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Citation for published version:

Scaltsas, T 2016, Relations as plural-predications in Plato. in M Carrara, F Moltmann & A Arapinis (eds), *Unity and Plurality: Logic, Philosophy, and Linguistics*. Oxford University Press, Oxford, pp. 3-18.
<https://doi.org/20.500.11820/b0f97ed7-69ac-4806-b11d-76726d4bcc13>

Digital Object Identifier (DOI):

[20.500.11820/b0f97ed7-69ac-4806-b11d-76726d4bcc13](https://doi.org/20.500.11820/b0f97ed7-69ac-4806-b11d-76726d4bcc13)

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Publisher's PDF, also known as Version of record

Published In:

Unity and Plurality

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Plurality and Unity

Plurality and Unity

Logic, Philosophy, and Linguistics

EDITED BY

Massimiliano Carrara,
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and Friederike Moltmann

OXFORD
UNIVERSITY PRESS

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Great Clarendon Street, Oxford, OX2 6DP,
 United Kingdom

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First Edition published in 2016

Impression: 1

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Published in the United States of America by Oxford University Press
 198 Madison Avenue, New York, NY 10016, United States of America

British Library Cataloguing in Publication Data

Data available

Library of Congress Control Number: 2015944345

ISBN 978-0-19-871632-7

Printed and bound by
 CPI Group (UK) Ltd, Croydon, CR0 4YY

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PART I

Pluralities in Logic

1

Relations as Plural-Predications in Plato

Theodore Scaltsas

Introduction

Plato's core metaphysical intuition is that transcendent properties—the Forms—are responsible for things being qualified in the way they are. These transcendent properties are universal in the sense that many individuals “partake” in each of the transcendent properties, at a time. Partaking in any one Form qualifies the partaking individual with the property that Form is; thus, an individual is courageous by partaking in the Form of Courage. The intuition is that the property of courageousness comes to be present in the individual by partaking in the Form (however “partaking” is interpreted ontologically). Since each Form stands for a single property (it is *monoeidic*), partaking in a Form qualifies the individual with that property.¹

An ontological theory needs to account for not only qualified individuals, but also for *related individuals*. Related individuals have been a thorny issue for Plato's Theory of Forms, because the theory does not *prima facie* seem to be designed to offer an ontology of related individuals, since it, strikingly, does *not contain any relational Forms*. Nevertheless, Plato was aware of the need for an explanation, and so did attempt to account for related individuals through his Theory of Forms. What I aim to show in this chapter is that there is a metaphysically deeply insightful background regarding participation, in his Theory of Forms, which can help us understand how Plato accounts for related individuals without relational Forms.

Plato's solution could *not* have been the introduction of *relational* Forms in his ontology. This is because partaking in a Form qualifies an individual *only* with the

¹ Part of the work for this chapter took place at the Bellagio Study Center, Rockefeller Foundation, supported by a grant from the Carnegie Trust for the Universities of Scotland; I am thankful to the foundations for their support. I would like to also thank the organizers and the participants of the *Semantics and Philosophy in Europe 5* conference for their useful discussion on an earlier version of the chapter presented at the conference. And finally I would like to thank the anonymous referees of the volume for their constructive criticisms. The present chapter is a revised version of my “Relations as Plural-Predications in Plato” in *Studia Neoscholastica* 10 (2013)/1 with the kind permission of the Editor.

property the Form stands for. But *asymmetric relations*, such as the mother–daughter relation, involve the qualification of two (or more) individuals with *different* properties each. There could be no Form partaking in which would qualify different individuals with different properties; for example, no maternal-relational Form, such that if two individuals partook of it, one individual would be qualified as mother and the other as offspring. I will argue that Plato's theory of *plural-partaking* in Forms, which he developed in one of his early dialogues, the *Hippias Major*, can help us understand his account of related individuals through the Forms of Opposites.

On his account of plural-predication, two or more individuals can partake in a Form as *plural-subjects*, and come to be *jointly* qualified by a *single* instance of the property of the Form; for example, Michael and George, acting jointly, are courageous. Remarkably, Plato was insightful enough to see and show in his theory that this does not make Michael courageous or George courageous, but only both of them together courageous. I aim to show that plural-partaking can shed light on Plato's problematic account of how related objects acquire their *relational qualifications*, without relations as additional entities between individuals. The related individuals share a monadic property instance in symmetric cases or a pair of property instances in asymmetric cases. Neither the shared property nor the shared pair of properties is a relational bridge between the plural-subjects, but a qualification of the subjects like any monadic qualification of an object. The subjects are conjoined in sharing this instance of a property, which is attained by the joint partaking in the Form (dictated by the relativizing context, as in being equal to or greater than, etc.). The joint-partaking does not turn the subjects into one, but retains the plurality of the subjects. Rather than requiring the oneness of the subjects, plural-partaking furnishes the *sharing* of the instance of the property between the subjects, which perform *jointly* the metaphysical function of partaking. We shall first turn to Plato's theory of *plural subjects* and *plural-partaking* in Forms, and then come to examine how (symmetrically and asymmetrically) related individuals can be thought of as partaking plurally.²

Plural subjects and plural-partaking in Platonic Forms

In Plato's dialogue *Hippias Major*, the sophist Hippias, in his exchange with Socrates, claims there is only distributive predication to many:

Never shall you find what is attributed to neither me nor you, but is attributed to both of us. If both of us were just, wouldn't each of us be too? Or if each of us were unjust, wouldn't both of us? Or if we were healthy, wouldn't each be? ... You Socrates think there's some attribute or being that is true of these both but not of each, or of each but not of both. And how could that be, Socrates? That when neither has an attribute, whatever it may be, this attribute—which

² I am grateful to Øystein Linnebo for pointing out possible connections of this account to concerns about asymmetric relations discussed by Kit Fine, Tim Williamson, and Cian Dorr. I note here, but will not explore the possible relevance to the following works: Timothy Williamson, "Converse Relations," *The Philosophical Review* 94 (1985): 249–62; Kit Fine, "Neutral Relations," *The Philosophical Review* 109 (2000): 1–33; Dorr Cian, "Non-Symmetric Relations," *Oxford Studies in Metaphysics* 1 (2004): 155–92.

belongs to neither—could belong to both?... whatever both are, each is as well; and whatever each is, both are. (*Hippias Major* 300 d 7–301 e 5)

I take Hippias's position to be that the many are *f* if and only if each of the many is *f*. I take this position to be the rejection of plural-predication, in the way that such predication is described by Hippias and ascribed to Socrates by him. For Hippias there is no shared attribute between the many over and above the individual possessions of attributes by each of the many; their collective qualification reduces to individual qualifications; I shall call this *distributive-predication*. Things are qualified in a particular way if they are *each* so qualified, and vice versa.

Socrates agrees that there are cases like the ones that Hippias mentions. But additionally, Socrates puts forward counterexamples to Hippias's theory and proposes an account that offers the ontology required for his counterexamples. The difference between the accounts is that Socrates does not reduce, in all cases, the collective qualification of the many to their individual possessions of that attribute, as Hippias does. Socrates allows for two further types of qualification. For him, an attribute can belong to all the many for independent reasons than the reasons for which it belongs to each of the many, or it may even not belong to each of the many at all; the instance of the attribute which is *shared* by the many is different from any instance that may belong to each of the many. So there are three types of predication: *one distributive* (Hippias's) and *two plural* ones (Socrates'). The distributive one is when the many are collectively qualified simply because each of the many possesses that attribute. The plural ones are, first, when an attribute is shared by all the many in addition to each of the many possessing that attribute; and, second, when an attribute is shared by all the many while none of the many possesses that attribute. But for simplicity's sake I will divide them into two only camps, one where the many are qualified and each of the many is also qualified, and one where the many are qualified but each of the many is not (or vice versa). (So I will not systematically distinguish between the many being qualified because each is qualified, and the many being qualified because they share an instance of the attribute over and above each possessing that attribute. The Platonic text also sets up the debate as a dichotomy rather than a trichotomy, for starkness of opposition between the two theories.) So Hippias and Socrates agree that when each of the many is *f*, then all are *f*, too; they disagree on whether the many can be *f* when none of the many is *f*.

Socrates' counterexamples show definitively that there are cases which cannot be explained by Hippias's theory of *distributed* predication. He argues as follows (with a touch of Socratic irony):

SOCRATES: We were so foolish, my friend, before you [Hippias] said what you did, that we had an opinion about me and you that each of us is one, but that we would not both be one (which is what each of us would be) because we are not one but two. But now, we have been instructed by you that if two is what we both are, two is what each of us must be as well; and if each is one, then both must be one as well.... Then it's not entirely necessary, as you [Hippias] said it was a moment ago, that whatever is true of both is also true of each, and that whatever is true of each is also true of both. (*Hippias Major* 301 d 5–302 b 3)

This example makes it clear that Hippias does not have the distributive way out here. Even if we could say that David and Susan are one (not “two”), it would not be true to conclude from this that David is one and Susan is one in the same sense of “one” as each is one. The predicate “one” in these statements means something different: in the former it may mean something like “inseparable between them,” while in the latter it would mean “one human being.” Neither is the predication “they are two” distributive; David is not two, nor is Susan, despite the fact that they are two.

Socrates’ initial counterexample to Hippias’s assumption about distributive predication, namely the example of “being two,” is the simplest to examine. Each of Socrates and Hippias is a one, while *they* are two. The attribute of being “two” belongs to them, but not to each of them; it is instantiated only in Socrates and Hippias together. It is the context that makes them two, the context of considering Hippias and Socrates, and no other. In this context they, no more and no fewer, are two.

The metaphysics of the Socratic position

Socrates’ metaphysical account of plural-predication is explicit. In *plural-predication* the predicated attribute belongs to *all the subjects together*; this belonging is *not* reducible to, *nor* does it need to be grounded on, that very attribute belonging to each of the individual subjects. Plato says, “when each of them is inexpressible, both together may be expressible, or possibly inexpressible” (*Hippias Major* 303 b 7–c 1). If they are expressible together, this is not grounded on individual expressibility if each of them is inexpressible. Let us further consider two colors; each is attractive and both together unattractive. Hippias could hold that we are justified in saying that the colors are attractive (in a distributive sense), since each is attractive. But it is also true that juxtaposed together, the colors are unattractive. The attribute of being unattractive belongs to them together, but does not belong to each individually, *contra* Hippias. This is what is distinctive of the Socratic position: his metaphysics allows that several individuals together can be the subjects of a single instance of an attribute (“unattractive”), which may *not* be instantiated in each individual; and an attribute instantiated in each individual (“attractive”) may *not* be instantiated *jointly* in all of them together (although it can be collectively attributed to them in a distributive (Hippian) way). A plural instantiation can *coexist*, as a different instantiation of an attribute, with instances of the same attribute in each of the subjects, as when each color is attractive, but also, they are all attractive, too. Alternatively, it can coexist with its opposite, as when the colors are unattractive together, despite each of them being attractive; in such a case, each color possesses an attribute (“attractiveness”) which they do not possess together, and they possess an attribute together (“unattractiveness”) which neither of them possesses by itself.

This ontological independence of plural-predication from individual-predication is just what Hippias denied when he said, “how could that be, Socrates? That any state of being, whatever, could be attributed to neither, since that attribute, which is attributed to neither, is attributed to both?” (300 b 6–8). Socrates does have an answer; he says

that “it was by the being that adheres to *both*, if both are [*f*] ... —it was by *that* they had to be [*f*], ... and not by what falls off one or the other” (302 c 4–7, my emphasis). This attribute does not make each of them *f*: if “that attribute adheres in both, but not in each ... then *that’s* not what makes each of them [*f*]; ... it doesn’t adhere in each” (302 e 5–10).

How does a color’s possession of attractiveness, which it possesses together with another color, differ from the color’s possession of attractiveness all by itself? The metaphysical innovation of Socrates is that *a single instance of an attribute can be shared by a number of subjects*; the instance is literally shared between the subjects; they co-possess it; they co-own that instance of the attribute. I do not use the terms “part-own,” or “part-possess,” as they may mislead by suggesting that there are parts of the attribute, each of which is fully possessed by each of the subjects respectively.³ A plurally shared attribute *belongs* to each individual subject *differently* than the way that attribute would belong to any one of these subjects if fully possessed by that subject alone. Shared ownership involves *only all* the sharing-subjects together possessing the attribute. It is like a statue being supported by two pillars. The statue is not partitioned so that one part of it stands on one pillar and the other part on the second; nor does the statue stand on the first pillar, or even on the second; rather, the statue stands as a whole on the two pillars. Without either of the pillars, the statue would fall; the whole statue would fall, not just part of it. In an alternative set-up, the statue could be supported by several pillars and not fall by the removal of one or more of them, but only come to be fully supported by fewer of them. Similarly, with the many owners of an instance of an attribute. In the case of their being “two people,” the loss of one would be detrimental to the plural-instantiation of that attribute, but if they are so many as to form “a crowd,” the loss of one would not undermine the plural-predication of “a crowd.”

For Socrates, qualifications can come to belong to particular things in two ways, the way Hippias described, distributively, but also the way Hippias denied, plurally (shared):

If they come to belong to both, they do to each also; and if to each, to both—all the examples that you [Hippias] gave.... But the examples I [Socrates] gave were not that way.

(*Hippias Major* 303 a 5–10)

And the Socratic type of plural, non-distributive predication, can occur together with individual-predication:

Then they [the fine things] have some thing that itself makes them be fine, that common thing [i.e. the Form of Fine] that belongs to both of them in *common*, and to each *privately*. Because I don’t suppose there’s any other way they would *both* and *each* be fine.

(*Hippias Major* 300 a 9–b 2)

(It is interesting here that Plato seems to be introducing a linguistic criterion for the distinction between distributive and plural-predication, e.g. not the Hippian “they are

³ Plato does consider partitioning of attributes in the *Parmenides* (130 e–131 e) but rejects it.

fine,” but the Socratic “they are jointly fine.”) The Socratic type of plural-predication can alternatively occur without individual predication of the same attribute:

[Socratic *hypothesis*:] Doesn’t that attribute [the fine] adhere in *both*, but *not* in each? ... Then that’s not what makes each of them fine; it doesn’t adhere in each. So the [Socratic] hypothesis lets us call both of them fine, but it doesn’t let us call each of them fine.

(*Hippias Major* 302 e 5–303 a 1)

In both Socratic cases of plural-predication, the instance of the attribute which qualifies jointly the many as *f* is different from any individual instances of it in each of the many. Although it is “textually underdetermined” what the ontology of the cases where Socrates agrees with Hippias’s examples is, I have tried to shed light on the ontological difference between the two for Socrates, premised on whether the collective attribution involves or not a shared attribute. (Plato’s position could have been more thoroughly developed in the text with correlations between linguistic forms and distributive versus plural attributions of collective qualification. For instance, correlating more explicitly an attribution such as “they are tall” with distributive predication, and an attribution such as “they are vivacious” with plural-predication, if they are jointly vivacious.) The complex ontological account presented above is required to explain the intricate semantics of plural-predication in language through the Theory of Forms.

Related individuals in Plato’s Theory of Forms

Plato’s Theory of Forms is designed to offer the metaphysics of predication by showing what it is for an object to be qualified in any way. An object is *f* by partaking in Form *F*:

Is there or is there not an absolute justice? Assuredly there is. And an absolute beauty and absolute good? Of course. (*Phaedo* 65 d 4–8)

They agreed that each of the abstract qualities exists and that other things which participate in these get their names from them. (*Phaedo* 102 a 10–b 1)

The individuals get their names from them, but also they become like the Form in which they partake:

If there is anything beautiful besides Beauty itself, it is beautiful for no other reason than that it shares in that Beauty. ... nothing else makes it beautiful other than the presence of, or the sharing in, or however you may describe its relationship to that Beauty we mentioned, for I will not insist on the precise nature of the relationship, but that all things are made beautiful by Beauty.

(*Phaedo* 100 c 4–d 8)

Forms are transcendent entities, which, notoriously, make partaking in them a theoretically challenging problem for the theory. But this will not be our concern here. It is a different aspect of the Forms that is of direct interest in our present inquiry, namely, what it is that a Form can offer to an individual that partakes in it, however the partaking is achieved.

Forms are of a single kind, *monoeidic*. This means that when an individual partakes of a Form F, all that the Form can do for that individual is to qualify it as an *f*. Plato is explicit in stating that Forms are monoeidic, each standing for a single kind:

Can the Equal itself, the Beautiful itself, each thing in itself, the real, ever be affected by any change whatever? Or does each of them that really is, being uniform [*monoeides*] by itself, remain the same and never in any way tolerate any change whatever? (*Phaedo* 78 d 3–7)

This does not mean that a Form has no further properties. It means that there is a single property that a Form stands for, which is the *only* property it can endow to its partakers.

The same is true when plural-subjects partake together in a Form: the partaking endows the subjects with a single instance of a single attribute—the one the Form stands for—which belongs jointly to these subjects together. Thus, an individual or individuals partaking in a Form will be qualified with the kind that Form is, namely the *single property* that constitutes the Form, for example Justice, Beauty, Goodness, Heat, Smallness etc. Joint ownership of an instance of a property is like joint ownership of a book—there is only one book but more than one owner of it.

There are two problems that arise for a theory of related individuals based on the ontology of the Theory of Forms. The first is that *qualifying* a partaker does *not relate* the partaker to anything and the second is that each Form can qualify its partaker(s) with a *single* qualification, while asymmetric relations qualify their relata with *different* qualifications.

I find the *monoeidic* (uni-form) character of the Forms to be the determining factor for whatever treatment of asymmetrically related objects can be given in Plato's ontology. This is so because the monoeidic nature of the Forms prevents the Forms from standing for asymmetric relations. *Asymmetric* relations qualify their relata with different qualifications. For instance, the asymmetric teacher-student relation takes individuals as relata, and qualifies one with the role of the teacher and the other with the role of their student. There can be no Form in Plato's Theory of Forms which could do the same for the particulars that partook in the Form. There *can* be a Form of Teacher, or a Form of Student; but no individuals that partook in either Form could be thereby qualified with the roles of teacher to student. Furthermore, although some individuals could be qualified as students by partaking in the Form of Student and others as teachers by partaking in the Form of Teacher, they would not be thereby related to *each other* as teachers to their students.

Generally, partaking in Forms *qualifies* but does *not relate* partakers; and the monoeidic character of Forms results in there being no Form in Plato's theory which would qualify its partakers with different qualifications. This, then, gives rise to the question of how Plato could explain the ontology of related individuals and, even more challenging, the ontology of *asymmetrically* related individuals in the Theory of Forms, if he has only qualifying (non-relational) monoeidic Forms at his disposal.

I will argue that Plato does identify the question of the ontology of symmetrically and asymmetrically related individuals, and that the problem can be addressed in his ontology, not via introducing *sui-generis* relational Forms, which Plato does not, but via plural-predication in monadic Forms and in Forms of Opposites. This is a special version of plural-partaking in Forms that could address the problem of symmetrically and asymmetrically related objects. We shall first look at Plato's description of asymmetrically related objects, because both ontological problems of asymmetry and of relatedness arise with respect to them.

Plato discusses the ontology of asymmetric relations in his dialogue the *Phaedo*. He offers examples of comparative relatives. He considers individuals that differ between them by being bigger or smaller than one another:

It is through Largeness that large things are large and larger things are larger, and . . . smaller things are made small by Smallness. (*Phaedo* 100 e 5–6)

According to the Theory of Forms, if an individual is qualified as large, it is so qualified on account of its partaking in the Form of Largeness and, correspondingly, with small individuals partaking in the Form of Smallness. This is in line with the monoeidic character of the Forms. (We assume that an individual that is larger than another is, by that token, also large, at least in that context.)

Proceeding, Plato examines the *relativity* of asymmetrically related objects. He begins with the following problem:

When you say that Simmias is larger than Socrates and smaller than Phaedo, do you not say that there is in Simmias largeness and smallness? (*Phaedo* 102 b ff.)

This raises for Plato the problem of how something large can be small, since they are antithetical qualifications. The solution he finds is to identify (to my knowledge, for the first time in the history of metaphysics) the *contingency* and so *non-intrinsicness* of some of the properties that qualify an individual:

Do you agree that the words of the statement "Simmias is larger than Socrates" do not express the truth of the matter? It is not, surely, the nature of Simmias to be larger than Socrates because he is Simmias but because of the largeness he happens to have? Nor is he larger than Socrates because Socrates is Socrates, but because Socrates has smallness compared with [*pros*] the largeness of the other?

True.

Nor is he [Simmias] smaller than Phaedo because Phaedo is Phaedo, but because Phaedo has largeness compared with the smallness of Simmias?

That is so. (*Phaedo* 102 b 8–c 9)

What this explanation introduces is a distinction between what it is to be a particular individual, say Simmias, and the qualifications Simmias may happen to have which are not aspects of being that individual, of his *nature*. It is not in the nature of Simmias to be larger than Socrates, but this is only a contingent feature of Simmias. Plato introduces the following criterion for distinguishing between contingent and

non-contingent qualifications: “I admit and endure smallness and still remain the same person and am this small man” (*Phaedo* 102 e 2–5). This criterion licenses the *counterfactual test* for the distinction between an individual’s nature and its contingent properties—for example, if I was qualified as large, I would be the same person I am. Plato does not offer further explanation in the text for us to be able to tell whether he believes that the largeness of Simmias is not an aspect of the *nature* of Simmias (of being a *person*), or whether he believes that largeness is not an aspect of his *identity* (of being *Simmias*)—there are indications in Plato’s language for both. These metaphysical distinctions can be studied in the more precise treatment of the conceptions of “essential nature” and of “individual” in Aristotle’s system.

Plato detects and addresses the *relativity* of contingent asymmetric qualifications, which is due to the circumstantial conditions of the related individuals:

Then Simmias is called *small and large*, being between the two [Phaedo and Socrates], presenting his smallness to be overcome by the largeness of one [Phaedo], and his largeness to overcome the shortness of the other [Socrates].⁴ (*Phaedo* 102 c 10–d 2, my emphasis)

Having established that largeness and smallness are not in the nature of each of the compared individuals, Plato turns to the context in which these qualifications emerge. Each individual is qualified as large or small, not in itself, but only in comparison to another individual. Thus, Simmias is larger than Socrates and smaller than Phaedo because it so happens. Simmias has largeness, not in himself, as Simmias, but in comparison to Socrates’ smallness, and has smallness in comparison to Phaedo’s largeness.

Plato even becomes graphic in his description of the *contingency* and *relativity* of the comparison in this context:

One of two things must take place: either the largeness in us *flees, or withdraws when its opposite, smallness, advances toward it*, or it is destroyed by the opposites’ approach. . . . either it goes away or is destroyed when that happens. (*Phaedo* 102 d–103 a, my emphasis)

What is significant for our own purposes in this description is that the partaking in Largeness or Smallness is temporary and contextual. Simmias’s largeness surpasses the smallness of Socrates, while his smallness is surpassed by the largeness of Phaedo. What Plato is emphasizing is that the presence of largeness or smallness in an individual is circumstantial, and dictated not by the individual’s nature, but by the context. The *contextuality* of the relative qualifications is expressed in Plato’s theory, *not* in a

⁴ This also introduces the comparison of the sizes of the individuals. But Plato does not generalize this into a metaphysics of quantity, in the way that Aristotle will, as he is focusing on Forms of Opposites. Forms of Quantities, such as so much weight, or such and such a height would raise problems of their own in the Theory of Forms, which Plato does not seem willing to introduce. An indication of this is that he immediately says, after the quoted sentence: “And he [Socrates] laughed and said, ‘I seem to be speaking like a legal document, but it really is very much as I say.’” The claim of legal fastidiousness is only to indicate that he was already being overly meticulous in his ontological description. Nevertheless, it may be that quantitative qualifications are unavoidable in a complete account of the theory. More generally, Plato does not develop a theory of what occasions or grounds partaking in Forms.

relation between Opposite Forms, but in the joint partaking by the two individuals (which is developed in what follows).

Symmetrically related individuals: the Form of Equality

I read Plato in the conventional and common-sense way of understanding the Form of Equality just like all other Forms, as a single transcendent property rather than as two equal entities.⁵ What is it, then, for a thing to be equal? It can only be equal to another thing, which, too, is equal to the first. But how is this to be explained in terms of the Theory of Forms? Plato does not discuss this explicitly, but one can surmise its ontology from similar cases that are discussed by him.

It is the relativity and contextuality of the equality between two individuals which invites comparison to Plato's treatment of similarly relative cases of qualification; specifically, that of being two, or of some objects being attractive or harmonious together. We saw above that Plato's explanation of Socrates and Hippias being two is that they both share the qualification of "being two," which we explained in the Theory of Forms by the plural-partaking of the individuals in the Form of Two. Further, Plato's explanation of two objects looking beautiful together is that they share the qualification of beauty, for which they need to plurally partake in the Form of Beauty. We have seen that what is particular about such partaking is that the individuals partake together, namely, they share a *single instance* of the Form's property. Thus, it is not Socrates that is two and Hippias that is two, but only both of them together bear the property of twoness. Similarly, for example, these objects are, by hypothesis, beautiful together.

My proposal is that *plural-partaking offers a way of understanding the way in which related individuals partake of Forms*, given the absence of relational Forms. This is more directly evident in the case of *symmetric relations*. I take it that *equal* individuals partake in the Form of Equality in the way that two individuals partake in the Form of Twoness. They partake plurally, together, while none of these individuals bears the Form's property on its own, but *only* jointly with its co-partaking partner. In this way individuals are equal together.

If I am right, there is an important and challenging question that arises. Two equal things are equal *together*. Is this the same as being equal *to one another*? Furthermore, is *sharing a property* an appropriate way of thinking of related individuals?

Let us consider two individuals which are beautiful together, but not singly. How does this qualification differ in type from two individuals which are equal together? I suggest that they are the *same type* of qualification, and that this is a *different way of conceiving* of relations than the way in which they have traditionally been understood. We are accustomed to thinking of relations as "arches" between objects. Could it be

⁵ For a criticism of considering the Form of the Equal as a pair of Forms, see Matthen's discussion of H.-N. Castañeda's "Plato's 'Phaedo' Theory of Relations" in M. Matthen, "Relationality in Plato's Metaphysics: Reply to McPherran," *Phronesis* 29 (1984): 304–12.

that Plato did not think of them in this way? Could it be that he thought of two equal individuals as being *qualified together* as equal? That he thought that the way they relate to each other does not connect them, but *qualifies* them in some way? Is this how we, too, think of individuals when we classify them into equivalence classes—for example, all A-students? Are A-students related to one another or jointly qualified?

Consider things that are beautiful and things that are equal, where none of them is beautiful or equal on its own. The beautiful things are beautiful because of how they each *relate* aesthetically to the other; the equal things are equal because of how they each *relate* quantitatively to the other. And yet we do not think of *being beautiful* as a relation. It is possible that this is how Plato thought of related individuals, namely as *group-qualifications* of individuals which together are *f*, even if none of them is *f* individually. Consider individuals which are heavy (for an elevator), and individuals which are equal. Their weights, each weight *with* the other weights, ground the individuals' heaviness in the one case, and their (say) sizes ground their equality, *to* each other, in the second. The individuals who are heavy are plurally heavy; doesn't this make the equals plurally equal?

One may remark on the difference between the equals being equal *to* each other, while heavy things being heavy *with* each other. But the question is not whether they are differently related, which is not disputable; rather, it is whether they are qualified with categorically different types of qualification (as relational and non-relational). Their difference seems irrelevant for the categorical classification of the qualification: are two harmonious sounds harmonious in relation "to" one another or are they harmonious "with" one another? More generally, we do not think that "over," "in," "on the side of," "with," etc. signal different ontological categories of the respective qualifications. Why should the difference between "to" and "with" signify a categorical difference of the respective qualifications? I suggest that it does not, and that Plato did not see, for example, being two (*with* one another) as a categorically different type of qualification than being equal (*to* one another).

The intuition that Plato develops is that we can capture the dependence of related individuals, not by connecting them through "bridges" between them, i.e. relations, but by their joint partaking, which results in their sharing a qualification. A shared qualification introduces the *oneness* of the qualification which is owned by *more subjects than one* and which embodies the dependence between the subjects. Their dependence results from the requirement that the partaking that will secure such a qualification for them all needs to be *joint* partaking. Joint partaking represents dependence, even in less conspicuously relational plural qualifications such as "being two," or "beautiful" (together), or "harmonious," or "heavy," or "equal," etc.

Asymmetrically related individuals

I derive the solution for asymmetrically related individuals proposed below from Plato's description of "Simmias...being between the two [Phaedo and Socrates], presenting

his smallness to be overcome by the largeness of one [Phaedo], and his largeness to overcome the shortness of the other [Socrates]” (*Phaedo* 102 c 10–d 2). What does it mean that the largeness of Simmias *overcomes* the shortness of Socrates? How can largeness be compared to shortness? I suggest that Plato sees opposites on the model of the hot and the cold—they are *comparable* because they can compromise each other: when one adds hot and cold water together one gets lukewarm water. This means that the difference between the opposites is reduced to a difference of *value* and *strength*, rather than a difference of quality. Generalizing, the difference between opposites is a difference of the quantity in a *qualitative common scale* between them, which allows for opposites to be compared and to overpower one another. This presupposed common qualitative ground, which reduces the difference between Opposite Forms to quantity, is the key to plural-partaking in Opposite Forms. It also sets Opposite Forms apart from non-Opposite Forms which differ qualitatively between them.

The ontology of asymmetrically related individuals is, expectedly, more complex than of symmetrically related ones, but I suggest that they are handled by Plato in the same way: as joint-qualifications resulting from plural-partaking in Forms. This is what follows from the realization that opposites are comparable, as explained above: the difference of two opposite qualifications in a comparative context is a difference of degree, rather than of quality. It is as if Opposite Forms stand for a common qualitative character and they differ quantitatively. Hence, partaking in Opposite Forms can be plural in so far as it qualifies individuals with *the same type of qualitative state*; it also needs to be partaking in two Forms rather than a single one, because the qualifications of the partaking individuals here are *quantitatively different* (as opposed to qualifications resulting from plural-partaking in a single Form, as e.g. with equal individuals partaking jointly in the Form of Equality). Asymmetrically related individuals need to plurally partake in more than one Form.

Thus if A and B are two objects where A is hotter than B, A and B plurally partake of the Form of the Hot and the Form of the Cold: A partakes of the Form of the Hot while B partakes of the Form of the Cold, and they thereby come to share the same type of qualitative states—of temperature—only in different strengths each. Thus plural-partaking in Opposite Forms results in the individuals sharing a common qualitative state, but to a different degree each, by acquiring their states from different Opposite Forms.

Importantly, I am *not* suggesting that *plural*-partaking in Forms of Opposites is a condition for participating in Opposites. For Plato, an object can participate non-comparatively in an Opposite Form, for example, of the Just. Thus, Socrates is just, namely, he has a harmonious rational soul, independently of the state of the soul of anyone else. But Socrates was also more just than Phaedo. In the first context, the predication of “being just” is not comparative, and Socrates’ partaking in the Form of the Just is individual-partaking. In the latter case, the context is comparative: Socrates is more just than Phaedo; the two subjects partake plurally of the Forms of Justice and Injustice. This means that they both have harmonious souls, but to different degrees

of harmony each. Hence, we see that for Plato, qualifications from the Forms of Opposites can be independent of each other in some contexts and relative to one another for other contexts; in the first case, there is individual-partaking in the Opposites, and in the *relative case*, plural-partaking. Which of the two kinds of partaking occurs in each case is determined *contextually*, not by a metaphysical bonding between Opposite Forms.

There is therefore a subtle difference between plural-partaking in the Form of Twoness or Beauty or Equality, and plural-partaking in a pair of Opposite Forms such as the Forms of the Large and the Small. The difference is that Socrates and Hippias share a *single instance* of the Form of Twoness, by partaking jointly in it. But Simmias and Socrates do not share an instance of a single Form; they share a pair of relatively determined instances of Opposite Forms in that context; they do so by each individual acquiring an instance of a respective Opposite relative to the other. Is this plural-partaking? I wish to claim that it is and that this is an asset in the Theory of Forms.

What the Theory of Forms cannot do is provide a single Form that qualifies both relata, the larger and the smaller. Yet, what it *can* provide is *paired* large-small qualifications. I take this pairing to be characteristic of plural-predication, not because the instantiated qualification is single, shared between the partakers, but because the partakings are paired. In the standard case of plural-predication, it is a single *instance* of a property that is shared between the plurally partaking individuals. At best, in the case of related individuals, there is a sense in which what is shared is a *generic* character that two Opposite Forms represent (if not embody) for example, for the Hot and the Cold being thermal. This is not in Plato. But what is in Plato, as we saw above, is the *interdependence* of partaking in pairs of Opposites in comparative contexts. Since there are no Forms of Larger and Smaller, the interdependence of these qualifications can be metaphysically cashed out only through the interdependence of the *partakings* that engender them. Such interdependence of partaking stems from the nature of the *Opposite* Forms, and is occasioned in comparative contexts where, for example, something cold is colder than something hotter. It follows that relations can be explained in the Theory of Forms through Opposite Forms, or, put differently, Opposite Forms would need to be assumed to explain any relation.

The interdependence is not reified in the Theory of Forms, for example, either through comparative Forms like *Hotter* and *Colder*, or through a generic Form of Temperature (or thermal state). It is represented ontologically in the interdependence of the partakings in the Hot and in the Cold, in comparative contexts. I take this interdependence to be the sense in which the partaking by Simmias and Socrates of the Form of Large and the Form of Small respectively is plural, that it is a *joint* partaking: partaking in a pair of Opposites is plural because interdependent, because the opposite qualifications of the partaking individuals are relative to each other. What we saw indicated in Plato's text is the interdependence of the qualifications; what I am suggesting is that this interdependence cannot be captured ontologically in meta-Forms about the Forms, but can be captured in the "joint-ness" of the partaking by the two individuals

in the Opposite Forms. This type of interdependence was already present in the repertoire of Plato's Theory of Forms before he addressed relations.⁶

There is further indication that Plato saw the relativity of Opposite Forms, arising as interdependence, despite his not positing meta-Forms to reify their interdependence. He says in the *Parmenides* (133 c 7–e 3) “those ideas which *are what they are relative to each other* have *their nature relative to one another*. . . mastery itself is what it is of slavery itself, and likewise slavery itself is slavery to mastery itself” (my emphasis). Although Plato does not discuss cases of *ordered* pairs, by extension from examples such as the present one we could assume that he would handle them by positing the respective Opposite Forms in his ontology (as he did for things that are colder than others). For example, having a Form of Lover and a Form of Loved would enable him to account for the ordered relation of “Chloe loving Daphnis” through their joint participation in that pair of Opposites.⁷ Aristotle captured the interdependence of relatives in terms of counterfactual dependencies on each other, for example, between a master and a slave or, as above, between greater and smaller. Aristotle handled it through ontological dependence between monadic properties, while Plato through partaking in pairs of monadic Forms—Opposites. I have tried to show that we should understand such partaking as joint partaking, in the sense “plural-partaking” in different Forms by different individuals, resulting in qualifications that are interdependent, just as plurally partaking individuals that share a single property; for example, two become, thereby, interdependently qualified.

Conclusion

Much of the subtlety of the Theory of Forms is lost if we do not recognize that Plato distinguished between two different types of partaking in the Forms: single-partaking and plural-partaking. *Plural-partaking captures the relativity of the resulting qualification(s)* through the *joint* metaphysical function of partaking occasioned in that context. In plural-partaking in the same Form, the relativity is captured also by the shared qualification. Symmetrically related individuals partake plurally in the same Form. We can understand asymmetrically related individuals as partaking *plurally* in pairs of Opposite Forms. We can thus associate plural predication more broadly with the following types of qualification: “being harmonious,” “being suitable,” “equal,” “being a spouse,” “a teacher,” “being the leader,” “being hotter,” etc.

I have tried to show that the *nature of plural-partaking*, namely the interdependence of the partakings, reflects the *relativity* of the resulting qualifications of the partaking individuals, whether in Hippias and Socrates being two, or in Simmias being larger than Socrates. In the case of asymmetrically related individuals, the interdependence

⁶ In the case of distributive predication there is no interdependence of qualifications.

⁷ For a contemporary discussion of similarity and ordered pairs in relation to *plural universals* see Hossack, *The Metaphysics of Knowledge* pp. 37–40.

of the qualifications cannot be derived from the ontology of the Opposite Forms they participate in. It is not an *ontological* connection between the Forms⁸ that signals relativity in the theory of Forms. Rather, joint partaking in one or more Forms suffices to capture the relativity of the qualifications, even when there is no shared single instance of a property between them.

Appendix on Castañeda's reading

Plato's theory of related individuals has not attracted much discussion in the exegetical tradition. More recently, there was a focused discussion of Castañeda's reading of Plato on relations,⁹ which triggered responses and criticisms by Gallop, McPherran, and Matthen.¹⁰ Castañeda's reading is fundamentally different from the present one, in so far as he premises it on a position that is antithetical to my position here, but also, a position I have argued is not Platonic. Castañeda's theory is based on the claim that

All Forms are monadic, i.e., each Form is instantiated only by one particular in each fact it is involved in: no Form is ever instantiated by pairs or other n-tuples, whether ordered or not.¹¹

This is a flat denial of the possibility of plural-partaking in a Form, which I have shown to be contradicted by Plato's account of plural-subjects. One apparent similarity between Castañeda's interpretation and the present one is that he holds that related individuals partake in chained-Forms, for example, Hot-Cold. But for Castañeda, nothing can partake in the Cold alone. Rather it must do so while something else partakes of the Hot. This has several ontological consequences for the Forms, which Matthen has itemized in his criticisms of Castañeda's account.¹² But the starkest problem I find in Castañeda's reading is that he avoids positing relations between things in the world only at the cost of introducing relations at the level of the Forms—relations which chain some Forms together, and which are *not* explained by the Theory of Forms. Apart from the explanatory gap this generates, it is also antithetical to Castañeda's claim that Platonic Forms are monadic. Castañeda says,

Plato (as does my [Castañeda's] general theory) reduces relations to special sets of *monadic* Forms, but does not reduce relational facts to non-relational facts.... Thus, it can be said that Plato (as well as my general theory) assimilates relations to monadic properties or qualities—in making them all monadic—even though he distinguishes (as I do) between the non-relational monadic properties, which can be participated in by particulars in isolation, and the *relational*

⁸ As per H.-N. Castañeda, "Plato's 'Phaedo' Theory of Relations," *Journal of Philosophical Logic* 1 (1972): 467–80.

⁹ H.-N. Castañeda, "Plato's 'Phaedo' Theory of Relations"; and H.-N. Castañeda, "Plato's Relations, Not Essences or Accidents, at *Phaedo* 102 b 2–d 2," *Canadian Journal of Philosophy* 8 (1978): 39–53.

¹⁰ D. Gallop, "Relations in the *Phaedo*," in *New Essays on Plato and the Pre-Socratics*, eds Roger Shiner and John King-Farlow, *Canadian Journal of Philosophy*, Supplementary Volume 2 (1976): 149–63; M. L. McPherran, "Matthen on Castañeda and Plato's Treatment of Relational Statements in the *Phaedo*," *Phronesis* 28 (1983): 298–306; and Matthen, "Relationality in Plato's Metaphysics."

¹¹ H.-N. Castañeda, "Plato's 'Phaedo' Theory of Relations," 471.

¹² M. Matthen, "Relationality in Plato's Metaphysics."

ones, which cannot be participated in except in company, with respect to the partakings of other Forms.¹³

It is clear that Castañeda requires second level relations in the realm of the Forms, in order to explain the nature of the *bonding* between Opposite Forms. Such relations would function as meta-Forms, whose partakers would be first level Opposite Forms. But such relational meta-Forms would fully undermine the Platonic program of rendering relations as monadic properties through the Theory of Forms. Not positing such relational meta-Forms would leave Castañeda's account with no explanation for the relational bonding of Opposite Forms, which is a fundamental gap, in view of the overall aim of Plato's ontology of monadic Forms, which Castañeda recognizes.

References

- Castañeda, Hector-Neri. "Plato's 'Phaedo' Theory of Relations," *Journal of Philosophical Logic* 1 (1972): 467–80.
- Castañeda, Hector-Neri, "Plato's Relations, Not Essences or Accidents, at *Phaedo* 102 b 2–d 2," *Canadian Journal of Philosophy* 8 (1978): 39–53.
- Dorr, Cian. "Non-Symmetric Relations," *Oxford Studies in Metaphysics* 1 (2004): 155–92.
- Fine, Kit. "Neutral Relations," *The Philosophical Review* 109 (2000): 1–33.
- Gallop, David. "Relations in the Phaedo," in *New Essays on Plato and the Pre-Socratics*, edited by Roger Shiner and John King-Farlow, *Canadian Journal of Philosophy*, Supplementary Volume 2 (1976): 149–63.
- Hossack, Keith, *The Metaphysics of Knowledge*, Oxford University Press (2007).
- Matthen, Mohan. "Relationality in Plato's Metaphysics: Reply to McPherran," *Phronesis* 29 (1984): 304–12.
- McPherran, M. L. "Matthen on Castañeda and Plato's Treatment of Relational Statements in the Phaedo," *Phronesis* 28 (1983): 298–306.
- Scaltsas, Theodore. "Relations as Plural-Predications in Plato," *Studia Neoscholastica* 10(1) (2013): 28–49.
- Williamson, Timothy. "Converse Relations," *The Philosophical Review* 94 (1985): 249–62.

¹³ H.-N. Castañeda, "Plato's Relations, Not Essences or Accidents," 41 (my emphasis).