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A critical analysis of the metaphysics of limit and unlimited in Plato's Philebus

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A Critical Analysis of the Metaphysics of Limit and Unlimited in Plato's *Philebus*

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Abstract

This paper examines several key passages within Plato's *Philebus* and analyses the underlying metaphysics that exists at the heart of the dialogue. Plato implements the metaphysics in the dialogue by utilizing the terminology of "the limit" and "the unlimited". This paper examines the Pythagorean origins of the limit and unlimited and depicts how Plato has adapted the terms from their original intent. The *Philebus* is examined to show the metaphysical importance of the limit and unlimited. The dialogue displays an example of the metaphysics of the limit and the unlimited through the debate between pleasure and intelligence, which is a central theme within the dialogue. This paper attempts to show how the metaphysical structure of the limit and the unlimited may be applied to other areas of his philosophy as well.

Introduction

The *Philebus* has been interpreted in various ways and many contemporary interpretations¹ have emphasized that the main point of the dialogue is to show how pleasure and intelligence are contrasted and related, without emphasizing the underlying metaphysics. This paper, on the contrary, argues that in the *Philebus*, Plato is exhibiting a metaphysics and that the concepts of the limit and the unlimited lie at the center of this metaphysics. A central topic in Plato's metaphysics is whether forms are "separated" and in what sense, but a full treatment of this complex topic is beyond the scope of this paper.² In this paper, I offer support for two related claims about the *Philebus*. First, while Plato obtained the terminology of the limit and the unlimited from the Pythagoreans, he has adapted the terminology to speak of the metaphysical structure that underlies everything; and, second, in his account of the limit and the unlimited, Plato is suggesting a rich metaphysical structure that underlies not only ethics, but other areas of his philosophy as well. The goal of this paper is to show that an important aspect of the dialogue is the metaphysically rich discussion of the limit and the unlimited, for it may be applied to a much wider scope of life, beyond the ethical discussion of pleasure or intelligence.

¹ Cristina Ionescu, "The Place of Pleasure and Knowledge in the Fourfold Ontological Model of Plato's *Philebus*," *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 30, no.1 (2015); Matthew Evans, "Plato's Rejection of Thoughtless and Pleasureless Lives," *Phronesis* 2, no.4 (2007); Gabriela Roxana Carone, "Hedonism and the Pleasureless Life in Plato's *Philebus*," *Phronesis* 45, no.4 (2000).

² For a thorough discussion of the topic, including bibliography, see Gail Fine, *On Ideas: Aristotle's Criticism of Plato's Theory of Forms* (Oxford: Clarendon Press, 1993).

I support my thesis by first examining the Pythagorean origins of the limit and the unlimited. Second, I set out and explain the metaphysical structure of the *Philebus*. Finally, I explain the metaphysical importance of the limit and the unlimited.

Chapter One: Pythagorean Background

As Kenneth Guthrie notes, we do not know as much about the figure of Pythagoras and his teachings as we would wish, yet the Pythagorean influence on Plato's writings, including the *Philebus*, is unquestionable.³ In the *Philebus*, Plato incorporates Pythagorean number theory with the notion of the limit and the unlimited, which is related to the Pythagorean view of an ordered universe.⁴ It is important to understand the Pythagorean notion of number, for number functions as the metaphysical root of Pythagorean philosophy. From what source Pythagoras ascertained the importance of number is uncertain, but Guthrie remarked that the view of the Pythagoreans differed from the modern notion of number, which is viewed as a quantitative measure; the Pythagoreans viewed number as a living qualitative entity.⁵ They viewed number as both scientifically discoverable and as a divine and universal principle. So, the Pythagorean notion of number reflects both scientific and religious aspects of Pythagorean teaching.⁶ As understood today, number often represents a specific quantity, but number in the Pythagorean sense is not something to be assigned a numerical value, for it is a universal entity in itself.⁷ Pythagorean cosmology regards its principles as universal and fundamental. Perhaps the most basic principle is that of One, which was not referred to as a number at all in the modern sense,

³ Kenneth Guthrie, *The Pythagorean Sourcebook and Library* (Michigan: Phanes Press, 1988), 24.

⁴ J.B. Kennedy asserts that Plato incorporated something called 'stichometry' or word counting techniques to write his dialogues that have been inspired by Pythagorean note systems. J.B. Kennedy, "Plato's Forms, Pythagorean Mathematics, and Stichometry," *Aperion: a Journal for Ancient Philosophy and Science* 43, no. 1 (2010): 22.

⁵ Kennedy, "Plato's Forms, Pythagorean Mathematics, and Stichometry," 22.

⁶ For more on this, see Guthrie, *The Pythagorean Sourcebook and Library*, 21.

⁷ Guthrie, *The Pythagorean Sourcebook and Library*, 22.

but instead acts as the underlying *principle* of number, including “numbers” such as odd and even.⁸

While the Pythagoreans construed number as the underlying constituent of reality, the metaphysical roots of number may be traced even farther back to the notion of monads and dyads. A monad acts as the One, or unity—simply the principle of number. A dyad represents duality and the starting point of multiplicity.⁹ The Pythagorean system, which is seen as the relationship between principles that create an “ordered-universe,” consists of three parts: unity, duality, and harmony, where harmony is the combination of the two extremes.¹⁰ F.M. Cornford describes this process, common to many early cosmologies, as follows: “(1) there is an undifferentiated unity. (2) From this unity two opposite powers are separated out to form the world order. (3) The two opposites unite again to generate life.”¹¹ These notions of unity, duality and harmony are echoed within the *Philebus* since Plato adopts this idea of generation through the combination of extremes.¹²

Kenneth R. Moore claims that Plato’s dialogue *Philebus* contains what he calls “Pythagorean semiotics.”¹³ This refers to the symbolic use of the central aspects of

⁸ Guthrie, *The Pythagorean Sourcebook and Library*, 22. The Pythagoreans viewed the world or cosmos as a combination of these elements or principles, such as the limit and the unlimited, Odd and Even, Good and Bad, which have been placed into a “Table of Opposites” and preserved by Aristotle in his *Metaphysics*. Aristotle, *Metaphysics*, in *The Basic Works of Aristotle*, ed. Richard Mckeeon (New York: Random House, 1941), 681—926.

⁹ Guthrie, *The Pythagorean Sourcebook and Library*, 22.

¹⁰ Guthrie, *The Pythagorean Sourcebook and Library*, 22. This is an important aspect that may be recognized in Plato’s metaphysics of the *Philebus* and shall be examined more within the second section of this paper.

¹¹ F.M. Cornford, “Mysticism and Science in the Pythagorean Tradition,” *The Classical Quarterly* 17, no. 1 (1923): 3.

¹² This will be more thoroughly discussed in the next chapter.

¹³ Kenneth R. Moore, “Pythagorean Symbolism in Plato’s *Philebus*,” *Athens Journal of History* (2016): 83.

Pythagoreanism, which include the terminology or division of limit and unlimited.¹⁴ The terms “limit” and “unlimited” are closely related to the notion of unities and dualities in the ordered universe. The limit and the unlimited create an interesting dichotomy as the two *seem* to be complete opposites, yet they exist together in a relationship, and this relationship is a manifestation of the Pythagorean roots of Plato’s theory. The limit and the unlimited according to the Pythagoreans, are regarded as the elements or principles of number, and therefore serve as the constituents in creating the ordered world. The limit and the unlimited act as the two extremes within the Pythagorean system. Guthrie notes that matter is tied to the unlimited and form is the limit.¹⁵ As limit is concerned with form, the limit imposes essential elements onto the unlimited, which exists as an indeterminate range until the limit is imposed. It is often claimed that the principles of unity and the unlimited were developed by Aristotle and expressed as form and matter.¹⁶ Owen Goldin claims that Aristotle thought that the Pythagoreans took number to be the elements of all things.¹⁷ Furthermore, Aristotle claims that the Pythagoreans “also consider that number is the principle both as *matter* for things and as forming their modifications and their permanent states” (*Metaphysics* 1.1.986a16-17).¹⁸ Thus according to Goldin, the Pythagoreans held that it is the elements of number that act as the *ultimate material cause* of things. If this is correct, there will be a clear difference between the Pythagorean view and Plato’s view since, as will be shown, the limit cannot be material.¹⁹ In the Pythagorean

¹⁴ Moore, “Pythagorean Symbolism in Plato’s *Philebus*,” 83.

¹⁵ Guthrie, *The Pythagorean Sourcebook and Library*, 24.

¹⁶ Owen Goldin, “Aristotle, the Pythagoreans, and Structural Realism.” *Review of Metaphysics* (2016): 693.

¹⁷ Goldin, “Aristotle, the Pythagoreans, and Structural Realism.” 693.

¹⁸ Aristotle, *Metaphysics*, in *The Basic Works of Aristotle*, ed. Richard McKeon (New York: Random House, 1941), 681—926.

¹⁹ While it is anachronistic to speak of the Pythagoreans and Plato in terms of Aristotle, in this case it is helpful as it displays the differences between the Pythagorean view and Plato’s.

system, unity gives rise to duality by having the limit imposed upon the unlimited, which thus gives rise to a new generation.²⁰ Unity, or One, gives rise to duality. It is from unity that all things arise, and the first change in unity is when it doubles and becomes two and the Dyad or duality arises.²¹ Yet, duality itself is both a one and a many. This view is supported by Hans-Georg Gadamer, who claims “addressing entities and reaching an understanding about them requires that the manifold entity be grasped in a unified way, in that which, as an entity, it always is.”²² Duality is one in principle, or the concept of duality exists as a unity in its definition, but in the application it becomes a many, as there is a many that participates in the concept of duality. When one speaks of “duality,” one is speaking of a concept, which is entirely different from other things, including other concepts. However, there are numerous dualities, or duality has many instances, which entitles one to speak of its being many. This can be extended to the claim that *any* individual whatsoever, since it is something and can be distinguished from every other thing, is one, but it is also *in some sense* a many. This applies even to physical things. A chair is one, but it is also many in that it is comprised of many physical parts—legs, arms, seat, back, etc. In the *Sophist*, Plato also illustrates this point that one is many, and many is one. In this passage, he says it almost seems absurd, yet is true. He illustrates the point by stating that anything may be divided into two. He uses the example of hunting, as it may be divided into land

However, as Pythagorean traditions are passed down orally, and considering Plato came before Aristotle, there is a lack of direct textual evidence to show that Pythagoreans viewed number as the constituents or material of reality, whereas Plato implements the terminology of the limit in an immaterial way, as a form of expression. Limit is likened to form, and thus exists as intelligible and immaterial.

²⁰ Guthrie, *The Pythagorean Sourcebook and Library*, 22.

²¹ Guthrie, *The Pythagorean Sourcebook and Library*, 21. Guthrie claims Theon of Smyrna, a Greek philosopher, influenced by Pythagorean teachings, claims that everything that is intelligible and not generated exists in unity. Unity is the most dominant principle in all things; all things emerge from it and it emerges from nothing and never departs from its nature.

²² Hans-Georg Gadamer, *Plato's Dialectic Ethics* (Bethany: Brevis Press, 1991), 121.

and sea hunting. He continues to divide land hunting into the hunting of tame and wild animals, illustrating that any one may be divided into a many.²³ When the limit is imposed on that which is unlimited, there is an offspring or mixture that is generated out of the extremes. According to Guthrie this new generation is seen in matter and is perceptible as it receives its shape by form or limit.²⁴ It is this aspect of the limit and the unlimited as metaphysical generators that Plato developed in his dialogues.²⁵

Kenneth R. Moore and George H. Elder draw distinct connections between the methodology of division or classification the *Philebus* employs and the Pythagorean number theory and the principles of the limit and the unlimited. There is a passage within the *Philebus* that references the Pythagoreans as “the men of old” who have passed down their methodology and orally claimed “all things, so it ran, that are ever said to be, consists of a one and a many, have in their nature a conjunction of limit and unlimitedness” (*Philebus* 16c).²⁶ Moore claims this is the first reference to the Pythagoreans and their number theory and their method of classification and division.²⁷ Pythagorean division is most notable in *Philebus* 23c-d. Socrates and Protarchus are discussing the classification of pleasure and intelligence among the limit and the unlimited, and conclude that pleasure along with pain reside with the unlimited and

²³ Plato, *Sophist*, in *Collected Dialogues*, ed. Edith Hamilton and Huntington Cairns (Princeton: Princeton University Press, 1961), 957-1018.

²⁴ Guthrie, *The Pythagorean Sourcebook and Library*, 24. There is the question as to whether that generation must always be raised in matter, but is beyond the scope of this paper.

²⁵ Guthrie, *The Pythagorean Sourcebook and Library*, 24. It should also be noted that Plato uses the terminology “limit” and “unlimited” in the *Timaeus*. Plato, *Timaeus*, in *Collected Dialogues*, ed. Edith Hamilton and Huntington Cairns (Princeton: Princeton University Press, 1961), 1151-1212

²⁶ Plato, *Philebus*, in *Collected Dialogues*, ed. Edith Hamilton and Huntington Cairns (Princeton: Princeton University Press, 1961), 1086-1151. All of the references to Plato have been made from this book. For the remainder of this paper I indicate the Stephanus number in the text.

²⁷ Moore, “Pythagorean Symbolism in Plato’s *Philebus*,” 84.

knowledge and intellect are akin to measure and belong with limit.²⁸ Plato ascribes the numeric methodology of Philolaus to the division that Elder claims is derived from Pythagorean models developed by the late Pythagoreans.²⁹ The section of the *Philebus* to which Elder is referring is “the first, then, I call the unlimited, the second the limit, and the third being what has come to be by the mixture of these two, as to the fourth, I hope I shall not be at fault in calling it the cause of the mixture and of the coming-to-be” (*Philebus* 27b).³⁰ Moore claims that the fourth kind, the cause, may be a consequence of the division methodology of the limit and the unlimited.³¹ For all manufactured things, an intelligence is the cause of a limit being imposed on the unlimited. Plato claims that the universe is ordered, and since it cannot have been ordered by accident, clearly the cause of everything in the ordered universe is an intelligence. As Plato holds, the universe is ordered according to the fourfold division of limit, unlimited, mixture and cause.

Guthrie claims that the Pythagorean view is that the cosmos was created out of the limit and the unlimited, or the elements of number. Furthermore, he claims that Plato has adopted this cosmology almost to the letter.³² However, Goldin’s position is while Plato uses the terminology of the Pythagoreans and Philolaus, he has not adopted their views.³³ The cosmology entails that

²⁸ Moore, “Pythagorean Symbolism in Plato’s *Philebus*,” 84.

²⁹ George Elder, “The Influence of Pythagorean Thought on Plato’s Concept of Forms,” from the website Pythagorean Influences on Plato’s Concept of Forms, 1994. <http://www.ghe101library.com/academic-works/pythagorean-influences-on-platos-concept-of-forms>

³⁰ Gadamer, *Plato’s Dialectic Ethics*, 129. Gadamer also claims that the mixture of the limit and unlimited is derived from Pythagorean origins, and can be linked to Philolaus in fragment one and two.

³¹ Moore, “Pythagorean Symbolism in Plato’s *Philebus*,” 84. Moore also notes there may be a reference to the tetractys, which is a triangle symbol that represents unity, dyad or the power of limit and unlimited, harmony, and kosmos. Moore also recalls within the *Timaeus*, the four-sided tetrahedon was used in reference to the Pythagorean symbolism of “cosmic fire”.

³² Guthrie, *The Pythagorean Sourcebook and Library*, 24.

³³ Goldin, “Aristotle, the Pythagoreans, and Structural Realism,” 693.

limited, unlimited, form and matter are connected through “numerical harmony” and their offspring, the mixture of limit and the unlimited, “is composed of universal constants and local variables,”³⁴ or unity and duality. However, Plato has not merely adopted the Pythagorean view; he has changed and adapted it. Plato accepts that “limit”, “unlimited”, “mixture”, and “cause” are the underlying principles of the universe, but in his account the terms are modified and expanded from their Pythagorean origins. Plato uses the terms “limit” and “unlimited” to speak of the metaphysical structure that underlies everything. For Plato the limit is immaterial while the unlimited is physical. On Plato’s view, since the term limited may be used to describe the physical world it is not a *component* of the physical world, or the physical world is not a composite of numbers, but its structure may be *expressed* by numbers, through things such as ratio or scale.³⁵

³⁴ Moore, “Pythagorean Symbolism in Plato’s *Philebus*,” 84.

³⁵ As the limit is tied to form, it is not a component of the universe as it is not material. Furthermore, Cristina Ionescu claims that the limited class also contains forms, which cannot be material. The limit, as will be shown in the next chapter, uses mathematical ratios to express the essence of the things it is limiting. See Cristina Ionescu, “The Place of Pleasure and Knowledge in the Fourfold Ontological Model of Plato’s *Philebus*,” *Proceedings of the Boston Area Colloquium in Ancient Philosophy* 30, no.1 (2015): 4—5.

Chapter Two: The Metaphysical Structure of the *Philebus*

The *Philebus* may be divided into four parts. The first is the “dialectical” part of the discussion. This section centers around the classification of pleasure and knowledge, the problem of the One and Many, and the fourfold division of all things (11a-27c).³⁶ The second part is a critical analysis of the discussion, centering on a critique of pleasure and knowledge, especially on true and false pleasures (31d-59d).³⁷ The third part is synthetic, the mixing together of the components of a good life (59d-64b).³⁸ The final part is the solution to the discussion, or the final ranking of the components (64c-67b).³⁹

In the *Philebus*, Plato develops an extended argument showing that neither pleasure nor intelligence alone constitute a good life. This is in reply to Philebus, who believes that attaining pleasure is the ultimate end of human existence. The passage begins with the continuation of a previous conversation between the characters Philebus and Socrates concerning what is the nature of the best life of a human being, pleasure or intelligence. Protarchus assumes the role of spokesman for Philebus. Protarchus argues that pleasure is the ultimate source of happiness for all humans. Socrates argues for the opposing side, that intelligence is the component of the best life.

At 13e-15e, Plato develops his argument by discussing the problem of the One and the Many. He claims “knowledge taken in its entirety will seem to be a plurality in which this knowledge is unlike that—even, it may be, this knowledge opposite to that”, meaning that while

³⁶ Dorothea Frede, *Philebus* (Indianapolis, Indiana, 1993), vii.

³⁷ Dorothea Frede, *Philebus*, vii.

³⁸ Dorothea Frede, *Philebus*, vii.

³⁹ Dorothea Frede, *Philebus*, vii.

knowledge is intrinsically good, it does admit of greater or lesser degrees (*Philebus* 13e-14a). Socrates then admits this is the problem of the One and the Many, claiming that it is different from the notion of one thing having many characteristics, such as Protarchus being both tall and short. He instead claims that the Ones in question are the “ungenerated and imperishable monads” (*Philebus* 14d). His examples of monads include man, ox, the beautiful, and the good. A question concerning monads is how many distinct things can “share” a single monad, or, as Socrates puts it, “an identical unity being thus found simultaneously in unity and in plurality” (*Philebus* 15b). In discovering these unities and pluralities, Socrates insists that they exist everywhere, will always exist, and shall never cease to exist.

To continue, at 16c-17e Socrates introduces the metaphysics of the limit and the unlimited as a remedy for the problem of the One and the Many. As he states, “it is indeed the instruments through which every discovery ever made in the sphere of the arts and sciences has been brought to light” (*Philebus* 16c). He begins by depicting the metaphysics as a gift from god brought to light by the men of old, speculated to be the Pythagoreans. Everything said to be consists of a one and a many, and with that conjunction it admits of a limitedness and unlimitedness. To begin to identify the essence of something, it must be assumed to be contained in a single monad. Once that monad is identified as the One, it must be further examined to see if it admits of more than one monad, and so on and so forth until the one monad that has been identified has turned into an unlimited many. Socrates provides three examples of this methodology. The first example Socrates uses is the alphabet, where the one stands for the basic sounds that may be uttered by anyone, and the unlimited lies in the variety of sounds that may be uttered. To explain, one begins with the alphabet and the basic sounds it produces. Upon attaining that One, one must next search for many other sounds that may be derived from the

alphabet, only to find that there are infinite combinations of letters that produce countless sounds with varying ranges, or the Many. He exemplifies his argument by claiming a man is “lettered” or has knowledge of language by knowing the specific sound as well as its variations. For one may not be considered an expert in a language without having knowledge of the individual parts, as well as how those parts come together in the creation of language.

The purpose of this paper is to demonstrate the metaphysical importance of the limit and the unlimited. To do that I shall explain the relevant passages at 23c-26d of the *Philebus*, as it is here that Socrates enumerates and explains the four kinds: unlimited, limit, mixture and cause. The discussion begins by stipulating that there are three kinds of things in the universe: the limit, the unlimited, and mixtures of the two. Upon further pondering, a fourth is added as the cause of the third kind, the mixture. Socrates begins by detailing what kind unlimited entails. Socrates states the unlimited may be understood as a many, or a range such as “hotter or colder” or “more or less” (*Philebus* 24b). To be unlimited is to exist without bounds, or to never admit of a specific determinate quantity. He furthers this point by stating as we find things becoming more or less or admitting of terms such as “strongly,” “slightly,” or “very,” we ought to view them as belonging to the same kind, which is the unlimited. Gadamer states “the indefinite reference of these comparative statements contains no limit or definition; instead they are always characterized by a more or a less. As something warmer or colder, the entity that is defined in this way is necessarily unfinished and indefinite in self”.⁴⁰ The reference to the term “hotter” is indeterminate, as it never stops where it is but continues until a definitive quantity is assigned. Since it is a comparative term, limits of degrees are to be established, once the limit is established; the unlimited nature of the term “hotter” ceases as it now can be used comparatively

⁴⁰ Gadamer, *Plato's Dialectic Ethics*, 131.

and precisely. Socrates reminds his listeners of the proper way of grouping things together: “we ought to do our best to collect all such kinds as are torn and split apart and stamp a single character on them” (*Philebus* 25a). This is exactly how he grouped the unlimited terms together, by discerning and separating which terms admit of an undefined range and lumping them together under the common kind of the unlimited. Furthermore, Gadamer claims that all of the kinds of unlimited things belong to the same class of unlimited insofar as they all share the common unifying feature of no definite quantity; thus, when the limit is imposed and measure takes place in the entity, the indefiniteness is excluded, and the entity becomes established and definable.⁴¹

Socrates continues the discussion by separating out that which contains a limit. Terms that admit a quantitative measure or ratio of one number to another, such as equal or double, are under a limit. He depicts the term that admits a limit as a mediator of sorts as it “puts an end to the conflict of opposites with one another, making them well-proportioned and harmonious by the introduction of number” (*Philebus* 25e). Cristina Ionescu claims that insofar as the members of the limited class are “mathematical ratios,” they indicate measure using scale and thus bring order to the unlimited.⁴² To express how ratio and proportion act as mediators, Ionescu brings up health. Health may express itself through the limit, or ratios, that structure the essential characteristics of human health, that would otherwise exist in the unlimited flux of higher and lower or more and less. When ratio and measure is applied to characteristics of human health

⁴¹ Gadamer, *Plato's Dialectic Ethics*, 131.

⁴² Cristina Ionescu, “The Place of Pleasure and Knowledge in the Fourfold Ontological Model of Plato's *Philebus*,” 4- 5. Furthermore, Ionescu claims that in addition to ratio and numbers, the class of the limited includes intelligible forms. However, she has since adopted a view closer to Mitchell Miller, which holds that the class of the limit only contains ratio and number, as the forms exist beyond the fourfold ontology and act as the source of order for the members of the limited class.

such as blood pressure or weight, then these ratios create the presence of a limit, which Ionescu claims ensures that the nature or essence is preserved in the thing that it limits.⁴³ This expresses the essence of health within the limit, as the ratios of proper health characteristics. Thus, the proper ratios of health characteristics act as the limit that brings structure to the unlimited ranges such as high and low or more and less.

Socrates moves to discuss the third kind, the mixture of the first two kinds. To begin, take the kind of the unlimited with terms such as wetter or drier, and combine it with the kinds of the limit, such as equal, and from the combination a new product is created. Consider music. Initially there is an unlimited range of high or low pitches. With the introduction of confining elements, such as measures and scales, one establishes the art of music. Socrates defines the kind of mixture as “the source of fair weather and all other beautiful things, namely in the mixture of the unlimited with that which has a limit” (*Philebus* 26b). He goes on to claim that there are countless aspects of the world that may be identified through this methodology, such as strength, health and beauty, as the result of the imposition of the limit on the unlimited. The mixture itself is a sensible particular that is generated from the limit being imposed onto the unlimited, of which Socrates says, “now as to the third kind, I am reckoning all this progeny of our two factors as a unity, and you may take me to mean a coming-into-being, resulting from those measure that are achieved with the aid of the limit” (*Philebus* 26d). Gadamer highlights that the significance of coming-into-being is the importance of the unified being, the mixture, composed of the limit and unlimited; this implies that the essential nature of the world is defined by measure.⁴⁴ Thus, through number and measure, the ontological sense of coming-into-being

⁴³ Ionescu, “The Place of Pleasure and Knowledge in the Fourfold Ontological Model of Plato's *Philebus*,” 5.

⁴⁴ Gadamer, *Plato's Dialectic Ethics*, 138.

may be understandable or able to be defined. Since the mixed class contains things that come-into-being, the mixtures belong to the class of sensible things and particulars.⁴⁵ Ionescu claims that the examples given within the *Philebus* such as health, strength, beauty, living things, and the good human life are all instances of harmonious mixtures. However, Socrates does not suggest that every being in the mixed class is necessarily a good mixture, as the class of mixtures is broad as it accounts for the various combinations of the limit and the unlimited.⁴⁶

The fourth kind, cause, is examined next, for it is necessary that for all things that come into being that there is a cause. Socrates hold that cause is the source of mixture as it is responsible for and presides over the imposition of the limit onto the unlimited. Socrates holds divine reason and knowledge are closely related to the degree of harmony within the mixture, since the mixture is dependent upon the degree of reason that presides over the imposition of the limit onto the unlimited.⁴⁷ Socrates holds that the thing that creates something and the thing that causes something to come into being are one and the same, with only a verbal difference (*Philebus* 26e). As it is natural to assume that the thing that is being generated is subservient to and occurs after the initial cause itself, the cause is different from the other three kinds as they all admit of things that come into being. This cause is similar to, perhaps identical with, Aristotle's efficient causality insofar as it deals with bringing a mixture into being through the imposition of

⁴⁵James Wood, "The Unorthodox Theory of Forms in Plato's *Philebus*," *Journal of Ancient Philosophy* 11, no.2 (2017): 45-81. James Wood refers to these generations as "the lower level 'offspring' of the limit."

⁴⁶Ionescu, "The Place of Pleasure and Knowledge in the Fourfold Ontological Model of Plato's *Philebus*," 5. Ionescu elaborates and states that the mixtures are created in the extreme, meaning they get their nature from the extreme of the limit and the unlimited. Yet she acknowledges that it is difficult to determine the range of normality within the mixture, and the only determining factor in the range of non-normality is if there is a complete lack of limit.

⁴⁷ Ionescu, "The Place of Pleasure and Knowledge in the Fourfold Ontological Model of Plato's *Philebus*," 6.

a limit. It is sometimes held, especially by Goldin, that Aristotle thought the elements of number act as the ultimate material cause of things. Goldin states that the principles of number such as even and odd, or limit and unlimited, act as material causes, with number becoming a higher level of matter, as the Pythagoreans held the elements of number as the elements of reality.⁴⁸

These four kinds and how they relate to each other are the metaphysics of the limit and the unlimited. They hold great metaphysical power, for later in the dialogue they are implemented in the discussion of pleasure or intelligence to properly depict what is a good life for a human being. However, this is simply one example of this methodology. Plato is suggesting that the four kinds have a metaphysical structure that underlies everything that we may speak of and may be applied more widely than an ethical discussion. The methodology of the four kinds may be used to decipher the essence of anything. For example, consider a piece of music. Any piece of music admits of a One and a Many, where the one consists of all of the many parts coming together and the many referring to the numerous unlimited ranges that may exist in the parts, such as pitch and volume. The four kinds may be implemented, as the finished product consists of the mixture of the limit and the unlimited. To begin, there is the unlimitedness of the varying chords and ranges that appear meaningless. However, once the limit is implemented in the form of measure or ratio, the music is intelligible. When the limit is implemented, the final product of the music is generated as the mixture of the first two kinds the limit and the unlimited. However, there may be questions regarding proportion, as due to the broad class of mixtures, some mixtures are more harmonious than others. In a piece of music, the notes and chords are arranged in a certain order to maximize the desired sound. To achieve

⁴⁸ Owen, "Aristotle, the Pythagoreans, and Structural Realism," 694. Goldin claims that Aristotle gets his understanding of odd and even through the Pythagorean table of opposites, where the odd is related to the limit, and even is related to the unlimited.

this desired sound, the instrument in question must be properly tuned, for if it is out of tune then the notes and chords do not create the desired sound. When the instrument is properly tuned, the limited tune and order of chords is imposed on the unlimited infinite number of possible sounds and produces the desired harmonious music. If there is not the proper proportion imposed, then the music generated will not be harmonious.

A central topic in the *Philebus* is the relation of pleasure and knowledge, and what mixture of the two constitutes the best human life, but within this context, Plato shows that each thing has a metaphysical structure that is comprised of both the unlimited and the limit, and that this structure is produced by a cause that imposes the limit on the unlimited. As noted above, the methodology of the limit and the unlimited "is indeed the instrument through which every discovery ever made in the sphere of the arts and sciences has been brought to light." (*Philebus* 16c). The methodology described in the *Philebus* characterizes both metaphysics and how the knowledge of any art or science is possible. The mixtures of the limited and the unlimited can be harmonious or not. Whether the mixture is good depends upon the intelligence and knowledge provided by the cause. Notes may be strung together without creating good music. In determining what constitutes a good mixture Socrates depicts what is necessary to create a good and harmonious mixture. In the next chapter I demonstrate that the metaphysical importance of the limit and unlimited may be applied to a wider scope of life than the discussion of pleasure, by determining what constitutes a good mixture.

Given how Plato implements the limit and the unlimited to create a mixture, it is clear that his view differs from the Pythagoreans. The Pythagoreans held the limit and the unlimited as the elements of number, which act as the underlying constituents of reality. This led Aristotle to believe that the Pythagoreans viewed the elements of number at the ultimate material cause.

Plato, however, holds that the limit is immaterial, and implemented the limit as a way to express the underlying nature of the physical world, like how health may be expressed through limiting ratios of proper health characteristics.

Chapter Three: The Metaphysical Importance of Limit and Unlimited

In the *Philebus*, Plato makes an extended argument to convey that good things come to be as a result of a successful mixture. As the central theme of the *Philebus* is the good life for the human, the focus is determining which mixtures have the elements to create the good life that is desirable itself.⁴⁹ This chapter demonstrates how the metaphysical structure of the limit and the unlimited in the *Philebus* is important insofar as it provides a metaphysical account of what constitutes the mixture that renders the good human life. If the limit works much like form, then anytime we have a mixture we may have multiple limits imposed on the unlimited. At 59d-66d, Socrates places the good mixed life in an argument, by determining what things should be mixed together.

Socrates and his debaters determine that knowledge of all kinds is to be included in the mixture; pleasure is also to be included, but only true pleasure, or pleasures that spring from virtue. Truth is also necessary to be mixed in for “nothing in the world could come to be without it” (*Philebus* 64a). After determining the three ingredients—knowledge of all types, the purest pleasures, and truth—the speakers determine that they are approaching the threshold of the good within the mixed life. Socrates declares that they cannot find the good under a single monad, and shall search for the good under “the conjunction of three, beauty, proportion, and truth, and then, regarding these three as one, let us assert that *that* may most properly be held to determine the qualities of the mixture, and that because *that* is good that mixture itself has become so”

⁴⁹Ionescu, “The Place of Pleasure and Knowledge in the Fourfold Ontological Model of Plato's *Philebus*,” 135-137.

(*Philebus* 65a). Since it has already been determined that in a good mixture the cause must have intelligence or knowledge, and truth is necessary, so it is also essential for a mixture to have proportion insofar as the proportion is imposed by the limit. Where there is proportion or measure there must be beauty, so beauty is required in a good mixture. In this sense, beauty is the ontological consequence of proportion or measure.⁵⁰

In accepting the good is in the mixed life, the speakers decide to next settle their debate regarding pleasure or intelligence by determining which one is more akin to the good in the mixed life. They begin by comparing pleasure and intelligence to the three forms used in combination to capture the good. Truth is considered first, and it is determined that reason or intelligence is closer to the truth than pleasure, as Protarchus proclaims that pleasure “is the worst of all imposters” whereas “reason on the other hand, if not identical with truth, is of all things the most like it, the truest thing in the world” (*Philebus* 65c). Measuredness is contemplated next, and Protarchus quickly states that it is reason that is more akin to proportion as pleasure is in its very character unmeasured. Lastly, Protarchus claims that there is no instance in which knowledge or intelligence would be considered ugly, or even be conceived of as becoming ugly (*Philebus* 65d-e). Thus, intelligence prevails over pleasure as it is more akin to the three forms of truth, proportion, and beauty. Finally, the ingredients of the good life are ranked according to their respective additions to the depiction of the good mixed life. What is ranked first is measure or proportion, second is beauty and perfection, third is reason and wisdom as the highest kind of knowledge, fourth is inferior knowledge, and fifth place belongs to pure pleasures.

⁵⁰ Satoshi Ogihara, “Plato’s Inquiry into the Good Life and the ‘Good’ in the *Philebus*,” (PhD diss., University of Pennsylvania, 2012), 174.

There is a distinction to be made between those that are ranked first and second, and the last three places. The last three ranks are the ingredients of a good life, while the first two are conditions that exist among the ingredients, such as measure, and act as characteristics of the mixture as a whole, such as beauty or completeness.⁵¹ In setting apart the last three kinds, Socrates is reaffirming the need for truth as knowledge, which is more akin to truth, is ranked higher than pleasure. It seems as if the first two ranks, measure (or proportion) and beauty are ranked higher, for they are responsible for making the ingredients, or the lower three ranks, good within the mixture.⁵²

The final ranking of goods shows the metaphysical importance of the *Philebus*, for it not only depicts how a mixture comes into being, it also depicts the characteristics of the ingredients that make the mixture a good one. The *Philebus* is significant as it not only addresses the ethical quarrel between pleasure or intelligence, but it extends beyond the ethical. The methodology of the limit and the unlimited allows for humans to understand or comprehend the good. The metaphysics in this dialogue is important, for it accounts for the generation of sensible particulars as the result of the imposition of limit on the unlimited, yet it can be applied in a much more significant way, such as using the methodology to discern the good within the mixed life for a human. The mixed life is a result of multiple limits being applied to the unlimited that results in a harmonious mixture. Furthermore, in enumerating the different ranks in accordance to the strength of its addition to the mixture, Plato is constructing an intelligible way for humans to understand and comprehend the good and how to implement the good within the mixed life.

⁵¹ Ogihara, "Plato's Inquiry into the Good Life and the 'Good' in the *Philebus*," (PhD diss., University of Pennsylvania, 2012), 175.

⁵² Ogihara, "Plato's Inquiry into the Good Life and the 'Good' in the *Philebus*,"

Conclusion

Although the *Philebus* is widely interpreted as a dialogue emphasizing the ethical discussion of pleasure or intelligence, the metaphysical structure of the dialogue deserves more emphasis than it has heretofore received. The metaphysical structure that Plato implements within the *Philebus* includes the terminology of the limit and the unlimited that Plato has adapted from the Pythagoreans. Plato views the term limited as a way to *express* the physical world's underlying structure through ratio or scale, and not as *component* of the physical world itself. The metaphysics of the limit and unlimited is expressed by the four kinds, unlimited, limited, mixture, and cause. When the limit is imposed on the unlimited by a cause, then a new generation is formed in a mixture. A central topic in the *Philebus* is what must be mixed into the mixture that constitutes the best human life. Within this context, Plato goes beyond the demonstration of a good mixed life, to show that each thing has a metaphysical structure that is comprised of both the unlimited and the limit, and that this structure is produced by a cause that imposes limit on the unlimited.

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