-modern modes of cognition, like the ancient Greek, which know nothing of formalized symbolic cognition. Thus, a methodological protocol emerges in the phenomenological interpretation of ancient Greek philosophy, that of the hermeneutical unsuitability of Husserl's concept of intentionality as an interpretative guiding clue.

Closely related to this methodological protocol is another one that Klein's research

makes necessary. It concerns the unsuitability of attributing to ancient Greek ontology—

or otherwise characterizing it in terms of—formal ontology and the object of that ontology

as the "something in general" (*Etwas überhaupt*). The ontological concept of an

indeterminate object as well as the ontological cognition in which it is given presuppose

the formalizing abstraction that makes symbolic numbers and operations and algebraic

operations on such numbers possible. Because ancient Greek mathematics and philosophy

presuppose objects whose being is determinate,[9] it is an anachronism to interpret the beings

investigated by their ontology in terms of the "something in general" and as well to

characterize the character of ancient Greek ontology as "formal ontology." To do so, as

Heidegger does with respect to both Plato's and Aristotle's ontology,[10] thus gives rise to

the methodological protocol of the interpretative illegitimacy of characterizing ancient

Greek ontology as an ontology whose object is the "something in general," that is, as a

formal ontology.

Summary and Transition

By way of a summary, so far, I've argued that Jacob Klein's phenomenological

interpretation of ancient Greek thought challenges the fundamental presuppositions behind

Heidegger's phenomenological interpretation of Plato and Aristotle. Klein does so on the

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[9] According to Klein, Greek mathematics knows only two kinds of quantity: discrete (numbers) and continuous (shapes), both of which are always determinate. Likewise, for him, the objects of Greek ontology always relate to determinate beings (in the case of Being) or are themselves determinate beings (in the case of the beings themselves). See *GMT*, especially ch. 9. It is a major finding of *GMT* that the generality of neither the methods of mathematics nor the εἴδη of beings investigated by Dialectic and First Philosophy posit beings that are intrinsically general. See *GMT*, especially ch. 11, C, 3.

[10] See for instance, Heidegger's *Sophist*, where Aristotle's research into Being is characterized as "the origin of what we today call formal ontology" (206/142) and λόγος is characterized as the guiding clue for explication of what is uncovered, "even if only the sheer something in general [*Etwas überhaupt*]" (225/155). Also in Heidegger's *Sophist*, Plato's resolution of the possibility of the Being of λόγος ψευδής is said to be resolved "by means of a formal-ontological consideration" (433/299), his reflection on the structure of the connection between word and meaning "is satisfied with the simple formal-ontological fact that to the word as word belongs that which is meant" (453/313), and Plato's account of the "λόγος as such, by its very structure, already co-says determinate moments of beings, determinate formal-ontological configurations" (515/356).

grounds that Heidegger's acknowledged guiding clue, Husserl's concept of categorial intentionality, is problematical. The problem is two-fold.

On the one hand, categorial intentionality privileges the whole-part structure that is constitutive of the unity of the predicative λόγος that renders intelligible Aristotle's ontology of independent beings. This, according to Klein, is a problem when it comes to interpreting Plato's ontology, which Klein argues is based in the ontology of a plurality of beings that are foundationally inseparable from one another. Heidegger's guiding clue is therefore blind to the intelligibility of the non-predicative whole-part structure of the collective unity of the beings that are paradigmatic in Plato's ontology.

On the other hand, sedimented in Husserl's characterization of the "empty intention" moment of intentionality, as including a normative reference to the conditions for the intuitive fulfillment of its intentional object, is the schema of pure concepts separated from intuition that is constitutive of the symbolic cognition determinative of Cartesian science (the *mathesis universalis*). This presents a problem for interpreting ancient Greek ontology in general, since when fully developed, this schema gives rise to the notion of a formal ontology, whose formal object—the "something in general"—is materially indeterminate in a way that no being in ancient Greek ontology ever was.

These considerations gave rise to three methodological protocols for the phenomenological interpretation of ancient Greek thought, all related to overcoming the historical bias of the modern conceptuality inseparable from Husserl's concept of intentionality. One, the privilege of the logical structure of the Aristotelian predication behind Husserl's concept of categorial intentionality shouldn't be taken as exemplary of the universal structure of the intelligibility of unity across all historical epochs, particularly when it comes to the whole-part intelligibility of unity for ancient Greek mathematical

thought and Plato's ontology. Two, Husserlian intentionality should not be used as the guiding clue for interpreting ancient Greek ontology. And, three, characterizing the formality of ancient Greek ontology in terms of a formal ontology and its object, the "something in general," is illegitimate.

With these protocols in place I turn now to a specimen of phenomenological interpretation, chosen for its relevance to phenomenology's original aspiration to be an eidetic science. It will focus on the Stranger's (who is a philosopher) and Theaetetus' (who is a mathematician) discussion in Plato's *Sophist* (253d-e) of the three kinds of eidetic unity and of their opposite.

253d-e, Immediate Context and Heidegger's Incomprehension

The discussion of the three kinds of eidetic unity and their opposite in the *Sophist* is arguably the most important passage in that dialogue if not the entire Platonic corpus, since what is at issue there is "the free man's [viz., the philosopher's] knowledge" (*Sph*, 253c7), characterized as "dialectical knowledge" (*Sph*, 253d1). Belonging to such knowledge is the ability "to distinguish according to kinds (γένη) and to deem neither the same form (εἶδος) to be another nor another to be the same" (*Sph*, 253d2-3). Such knowledge is necessary to show which kinds mix with one another and which do not. Moreover, such knowledge is "especially" (*Sph*, 253c) necessary for finding out if those that mix are held together by other kinds "present throughout" [διὰ πάντων] (*Sph*, 253c), and if for those that do not, where there are "separations," there are kinds that are "the causes of division throughout the whole." In a highly complex passage, the Stranger then articulates the three kinds of eidetic unity, along with their opposite, that the one who has dialectical knowledge "discerns distinctly enough" (*Sph*, 253d5); knowledge of these are required for the one who seeks "to make his way with accounts" (*Sph*, 253b), in order to

show correctly how some of the forms "fit" each other and how others do not accept each other. The passage may be broken down into four segments:[11]

1) "a single form [μίαν ἰδέαν] that is extended every way through many, each one of which is situated apart" (*Sph*, 253d6);

2) "and many [forms], different from one another, that are embraced from without by a single [form]" (*Sph*, 253d7);

"and, again,"

3) "a single [form] running through many wholes [δι᾽ ὅλων πολλῶν] that is assembled into a unity [or gathered into a one]" (*Sph*, 253d8);

4) "and many [forms] that are separated off apart in every way" (*Sph*, 253d9).

To know 1-4, which "belongs to dialectical knowledge" (*Sph*, 253d1), "is to know how to discern, according to kind (γένος), where each is able to combine and where not" (*Sph*, 253e1).

Regarding what Plato has the Stranger say here, Heidegger remarks, "I confess that I do not genuinely understand anything of this passage and that the individual propositions have in no way become clear to me, even after long study" (Heidegger's *Sophist*, 365). Klein attended Heidegger's lecture course (winter semester 1924-5) on the *Sophist* and most likely was present when Heidegger made this confession. Ten years later he published his *Greek Mathematical Thought and the Origin of Algebra* a large part of which reconstructs the arithmetical mathematical context of ancient Greek philosophy generally and the concept and being of mathematics' most fundamental principle, number, together

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[11] These segments' division and numbering of 253 d-e follows that of Gómez-Lobo (Alphonso Gómez-Lobo, "Plato's Description of Dialectic in the 'Sophist' 253 d 1-e2," *Phronesis*, Vol. 22, No. 1 (1977): 29-47, here 30).

with the third kind of number (besides sensible and mathematical) Aristotle reports Plato distinguished, namely "eidetic number."[12] Because, as we will see, it is precisely the distinction between the unity belonging to the whole-part structures of the related yet two different kinds of numbers—mathematical and eidetic—that is the key to interpreting *Sophist* 253d-e, it is not too much of an exaggeration to say that since Klein's *GMT* establishes (for the first time in the literature) this difference, that work amounts to a fundamentally critical engagement of Heidegger's interpretation of Plato.

Critical Review of Standard and Most Recent Interpretations of 253d-e

Klein himself, however, did not explicitly interpret 253d-e. Thus, we will begin our phenomenological interpretation of this passage by considering briefly the arguments behind the traditional view alluded to by Heidegger, the definitive critique of that view recognized by the literature, and a recent attempt at a fresh interpretation. In the traditional interpretation inspired by Julius Stenzel, the passage is understood as an articulation of the method of definition by division demonstrated in the dialogue, based on the hierarchal division of classes from higher to lower, down to the infima species as the definiendum.[13] Alphonso Gómez-Lobo's widely accepted critique of Stenzel's interpretation challenges the basic premise behind it, that the passage is an account of definition by division, and argues instead that the proper interpretative context of the passage is its anticipation of the discussion of the five greatest kinds together with the account of Not-Being that follows

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[12] Aristotle, *Metaphysics* A 6, 987 b and *N* 3, 1090 b.

[13] In Julius Stenzel's classical articulation of this interpretation, set out in his *Studien zur Entwicklung der Platonischen Dialektik von Sokrates zu Aristoteles* (Breslau: Trewendt & Granier, 1917), statements 1-4 compose as it were a pyramid of classes (104), from higher to lower. One of the five greatest kinds, the Other (105), provides the form of unity articulated in statement 1, while statement 2 refers to collected forms (103) and 3 and 4 to divided forms

it[14] Mitchell Miller's recent reading[15] of the passage departs from these interpretations by rejecting the view that any of its statements refer to collection and arguing against the division of the pairs of statements as referring, as Gómez-Lobo maintained, to Being and Not-Being respectively.

From a phenomenological point of view, several things stand out in light of these interpretations. First off, as Gómez-Lobo observed, there's no mention of definition by division in either the passage or the text leading up to it. The immediate context of the passage is the mixing and non-mixing of kinds, and the agreement between the philosopher and mathematician that the ability to show correctly which mix and which do not require some kind of knowledge. Indeed, it is singled out that knowledge is required *especially* if one intends to show whether there are some kinds that hold those that mix together and other kinds that are responsible for the "separations" (διαιρέσεις) (*Sph*, 253c14) of those that do not. Of course, definition by division *presupposes* the ability to show correctly what kinds mix and what kinds do not, and because of this the knowledge in question here is indeed directly relevant to definition by division. However, that the relevance here is not exclusively tied to definition can be seen with the realization that definition by division—as it is presented in both the *Sophist* and *Statesman*—in no way requires finding out if there are kinds that are *responsible* for the mixing and non-mixing of kinds. The sought-after kinds in question here are clearly the greatest kinds investigated by the philosopher and mathematician shortly after 253de. The ability, then, that belongs to dialectical knowledge, to divide kinds in a manner that doesn't confuse the same form with another or another

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[14] Gómez-Lobo finds nothing in the passage to support the claim that the method of division, involving two operations (ascent and decent) and defined forms, is at issue in it, since in it the "Dialectician simply 'discerns clearly' (Cornford) four items" (35).

[15] Mitchell Miller, "What the Dialectician Discerns: A New Reading of *Sophist* 253d-e," *Ancient Philosophy* 36 (2016): 321-352.

with the same, would appear to embrace both definition by division and the account of the kinds responsible for the combination and non-combination of forms. Significantly, the knowledge in question here would, "perhaps" (*Sph*, 253c), as the mathematician puts it, be "nearly equal in size to the greatest."

This, then, I submit is the proper *immediate* context for what is articulated in our passage, namely, the knowledge necessary for definition by the division of forms *and* for an account of the kinds that are responsible for the combination and separation of the forms at issue in definition by division. Its proximity to the greatest knowledge, arguably that of the idea of the Good, signals the nearly supreme significance of our passage, and of course raises the question why its author would present it in a way that is so obscure, indeed, why, perhaps it "is made deliberately"[16] so. But is it really so obscure? If we take Miller's path-breaking suggestion[17] that there is a broader context that must be taken into account to make manifest what our passage articulates, namely the connection between the aporetic ending of the *Theaetetus* and the content of the *Sophist*, and grant that the knowledge of kinds at issue in the passage concerns both a) their combination and separation discerned in definition by division *and* b) the finding out whether there are other kinds responsible for the combination and separation of kinds articulated by definition by division, the obscurity of the passage lifts like a veil. Or so I want to argue. That is, I want to argue that there's a paradigmatic aporia in the *Theaetetus* that the *Sophist* engages, and that our passage is crucial for that engagement. My argument will be guided by the methodological protocols extracted above from Klein's general approach to the interpretation of ancient Greek philosophy together with his phenomenological reconstruction of the significance

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[16] Noburu Notomi, *The Unity of Plato's* Sophist (Cambridge: Cambridge University Press, 2001), 235. Hereafter, "Notomi."
[17] Milller, 321.

of the *Sophist*'s account of the five greatest kinds for Plato's ontology. My argument will proceed in three stages. First, I will show that the aporiai in the *Theaetetus* have their basis in what, from the standpoint of natural predication, is the paradoxical collective unity that structures mathematical numbers, and the peculiar whole-part relationship entailed by collective unity. Second, I will show that Klein's phenomenological interpretation of the greatest kinds (*Sophist* 254 b – 258 c) resolves the mathematical aporiai in the *Theaetetus*, while at the same time giving rise to ontological aporiai. Third and finally, I show the structure of the latter are anticipated in 253 d-e and thus demonstrate, following Klein's lead, that pace Heidegger's reading, the kinds of eidetic unity and their opposite articulated in the latter passage are not incomprehensible.

The paradigmatic aporia in the last part of the *Theaetetus* (201c-210a), following Klein, can thus be seen to be manifest in the whole-part relationship between "whole" (ὅλον), "all" (πᾶν), and "all of something" (πάντα), as exemplified by the whole-part unity of number, whose whole-part unity the *Sophist*'s aporia about Being engages in its investigation of the eidetic whole-part unities brought about by the five greatest kinds. And our passage from the *Sophist* is crucial to that engagement, as it lays out the three structures of whole-part unity, together with the absence of any kind of whole-part unity, that the one who has dialectical knowledge can discern. Or better, can discern "distinctly enough" to be able to make arguments about the definitions of kinds, as well as arguments about the other kinds that are responsible for the combination and separation of the kinds articulated by those definitions.

The Aporia of the Relation of 'Whole' (ὅλον) and 'All' (πᾶν), and 'All' and 'All of Something' (πάντα)

The aporia in the *Theaetetus* concerns Socrates' return dream for Theaetetus' dream that knowledge is "intelligible" (ἐπιστητά; *Tht*, 201c-d) only as correct opinion with an

articulation, and that correct opinion without an articulation is "unintelligible" (οὐκ ἐπιστητὰ). The core of the aporia concerns the stipulation that only a compound (συλλαβὴ) can be articulated, because beyond being named and perceived what is non-compounded is intrinsically without parts and therefore cannot admit attributes like "to be" (*Tht*, 205c) or "this." Only that which is made up of more than one part and therefore compounded presumably admits a λόγος that can bring together or hold distinct those parts, that is, articulate them. This stipulation, however, invites the question of the being of the compound, specifically, of the precise nature of its relation to the parts that compose it. Is the compound, as "a single form that comes out of each and every [of its parts] when they are fitted together" (*Tht*, 204a), something without parts, because for "a thing of which there are parts, it's necessary for the whole [ὅλον] of it to be all the parts [τὰ πάντα μέρη]" (204a); or is "the whole that has come into being out of the parts . . . also some one form, different from all the parts?" And, if the latter, does this mean that the whole in its being is "a single indivisible form" (*Tht*, 205c)? Formulated in this way, the question about the being of the compound comes down to the question whether the all (πᾶν) of the compound, in the sense of the totality of all its parts (τὰ πάντα μέρη), is the same as the whole of the compound, or whether the whole is something different from the parts.

Either way the question of the being of the compound is answered, the stipulation that only it can be articulated proves unfounded. On the one hand, if the being of the whole of the compound is different from the being of the all, then the compound doesn't have parts that can be articulated. On the other hand, if the being of the compound is the same as the parts, it would be "knowable" in the same way, which is to say, unintelligible, because beyond being named and perceived, there couldn't be any other articulation of it. Moreover, if the compound were a single indivisible form, that would mean it has "fallen

into the same form as the element [part]"[18] (*Tht*, 205d), and being without parts it would be incapable of being articulated and thus unintelligible.

Whole-Part Structure of Number as a Way Out of the Aporia
of Whole, All, and All of Something

From Klein's phenomenological perspective,[19] it's significant that the aporia here is caused by a philosopher trying to convince a mathematician of the falsity of his opinion that the whole and all are different (*Tht*, 204b). The significance is twofold. One, the mathematician is in possession of the knowledge capable of articulating the truth of his opinion. Two, he doesn't do so because he accepts the philosopher's formulation of the mutually exclusive possibilities of the unitary relation between a whole and its parts: either the whole and the parts are the same, such that no difference between them is manifest, or they're different, such that there is manifest nothing in common between them. But there's a third alternative, as we've seen from our discussion of Klein's account of the collective unity structure of number, namely that the whole unifies its parts without thereby becoming partitioned in any one of them and without being the same as all of them (πάντα), such that the parts belong to the whole without the whole being the same as it, either singly or all together.

Socrates, in fact, exhibits just such a whole-part unity with his example of the number six (*Tht*, 204c). The number six for ancient Greek mathematics is the first "perfect" or, better, "complete" (τέλειος) number, and this is not only something Theaetetus would have known, but it is also likely that he was the discoverer of the form (εἶδος) of such numbers.[20]

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[18] "Elements" [στοιχεῖα] are explicitly identified as "parts" [μέρη] in Socrates' and Theaetetus' discussion (*Tht*, 205b).

[19] See *GMT*, 98.

[20] For all these points, see F. Acerbi, "A reference to Perfect Numbers in Plato's *Theaetetus*," *Archive for History of Exact Sciences*, 59 (2005): 319-348.

This form, referred to in the definition of a complete number, encompasses all numbers that are the same as the sum of their proper parts, where proper part is understood as a measure of the number. In the case of the number six, the parts that measure it are one, two, and three, which added together are six. Thus, when six is expressed mathematically as the first complete number, it is manifestly false that all of it (πᾶν) is the same as all its parts (τὰ πάντα μέρη). This is the case because, as Socrates' example makes clear, albeit without using the term, the parts of six also include four and five, in accordance with the ancient Greek mathematical definition of any number as including as its parts all the numbers before it, which, in the context of complete numbers, is to say its incomplete parts.

In the case of any number, moreover, it is also false that 'all of it' is the same as 'all its parts', because each of these parts is manifestly different from the unity of each number as a 'whole'. This can be seen beginning with the first number recognized by ancient Greek mathematics, two, the unity of which is *not* the same as its parts, because each of these parts, as a unit (μονάς) in a multitude, is exactly *not* two but one.[21] Only both together, as encompassed by the whole of the dyad, are they what neither is separately, namely the number (ἀριθμός) two. Or rather, this is the form of number according to what Plato *said*, if, following Klein, Plato's view of the unity of number is disentangled from Aristotle's critique of it.[22]

Aporia of the Dream Stipulation that the Intelligibility of Knowledge is Correct Opinion Together with an Articulation

The discussion in the *Theaetetus* (or any other dialogue) does not explicitly pursue this line of thought,[23] although we'll see shortly that a crucial aspect of the whole-part

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[21] See Klein's discussion of the *Hippias Major* 300 a -302 b, where this structure is explicitly discussed by Socrates.

[22] See Klein, *GMT*, chapter 6. See also, Hopkins, *Origin*, ch. 19.

[23] Although the *Hippias Major* 300a – 302b comes close.

structure of number reconstructed here is made manifest in the *Sophist*'s discussion of the community (κοινωνία) kinds Being, Motion, and Rest. Rather, the aporia of the unintelligibility of whole and parts that emerges when their relation is formulated either in terms of being the same or different, leads to the rejection of the dream's claim that "a compound is knowable and speakable and an element [part] is the opposite" (*Tht*, 205d).

The response to this rejection leads to the final formulation of the articulation of correct opinion at issue in knowledge, in terms of an articulation of "in what respect the thing in question differs from all things" (*Tht*, 208c). However, this stipulation, too, ends in aporia, as it presupposes the bifurcation of articulation into two kinds: one that articulates what each thing has in common with other things and the other that articulates "the difference of each thing by which it differs from everything else" (*Tht*, 208d). Therefore, because correct opinion is shown to "be about the differentness of each thing, too" (*Tht*, 209d), the requirement that the intelligibility of knowledge involves a correct opinion along with an articulation of the difference of something from everything else turns out to be "completely ridiculous" (ibid.). Correct opinion, then, already involves an articulation of something, or, more precisely, of the whole and parts of something, in terms of its commonness and differentness. And this involvement brings us back to and points a way out of the first aporia, which was made manifest by the philosopher trying to convince the mathematician that the unity of whole-part structures requires either that the whole and parts are completely the same or completely different. This last aporia, i.e., that correct opinion must already involve an articulation of something in terms of commonality and difference, makes manifest in a perceptual compound the unity of a whole wherein its parts are both the same and different. Theaetetus' body parts are something that he shares in common with other humans, while his snub nose and bug eyes (*Tht*, 209c) are different

from everybody else (including Socrates' snub nose and bug eyes). As was mentioned, the third possibility—the whole-part structure exhibited by number— regarding the relation of the whole and parts in their unity allows for precisely this coexistence of what is common and different in the unity of a whole and its parts. Specifically, in the case of number, we saw that the whole unifies the parts without being partitioned in them and therefore also saw that the whole in this case is something that its parts have in common while yet remaining different both singly and all-together from it.

The coexistence in the unity belonging to a whole of what is common or the same and what is different is a major issue in the *Sophist*, as is the relationship between number and Being. The concluding aporias in the *Theaetetus* thus arguably provide a general context for the *Sophist* 253d-e. However, beyond that, our passage snaps into focus if not clarity when read in terms of the paradigmatic aporia in the *Theaetetus* concerning the unity of a whole and parts. Indeed, it does so when we are mindful that this aporia is unfolded in the *Theaetetus* in terms of the problem of such unity in number, in λόγος, and in perception. In other words, the aporia of the unity of a whole and parts is presented in the *Theaetetus* in terms of the aporia of the different kinds of unity at issue in number, λόγος, and sensible being. Of course, missing from this mix is the problem of unity belonging to the whole-part composition of Being that is central to the *Sophist*, but even here we will see that the paradigmatic aporia in the *Theaetetus* provides its crucial context. Before turning briefly to this last problem, however, I want to highlight the first aspect of our passage that snaps into focus when the specifics of its context in the *Theaetetus* are brought to bear on it. As we've seen, in the *Theaetetus* the problem of knowledge is framed in terms of its pre-condition, namely correct opinion. And, with the exception of sensible being, the basic unit of the whole-part unity articulated by correct opinion is non-relational, in the precise sense

that the unity of whole and parts in both number and the syllable does not refer to anything other than their respective wholes—number and syllable—in its composition. Looking to our passage, we see the exact same thing: each of the three kinds of unity articulated in 1-3 is composed on the basis of its single form's manner of composing its many parts.

<center>*The Aporia of Being in the* Sophist: *Being is Not a Third Kind*</center>

Turning now to the aporia of Being presented in the *Sophist*, from Klein's phenomenological perspective it's important to track its appearance in what both the philosopher and mathematician say, in what *appears* when their words are taken together. The philosopher begins by asserting that the mathematician says that, "Rest and Motion" (*Sph*, 250a) are "most contrary to one another," which elicits the mathematician's agreement. The philosopher then asserts that the mathematician claims "at least: that both and each of them alike are (εἶναι)," to which the mathematician also agrees; and he agrees as well with the philosopher that in claiming this he does not mean either "that both and each of them are in motion" (*Sph*, 250b) or "that both of them are at rest" when he says "they both are." The philosopher then suggests that the mathematician posits "Being (τὸ ὄν) as some third thing in the soul beyond these, as if Rest and Motion were embraced by it" in such a way that, "through taking them together and focusing on the community of their beinghood (οὐσίας κοινωνίαν)," he says "that both of them are," and the mathematician replies "[w]e truly do seem to divine that Being is some third thing, whenever we say that Rest and Motion are."

The philosopher then draws the following implications from what the mathematician has agreed to say and to claim, implications that the philosopher then calls into question: that "Being is not Motion and Rest both together but something other than these" (*Sph*, 250c), such that "according to its own nature, Being is neither at rest nor in motion." The

philosopher signals that he is in fact about to call this into question, that is, call into question that Being is a third thing in the soul beyond Motion and Rest, by posing the question where "the man who wants to establish something clear about it [Being] for himself [can] still turn his thought [διάνοιαν]" (ibid.); and when the mathematician professes not to know the answer to this, he proceeds to say that "there's nowhere he can still turn easily" (*Sph*, 250d), because "if something isn't in motion, how is not at rest? Or again, how is that which is in no way at rest not in motion?" Noting that if, as they've agreed, "Being has now come to light for us outside both of these," the philosopher then asks the mathematician "Is that possible?"—to which the mathematician replies "It's the most impossible thing of all." [24]

The aporia that emerges from this exchange is that when Motion, Rest, and Being are counted, Being is posited as a third thing, other than both Motion and Rest, which is supremely impossible, because what *is* either *is* in motion or *is* at rest. I follow Klein's

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[24] Miller's recent discussion endorses Theaetetus' agreement with the Stranger's initial suggestion that he posits Being as a "third" beyond both Motion and Rest (Miller, 348). He does so on the ground that because Motion and Rest are complete contraries, "the *being* of the one must be thought as independent of the *being* of the other, with neither in any way constitutive of the other." Each, then, in their independence from the other, is "a case of Being" (348) according to Miller, while "Being itself, on the other hand, is one and the same." In order to account for "its internal unity and the way it is common to both Motion and Rest," Miller holds, then, that "it [Being] must be thought as 'a third (τρίτον τι)) that is 'beyond' (παρὰ, 250b7) Motion and Rest while they must be thought as 'embraced by it' from 'outside them both'" (*ibid.*). Miller's acceptance of Theatetetus' initial assent to the Stranger's suggestion that Being is a third (kind) beyond Motion and Rest, hinges on his notion that each of these is "a case Being," insofar as each of them "are." However, in light of the agreement later in the passage between Theaetetus and the Stranger that it is "the most impossible thing of all" for something to *be* without in any way *being* in motion or at rest, being a "case" of Being, assuming what is meant by this is something that shares in what something else is, would entail that the case of Being is something that is characterized by *both* Motion and Rest. This is to recognize that while what Being has in common with Motion and Rest cannot be constituted by any quality or qualities that Motion qua Motion and Rest qua Rest share with each other, given their opposition, Being nevertheless can exhibit something common with Motion and Rest insofar as both together in their opposition must be thought to compose it. Thus, neither Motion nor Rest independently of the other can possibly be thought of as being a "case" of Being, because Being is precisely *both* of them. Because of this, neither one, Motion or Rest, "are situated apart," as both *are* only when they are *together*. This is why they must be thought to be embraced by Being "from outside them both," since if Being were internal to Motion and Rest they would not be two but one, which is impossible. See the discussion of Statement 2 for further elaboration of this last point.

phenomenological analysis of this aporia, which as mentioned is based on a reconstruction of the concept and being of the ancient Greek ἀριθμός, together with an interpretation of Aristotle's account in the *Metaphysics* of the Platonists and Plato himself seeing the forms as numbers.[25] As touched upon above, the upshot of this analysis is that the concept of number, which in the Greek context means its form (εἶδος), is that of the whole-part unity (or being one) of a multitude of homogenous indivisible units (μονάδες).

The mathematical *being* of this form, which was investigated by theoretical arithmetic, concerned what is responsible for the number's whole-part unity. For our purposes, only the two most fundamental forms of number need concern us, the Odd and

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[25] Oskar Becker's investigation ("Die diaretische Erzeugung der platonischen Idealzahlen," *Quellen und Studien zur Geschichte der Mathematik, Astronomie, und Physik*, Abteilung B; Studien, Vol. 1, 1931: 464-501, English trans., Jerome Veith, "The Diaretic Generation of Platonic Ideal Numbers, *The New Yearbook for Phenomenology and Phenomenological Philosophy*, VII, 2007: 261-295) of Plato's "'*ideal number*'" (289), the first in the phenomenological tradition, arrived at the conclusion that that "*rather nebulous term*" should be replaced with "'**idea-number**',**"** because his interpretive efforts establish "that an εἰδητικός ἀριθμός is nothing other than a *number of ideas* (εἰδῶν ἀριθμός)." Becker establishes that "[t]he expression ὁ ἀριθμὸς ὁ τῶν εἰδῶν" (282) "is none other than the common expression for a *named number* ('a number of ideas', just as a 'number of sheep' or "dogs'). More explicitly, "ὁ ἀριθμὸς ὁ τῶν εἰδῶν means nothing other than 'a definite amount [(*An-*) *Zahl*] of ideas', i.e., a concrete [*benannte*] number with the designation idea, an ordered multitude [*Menge*] or multiplicity of ideas—thus a number whose units (μονάδε) are ideas. (Thus, of all things, *not*: one number = one determinate idea!) (283).

    Regarding the unity of the Greek number in its non-ideal (Platonic) and presumably mathematical sense, Becker holds that even in Aristotle "ἀριθμός still bears a sense that is strange, figurative, and 'archaic' to us" (285). Specifically, Becker characterizes the "unitariness" (286) of the "whole" of ἀριθμός "apart from the elements (the units)" as a number formation "with a certain intuitive 'dimension' [*gewissen anschaulichen 'Umfang'*], which nonetheless is not nearly as universal as that of our concept of quantity . . . —the modern concept of number that is neutrally applicable to everything." Becker continues, "[t]hus, ὁ ἀριθμὸς τοῦ πλήθους πᾶς, the entire (whole) number of the multitude [*Menge*] or multiplicity [*Vielheit*]— *not* 'all numbers of the set' [*Menge*], i.e., all that somehow occur in the whole structure!—does not represent a 'cardinal number' [*Anzhal*] in our contemporary sense, but rather a much more figural sense, in which the articulation (structure) of all parts is strictly determined throughout the whole."

    Becker appeals to the "intuitive dimension" of the figural quality of the whole of ἀριθμός rather than to the phenomenological structure of collective unity, because his interpretation of this point follows Stenzel's interpretation, which stresses the Greek number's "intuitiveness" [*Anschaulichkeit*] and "figure-like nature" [*das Gestalthafte*]. Klein raises a fundamental objection "against stressing the 'intuitive' character of the ἀριθμός-concept, namely that it arises from a point of view whose criteria are taken not from Greek, but from modern, symbolic, mathematics" (*GMT*, 63). This is the case, as we've seen above, because for Klein intuition as an independent cognitive function first emerges as an epiphenomenon in relation to the pure, world-less conceptuality of the symbolic number concept. Thus, Klein maintains that Becker, "in general" (*ibid*, 62) and "especially in the interpretation of the ἀριθμοὶ εἰδητικοί, is guided after all by *our* [symbolic] number concept [*Zahlbegriff*], which has a totally different structure" (*ibid*.) That said, Klein credits Becker with having pointed out "the central significance of the 'monads' for an understanding of the Platonic doctrine of the so-called 'ideal numbers'" (*ibid.*).

the Even. These forms divide the whole-part unities of numbered multitudes into those that are divisible by two and those that when divided by two have a unit left over. In contrast to the mathematical being of number, the philosophical being of the form of number, or better, Plato's account of its philosophical being, as discussed above, articulates the irreducibility of the unity of the number as a whole to any of its parts, taken singly or as a totality. And it is precisely this mode of being that Klein argues, compellingly on my view, the aporia of Being, Motion, and Rest makes manifest, save one important difference. That difference concerns both the parts of the respective numbers and the relation of the whole to its parts. The units of mathematical numbers are comparable, as they are identical and therefore homogeneous, while those of eidetic numbers are "incomparable" (ἀσύμβλητοι),[26] meaning that despite their unity as parts they are not identical and therefore exhibit different kinds (γένη). In the case of the "seeming" triad of Being, Motion and Rest, when seen as a number, that is, an eidetic number, the parts of the whole in question, which is to say, the parts of Being as a whole, are unlike the parts of the whole in question in a mathematical number. Whereas the whole of the number two cannot be predicated of its parts, that is, the single units that this whole composes as a unity, without being partitioned in them, the whole of Being necessarily has to be partitioned in its parts, Motion and Rest, albeit not exclusively. That is, both Motion and Rest *are*, without either exclusively coinciding with Being; if either was exclusively Being, then either all things would be at rest, if Rest exclusively *is*, or in motion, if Motion exclusively *is*. On the contrary, Being only is when both together *are*, despite their difference and indeed opposition. This is why the kinds Being, Motion, and Rest cannot, strictly speaking, be counted. Counting them brings with it the presupposition that what is counted are homogeneous units, such that

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[26] Aristotle, *Met.* M, 1080a 20.

Motion would be one, Rest another one (two), and Being a third one. Thought, however, has to concede that Being, rather, is not a third thing but precisely just *is* Motion and Rest, both together.

The Three Kinds of Whole-Part Unity and the Absence of Whole-Part Unity Manifest in 253de

Returning now to the passage 253d-e, we can illuminate it as follows. Statement 1, "a single form that is extended every way through many, each of which is situated apart," articulates the basic whole-part unity of any multitude composed of homogeneous parts, regardless of whether that multitude is sensible or intelligible. Thus, from the phenomenological perspective established by Klein, the argument that because our passage articulates the knowledge needed by the dialectician to distinguish forms, the 'many' in all of its statements must refer exclusively to forms, is not convincing.[27] The argument fails to convince because the *sine qua non* for the initial access to the forms is the capacity to distinguish their appearance from the appearance of the many sensible things for which their intelligible unity is responsible.[28] The parts of a homogeneous multitude must be arithmetically more than one. The minimal condition for this is that the parts—whether sensible or intelligible—are not just different or other than one another, as in the case of Motion and Rest, but that they are discrete, that is, situated apart. To be unified by the

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[27] Natorp and more recently Sayre assume that the "many" here are "sensible objects" (Natorp, 273) or "different things" (Kenneth Sayre, *Metaphysics and Method in Plato's* Statesman (Cambridge: Cambridge University Press, 2006, 43). As we've seen, Stenzel questions this (n. 11), as he initially leaves the question "open" (Stenzel, 99), but then subsequently takes "this meaning for granted" (103). Gómez-Lobo rejects "the view which sees material objects" (Gómez-Lobo, 31) here, but oddly attributes precedence for this to Stenzel. Notomi (Notomi, 236) and Miller also concur with—as Miller puts it—the view that "the Visitor takes forms or kinds as his proper objects, not sensibles" (Miller, 339). From a phenomenological point of view, extending the scope of the many referred to in Statement 1 to a sensible multitude is not necessarily inconsistent with the view that it belongs to dialectical knowledge to have forms or kinds as its proper objects, because, clearly, the capacity to distinguish sensible beings from eidetic ones must be a part of such knowledge. Moreover, the sensible extension in the scope of the many likewise is not necessarily inconsistent with the view that the many referred to in Statement 1 may also refer to intelligible beings.

[28] See for instance *Rep.* 5, 476 c-d.

single form as a homogeneous part of its whole, however, that form must extend through each part in every way, without, of course being the same as it.

Statement 2, "many [forms], different from one another, that are embraced from without by a single [form]," clearly articulates the unity of a multitude composed of heterogeneous parts. The least such multitude would be exhibited in the aporia of Being, Motion, and Rest. Being embraces, from the outside, Rest and Motion, which while different from one another, are not "situated apart," as are the parts articulated in Statement 1. If either were so situated, it would be capable of being what it is—Being—independently of the other, from which (as the aporia of Being makes clear) something impossible would follow: for Being would then be either exclusively Motion or exclusively Rest, and, hence, not composed of a multitude. If Being embraced them from the inside, they'd cease to be a multitude, as they'd be one and not two.[29]

Statement 3, "a single [form] running through many wholes that is assembled into a unity [or gathered into a one]," departs from the whole-part unities articulated by 1 and 2, insofar as its parts are themselves whole-part unities, unlike the parts in 1 and 2.[30] The kind

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[29] Cf. 243d, where the Stranger asks, in connection with the question whether those who say Being is hot and cold, whether they are saying Being is "a third besides these two . . . [f]or surely when you call the one or the other of the pair Being, you're not saying both similarly are," since in that case "the pair would be pretty much one but not two."

[30] Natorp equates "δι᾽ ὅλων πολλῶν" at 253d8 with "διὰ πάντων" at 253a (Natorp, 273), and therefore treats ὅλων and πάντων as interchangeable. In this case, the reference to ὅλων in Statement 3 wouldn't necessarily signal a difference between the πολλός that composes the πάντων and those in the first two Statements. Stenzel points out that "[t]he use of ὅλων for πάντων is unlikely as early as Plato" (Stenzel, 100). But the stronger argument against this usage is the context provided by the *Theaetetus*, which, as we've shown above, displays the aporia, in the paradigmatic case of the whole-part being of ἀριθμός, that occurs when ὅλων and πάντων are not distinguished. From a phenomenological standpoint, it's important to keep in mind that ὅλων and πάντων show up in both the *Theaetetus* and the *Sophist* in terms of the whole-part structure of multitudes. Likewise, it is important to keep in mind the necessity of distinguishing structurally ὅλων and πάντων, to which the aporias in the *Theaetetus* point. Recall that for the whole-part structure of an ἀριθμός to be intelligible, its whole must unify its parts without either partitioning itself in any one of them or being the same as all (πάντα) of them. In line with this, the many wholes referred to in Statement 3 therefore would refer to the unity of whole-part multitudes, not to the determinate unities of those parts considered together, that is, to "all of them" (πάντων).

of unity articulated there would be, for example, the unity of something like the being exhibited by either of the two most basic forms of number, each of which run through the many wholes of number, assembling or gathering their whole-part unities into the unity of a single form, the Odd or the Even.[31]

Stenzel distinguishes δι᾿ ὅλων and διὰ πάντων methodologically, in terms of the division of an εἶδος into its lesser εἴδη and the collection of lesser εἴδη under higher ones. Δι᾿ ὅλων refers to division, διὰ πάντων to collection according to Stenzel, because in the division "the important thing is . . . that it pass through wholes or unities" (Stenzel, 101), while in collection "the essential thing is to include *all* the kinds (γένη) under certain higher ones" (*ibid.*). Apart from the problem of the text not supporting the interpretation that finds collection in 253d-e (which is pointed out by both Gómez-Lobo and Miller), Stenzel's interpretation raises the substantive issue of the relation between method and structure. Specifically, whether for Plato the being of ὅλων and πάντων present structures that are independent of methodical intervention or whether their very structures are dependent on their methodical articulation. The intelligibility of the unity of ἀριθμός pointed to in the *Theaetetus* appears as such independently of the methodological intervention characteristic of division or collection. Whether it would also be manifest independently of the methodological intervention of Socrates' questions and Theaetetus' answers, that is, independently of the dialectical "method" inseparable from Platonic philosophy, is not the issue here. Rather, the issue is whether the unity of the whole-part structure that the method of division partitions is somehow there *prior* to its methodical intervention or whether such intervention is requisite for that unity to come into being.

[31] Because in Statement 3 a single form is characterized as "running through" *many* such wholes, or better, many such whole-part unities, and, moreover, because that form's unity, its being one, is said to be assembled or gathered together on the basis of this running through, the unity or being one of the form in question appears to be inseparable from and therefore dependent on its basis in these many wholes. The interpretive question, then, is whether the assembling or gathering of the form's unity on this basis presupposes some kind of directed methodical intervention, viz., collection or division. Natorp, Stenzel, and Miller answer this question affirmatively, albeit without a consensus on the method involved, as Natorp sees collection at work while Stenzel and Miller see definition by division. Gómez-Lobo's answer to the question is negative, as he sees not method but the form of Not-Being at work here.

Considering the context provided by the *Theaetetus* once again, Theaetetus' and Young Socrates' division of "all number in two" (*Tht*, 147e), accordingly as they have or don't have the "potency to come into being as an equal times an equal" or not, is significant on three counts. One, it exhibits the one form (unity) of whole-part structures in a manner that is consistent with the articulation of unity in Statement 3 but *inconsistent* with the process of definition by division in the *Sophist*. This is because, one, *both* kinds of number, termed, respectively, "square" and "oblong," are the relevant result of the division. Thus, the distinction between the "left" and "right" hand of what is divided is irrelevant to the process and results of this division in the *Theaetetus*. Two, on the assumption that the kinds of number are the definienda, the one form that runs through the many numbers in each case doesn't function to "tie together" (συναγωγή) the putative many right-handed parts of previous divisions. *Both* halves of the division are therefore relevant to the (arithmetical) knowledge in question. And, three, the relevance of this form proper to arithmetical knowledge – that is, proper to one form running through many whole-part unities – to the one form of knowledge per se (ἐπιστήμη), is stressed by Socrates. Specifically, it is stressed when he urges Theaetetus to "try to imitate your answer about potential squares [viz., "square numbers"], and just as you encompassed them all, many as they are in one form, so too try to address the many forms of knowledge in one account (λόγος)" (*Tht*, 148d). Moreover, it is noteworthy that what Socrates singles out as relevant here makes no mention of the division of all number that yielded the one form of potential square numbers, just as Statement 3 makes no mention of division. The phenomenological point here being *not* that Statement 3 rules out the kind of unity aimed for in definitions by division, but rather that the kind of unity it articulates is not limited to the unity or being one aimed at by definition's συναγωγή.

Finally, Statement 4, "many forms that are separated off apart in every way," clearly articulates the opposite of any whole-part unity, including that of a mathematical (homogeneous) or eidetic (heterogeneous) multitude. What we have here is a heap, albeit a heap of forms, with no overriding whole manifest to provide unity. For example, the forms of justice, angler, and juggler.

The traditional interpretations of our passage take the "and, again" (*Sph*, 253d8) as a structural key, as it divides the statements into two pairs, with the point of departure for each pair—"one [form]" and "many [forms]"— mirroring the other. However, as we've seen, there's little interpretative consensus about the meaning of the statements. Our phenomenological interpretation of that meaning departs from all others by maintaining that the passage articulates the *preconditions* for dialectical knowledge. These preconditions manifest the kinds of whole-part unity together with the opposite of any kind of whole-part unity that allow the dialectician to arrive at both definitions by division *and* to articulate the kinds that are responsible for the community and separation of the kinds articulated in those definitions. That is, rather than claim that the statements in 253d-e refer either to definition by division or to the kinds of unity and separation the greatest kinds are responsible for, or to a combination of division and greatest kinds, my argument is that the statements articulate the whole-part unities (and their absence) that are responsible for the soul's capacity to articulate definitions and greatest kinds in the first place.[32] Moreover, in connecting the structural wholes articulated in Statements 1-3 to the numerical way of overcoming the paradigmatic aporia at the end of *Theaetetus*, we have shown that each of these statements not only articulates the unity of a whole-part structure in which sameness

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[32] This interpretation is consistent with Notomi's observation that the passage "unites the two parts of the *Sophist*" (Notomi, 237), namely the definitions by division of the sophist prior to the passage and the inquiry into the greatest kinds following it.

and difference coexist, but also that they articulate three distinct kinds of whole-part unity. Statement 1 articulates the unity of the whole of a homogeneous multitude, inclusive of multitudes proper to both sensible and intelligible parts. For instance, the unity of multitudes of sensible beds or intelligible units. Statement 2 articulates the unity of the whole of a heterogeneous (incomparable) multitude. For instance, the unity of the smallest multitude of kinds, Being, Motion, and Rest, whose eidetic number is two, not three. As such, Statement 2 also articulates the paradigm for the division of the overarching unity of a kind into two different forms, which is to say, the paradigm for bifurcatory division. Statement 3 articulates the unity of the whole of a homogeneous multitude of parts that are themselves whole-part unities. For instance, the unity of the multitude of whole-part unities composed of oblong numbers (*Tht*, 148a; 148d). Because the last statement doesn't deal with the unity of a whole at all but with its absence, the phenomenological interpretation doesn't find a structural parallelism in the ostensible pairs of statements, since Statement 4, despite mirroring Statement 2's beginning and its concerns with a multitude of kinds, does not articulate any kind of unity.

Given the "foundational" role for dialectical knowledge played by these three unities and their absence that is articulated by these statements, the order of their appearance stands out as significant from a phenomenological perspective. Because the first whole-part unity articulates the form of a homogeneous multitude and the second whole-part unity articulates that of a multitude that is heterogeneous, the question of the relation, if any, between these two kinds of multitudes naturally arises. The whole-part unity that composes a heterogeneous multitude, in the case of the eidetic numbers, functions as the foundation for the kind of unity responsible for the whole-part unity that composes the homogeneous

multitude of mathematical numbers.[33] Hence, the ordinal priority of Statement 1 can be ruled out as signaling its foundational priority over 2. Rather, given this responsibility, it's the other way around, as the whole-part unity articulated by Statement 2 manifests the foundation for the unity articulated in Statement 1. A better candidate for Statement 1's priority, therefore, is that what it articulates comes first in the order of knowing. Certainly, this kind of eidetic unity appears first in the dialogues, and insofar as its apprehension presupposes the capacity to differentiate intelligible unity from sensible unity, its priority would appear to be methodological as well. The heap articulated in Statement 4, of course, can in no way stand in a foundational relationship to the kind of eidetic unity in Statement 3's articulation of the form of parts that are themselves whole-part unities. Statements 3 and 4, therefore, do not mirror the foundational relationship between the statements in the first pair. Moreover, because the parts of 4 are explicitly identified as forms, 2 is the only statement in the first pair that it could possibly parallel. And it does, insofar as it articulates the exact opposite of many different forms united from the outside by a single form, viz., many discrete forms, which is to say, a heap of forms.

Conclusion

Guided by the phenomenologically methodological protocols requisite to interpret the formality of ancient Greek philosophy from its own conceptual level, three distinct kinds of eidetic whole-part unities and their opposite have been disclosed in our passage: 1) the unity of multitudes whose intelligible and sensible parts are homogenous; 2) the unity of multitudes whose eidetic parts are heterogeneous; 3) the unity of multitudes whose

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[33] "Only because there are *eide* which belong together, whose community in each case forms a 'kinship' which must be, due to the 'arithmetical' tie among its 'members', designated as *the* six or *the* ten, can there be arbitrarily many numbers, such as hexads and decads, in the realm of 'pure' units as well as in the realm of sensibles" (*GMT*, 105).

parts are themselves wholes of intelligible parts; and 4) the opposite of any kind of eidetic whole-part unity, multitudes of ununified—which is to day, "heaps" of—εἴδη. Crucial to this phenomenological interpretation are its protocols' origin in Jacob Klein's critique of the Aristotelian and Husserlian presuppositions guiding Heidegger's interpretation of Greek philosophy generally and Plato's in particular: the whole-part structure of categorial predication in Aristotle and the formal ontological conceptuality sedimented in Husserl's theory of intentionality and the notion of empty intention crucial to that theory.