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De Pulchritudine:

An Investigation into the Analogical Nature of Beauty

A Thesis Submitted to

Dr. James Jacobs and Dr. Mark Barker

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William Charles Whitlow

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Ever since the creation of the world his invisible nature, namely, his eternal power and deity, has been clearly perceived in the things that have been made. So they are without excuse; for although they knew God they did not honor him as God or give thanks to him, but they became futile in their thinking and their senseless minds were darkened. — Romans 1:20-21

“This[beauty] is the very way in which reason is freed from dullness and made ready to act.”

— Cardinal Joseph Ratzinger, in “The Feeling of Things, the Contemplation of Beauty”

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Introduction

A Contemporary Debate

There is a crisis of beauty in modern culture. Not that beauty has faded away from our collective vocabulary, but that we have willfully closed ourselves off from receiving beauty because the essence of beauty as that which awakens wonder is in danger of being lost in contemporary society. This has been replaced with a world that is filled with nothing but mundane sights wherein nothing is a marvel for contemplation, but is rather merely signs leading to other knowledge. As such, to restore the sense of wonder that has been lost to modern times it must be argued that beauty is a metaphysical term.¹ However, before beginning to outline the metaphysical nature of beauty, I first want to introduce two different understandings of beauty. The first is from Mark Twain and the second is a personal anecdote from my time studying mathematics for a degree in Computer Science.

Mark Twain's understanding of beauty tends to be caught in the crossroads between an unreserved appreciation for natural beauty and empiricism. Two passages from his work *Life on the Mississippi* highlight this point exceptionally well. In the first Mark Twain reminisces on his days of learning to pilot a steamboat. In the beginning, he is left dumbfounded by the beauty of a sunset on the river, however, by the conclusion, he no longer appreciates the beauty of that sunset but instead only sees the signs of future dangers.² The second passage, even more, solidifies his belief that knowledge robs one of beauty. Here Twain considers what it must be like for a doctor to see a beautiful woman after having mastered his trade:

1. James M. Jacobs, "Beauty as an Excess of Intelligibility," *Logos: A Journal of Catholic Thought and Culture* 19, no. 2 (2016): 18–21,
<https://www.stthomas.edu/media/catholicstudies/center/logosjournal/archives/2016volume19/192/19.2Jacobs.pdf>.

2. Mark Twain, *Mark Twain: Life On The Mississippi* (New York: P. F. Collier & Son Company, 1917), 77–80.

No, the romance and beauty were all gone from the river. All the value any feature of it had for me now was the amount of usefulness it could furnish toward compassing the safe piloting of a steamboat. Since those days, I have pitied doctors from my heart. What does the lovely flush in a beauty's cheek mean to a doctor but a 'break' that ripples above some deadly disease? Are not all her visible charms sown thick with what are to him the signs and symbols of hidden decay? Does he ever see her beauty at all, or doesn't he simply view her professionally, and comment upon her unwholesome condition all to himself? And doesn't he sometimes wonder whether he has gained most or lost most by learning his trade?³

According to Mark Twain, an abundance of knowledge destroys one's ability to recognize beauty.

However, it seems to me that this cannot be the case. The beauty that the doctor observes cannot both be beautiful and not beautiful at the same time. Instead, it would only be an overly critical mind of a doctor to no longer be able to see the beauty as beautiful. The objective beauty of the patient is still present, but the doctor may, through his experience and knowledge, block himself off from this reality. It is for this reason that it is necessary to explore beauty from a metaphysical perspective. For by broadening the mind beyond pragmatic interests, one can grow in awareness, breach the mundane, and recognize the inexpressible wonder of creation.

Likewise, I remember a time while taking classes in mathematics wherein I despised the calculations/proofs that were required for either calculus or combinatorics. Yet later on I would be using the same calculations under a different setting, or a particular proof I was struggling with would become clear to my intellect, and I remember thinking that there was an immense beauty present. The mathematical equations and the proofs themselves did not and cannot change. The only thing that changed was my understanding of the subject. Although I was completely unaware of philosophy at the time (and certainly of metaphysics), I believe that the intuition I had then is characteristic of the nature of beauty that I intend to explore further throughout this work.

3. Twain, *Mark Twain: Life On The Mississippi*, 80.

In order to reconcile the two different viewpoints provided above it will be necessary to address the metaphysical nature of the term ‘beauty.’ This, however, is a contested matter within contemporary scholarship, with much of the discussion centering around the question of the transcendental status of beauty (cf. §4.2.2). Rather than directly addressing the question of transcendental status, this work will argue that beauty is an analogical term definable across all modes of being (these modes are material, intelligible, spiritual, and metaphysical). Before arguing that beauty is an analogical metaphysical term, it is important to begin with definitions about the nature of beauty.

The Definitions of St. Thomas Aquinas

Unfortunately, St. Thomas Aquinas, although a prolific writer and commentator, never explicitly dedicates a section of his work to the fundamental nature of beauty. As a result, modern efforts to understand Aquinas’s precise thoughts on beauty require collating the multitude of times that the term is mentioned throughout his works. This makes precise clarity difficult, since the works of Aquinas span an impressive gambit, from commentaries on Sacred Scripture and Aristotle to the *Summa Theologiae*. The term *beauty* is utilized in a multitude of ways in a multitude of settings. Hence, it is the task of the modern reader to discern the specific meaning of this term.⁴

Definition #1: Pleasing When Seen

Fortunately, though, Aquinas does offer some general principles of beauty that are useful for forming a definition. The first and most general reference to beauty is from Aquinas’s treatment of the good in the *Summa Theologiae*. Aquinas identifies that beauty is closely related to the good; but rather than being a desire of the appetite, beauty combines both appetitive and

4. Christopher Scott Sevier, *Aquinas on Beauty* (Lanham, Maryland: Lexington Books, 2015), 2.

cognitive aspects. Accordingly, Aquinas simply defines beauty as: “*pulchra enim dicuntur quae visa placent* (for beautiful things are those which please when seen).”⁵

Now admittedly this particular quote, although instrumental to Thomistic discussions of beauty, is somewhat ambiguous as to the nature of beauty because it is about man’s natural reaction to beauty. As such it is not instantly apparent what the exact denotation of ‘seen’ is. However, his position can be clarified when we consider another quote from later in the *Summa Theologiae*: “The notion of the beautiful is that which calms the desire, by being seen or known.... Thus it is evident that beauty adds to goodness a relation to the cognitive faculty: so that *good* means that which simply pleases the appetite; while the *beautiful* is something pleasant to apprehend.”⁶ Since the cognitive act requires both the senses and the intellect⁷ this becomes the foundation by which beauty can be considered analogical. For the object of the senses is material being; whereas the object of the intellect are the immaterial aspects of reason. Accordingly, the same principles that allow for the understanding of material beauty will correspond to immaterial being, however, given that these modes of being are experienced under different operations it becomes apparent that the definition of beauty must be understood according to the mode of being. As such, beauty will be present in diverse modes of being.⁸ Despite the differences within each mode, all modes of beauty elicit the same response of joy. As such, beauty is not a univocal term but an analogical term. This will be demonstrated further by treating the various modes of being specifically. However, before this can be done; we must consider the objective properties of being that are the cause of pleasure in cognition.

5. St. Thomas Aquinas, *Latin/English Edition of the Works of St. Thomas Aquinas: Summa Theologia*, I.5.4 ad 1 trans. Fr. Laurence Shapcote, OP (Green Bay, Wisconsin: The Aquinas Institute, 2012).

6. *ST* I-II.27.1 ad 3.

7. *ST* I.85.1.

8. Sevier, *Aquinas on Beauty*, 182.

Definition #2: The Three Criteria

Aquinas outlines three separate objective properties that make something beautiful. These three principles are “*integrity or perfection*, since those things which are impaired are by the very fact ugly; due *proportion or harmony*; and lastly, *brightness or clarity*, whence things are called beautiful which have a bright color.”⁹ The varying degree to which these criteria are found in beings will also correlate to the degree of beauty the being possesses.

The first criterion of integrity/perfection is perhaps the simplest to understand. In general, this criterion details that a being that is lacking an aspect of its perfection, such as a bird with a missing wing or a man with a missing hand, is less beautiful than a being without that particular defect. Thus a noticeable defect which reveals that something is lacking is not cognitive pleasing.

The focus of proportion/harmony is discovered in the concordance of the particular to the ideal/whole. As such, Aquinas states regarding proportion/harmony: “We see that an image is said to be beautiful, if it perfectly represents even an ugly thing.”¹⁰ The image in perfectly maintaining the proportion of the intended subject is beautiful because the intellect can see the resemblance between the painting and the subject. Moreover, as Maritain notes, proportion is dependent upon the subject since “proportions good in a man are not good in a child.”¹¹ Likewise, it can be recognized that a man who has one arm that is shorter than the other is less beautiful, because there is a defect of proportion present within the man.

The last criterion then is that of radiance/clarity is one of absolute necessity, but is not particularly well-explained by Aquinas’s statement that “things are called beautiful which have a bright color.”¹² Aquinas will clarify this by describing the third criterion as “the light and

9. *ST I.39.8*. Italics in Original.

10. *ST I.39.8*.

11. Jacques Maritain, *Art and Scholasticism*, trans. J. F. Scanlan (Providence, Rhode Island: Cluny, 2020), 29.

12. *ST I.39.8*.

splendor of the intellect.”¹³ Now, this particular criterion “must be understood [as] an *ontological* splendor which happens to be revealed to our minds, not a *conceptual* clarity.”¹⁴ An *ontological* splendor is the brilliance of being which inspires joy, as opposed to *conceptual* clarity which refers to truth. The reason for this signification is that in order for beauty to manifest itself it must occur in a manner of excellence that corresponds to its being. Thus it can be recognized that no man is recognized as a beautiful man from three miles away, because there cannot be sufficient clarity to identify the beauty of a man from that distance. As such, Maritain states that beauty “begins to exist as soon as the radiation of any form over a suitable proportioned matter succeeds in pleasing the mind.”¹⁵

We will see how these three criteria are to be understood analogically in the various modes of being. For by identifying these criteria with further examples and principles in the contexts of material, intelligible, spiritual, and metaphysical beauty the validity of these definitions will be demonstrated. This will ultimately provide a basis by which one can argue that beauty is a transcendental.

Now, there are two errors that could result from this definition of beauty. One interpretation is that beauty merely applies to physical objects. For example some might insist that, there exists a set of quantifiable proportions/colors that are responsible for beauty. The danger in this is that it limits beauty solely to the physical realm, which would seem to contradict the earlier anecdote about mathematics. The opposing error is to completely spiritualize beauty, to argue that beauty is only discernible in an abstract metaphysical sense. The danger is that this error neglects the importance of identifying beauty according to the mode of being, by forcing

13. *ST* I.39.8.

14. Maritain, *Art and Scholasticism*, 29n. Italics in Original.

15. Maritain, *Art and Scholasticism*, 30.

beauty to be an unchangeable ideal and a univocal notion. This also fails to explain how it is that one can see beauty in a mathematical equation, wherein another does not, since an unchangeable ideal should be graspable and then known by all in all circumstances. In reality, beauty is present in both the physical and the spiritual realm. Therefore by demonstrating that beauty is an analogical metaphysical term one will understand better what is meant in saying 'X is beautiful.'¹⁶

16. Maritain, *Art and Scholasticism*, 30–31.

Chapter 1

Material Being: That Which is First Perceived

The mode of beauty which is most natural for man to grasp is material being. This is because man, as a composite of a material body and an immaterial intellectual soul, has direct sensation of material beings and the proper object of the intellect is the quiddity of material beings.¹ However, because these beings are *hylomorphic* (i.e., a combination of matter and form), they are therefore subject to the limitations of matter in that their potency subjects them to defect. Significantly these defects in matter account for the experience of ugliness within material beings. As such, to understand material beauty then requires demonstrating how the definitions of Aquinas are expressed even when limited by the principles of *hylomorphism*.²

However, before addressing the metaphysical properties of material beings it is useful to acknowledge that all material beings can be defined as either substances or accidents. The difference is, “a substance is an ultimate existing subject; it is an intrinsically (though not necessarily absolutely) complete existent; or simply, a substance is what exists (period).”³ Examples of substances include beings such as horses or man.⁴ On the other hand, “accidents depend on substances, as on a subject, for their being.”⁵ Thus rather than being able to exist individually such as the horse or man, accidents inhere in the subject. For example, there may

1. W. Norris Clarke, S.J., *Person and Being* (Milwaukee, Wisconsin: Marquette University Press, 1993), 32–35.

2. Thomas Ainsworth, “Form vs. Matter,” in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta (Metaphysics Research Lab, Stanford University, 2020), 1, <https://plato.stanford.edu/archives/sum2020/entries/form-matter/>.

3. Joseph Bobik, *Aquinas On Being and Essence: A Translation and Interpretation* (Notre Dame, Indiana: University of Notre Dame Press, 1965), 72.

4. St. Thomas Aquinas, *On Being and Essence*, in *Aquinas On Being and Essence: A Translation and Interpretation*, trans. Joseph Bobik (Notre Dame, Indiana: University of Notre Dame Press, 1965), ¶100-102; 238-239.

5. Bobik, *Aquinas On Being and Essence*, 50.

exist a brown horse or the form of a statue is present in marble.⁶ The importance of this distinction is to outline the differences between natural and artistic beauty, respectively.⁷ The ontological properties of this distinction will become more apparent upon defining the metaphysical principles of material beings.

1.1 The Metaphysical Principles of Material Beings

The foundational metaphysical principle of *hylomorphism*, which defines material beings as a composite of matter and form, ultimately means that recognizing material beauty will require identifying it within the principles of matter and form. Therefore, it is necessary to briefly describe the ontological properties of matter and form, because afterward it can be demonstrated how the three criteria of beauty exist within the context of material beings.

Matter consists of a wide variety of physical phenomena, e.g. sound waves, light waves, elements, or any other principles that are part of the sensation of a substance. The important detail about matter is that it enables sensation.⁸

Although matter is foundational to the existence of material beings, it is not the principle of intelligibility. In fact, pure undefined matter⁹ is unintelligible because it is that which is in potency to intelligibility.¹⁰ Accordingly, there must exist another principle which accounts for existence and intelligibility and this principle is called form. Form is the defining principle that unifies matter as what something is in being, either as a substance or an accident. Hence form can be referred to more specifically as either substantial form or accidental form depending on the

6. St. Thomas Aquinas, *De Principiis Naturae*, in *Aquinas on Matter and Form and the Elements: A Translation and Interpretation of the de Principiis Naturae and the De Mixtione Elementorum of St. Thomas Aquinas*, trans. Joseph Bobik (Notre Dame, Indiana: University of Notre Dame Press, 1998), ¶2-3; 3-4 and 6.

7. See Umberto Eco, *The Aesthetics of Thomas Aquinas*, trans. Hugh Bredin (Cambridge, Massachusetts: Harvard University Press, 1988), 173. While this work will refrain from commenting directly on the beauty of art, it is still nevertheless important to acknowledge the metaphysical principles that enable artistic beauty.

8. Mathematics and angels are immaterial beings and hence proper sensation of these beings is not possible.

9. This being the concept of prime matter.

10. Bobik, *Aquinas on Matter and Form and the Elements*, 4-5.

ontological disposition of the subject being discussed.¹¹ Significantly then the form of the being is what is apprehended by the intellect through abstraction from material beings, as both the material and formal cause.¹² Accordingly, given the earlier definition of Aquinas that “the *beautiful* is something pleasant to apprehend,”¹³ it will be a being’s connection to its form that makes something beautiful.

For instance, when Aquinas first discusses beauty in the *Summa Theologiae*,¹⁴ he states: “Now since knowledge is by assimilation and similarity relates to form, beauty properly belongs to the nature of a formal cause.”¹⁵ Implied within this understanding of forms is the necessity of knowing what something is. If the form is known, then one also knows that which is proper for that particular being according to its formal cause, and as a result, one understands the degree of perfection that the being has attained. Now the more perfect any particular being is in relation to its formal cause, the more it will completely fulfill the three criteria of beauty; which means that the beauty increases proportionally to the fulfillment of formal cause. Hence the principle of actuality, in this case the form, establishes a necessary relationship between beauty and form.¹⁶ The essential reason for this relationship is due to the importance of perfection to the objective beauty of any particular being. Because an imperfect being must be lacking in either integrity, proportion, clarity, or various combinations of all three, yet a defect in any one only would make the cognitive act of any particular being less pleasing than that of a perfect being. This measure is impossible to identify without this objective principle of actuality. Therefore as a being more

11. Aquinas, *De Principiis Naturae*, ¶3; 6.

12. *ST* I.40.3.

13. *ST* I-II.27.1 ad 3.

14. This being the ‘pleasing when seen’ definition, but ‘seen’ must be taken to refer to any cognitive faculty.

15. *ST* I.5.4 ad 1.

16. Eco, *The Aesthetics of Thomas Aquinas*, 70–71.

completely actualizes its form, the more beautiful it will be.¹⁷ In this regard, beauty results from the “due actuality of being and form.”¹⁸

1.2 Concrete Examples of Material Beauty

Two examples of material beauty will be considered in order to demonstrate this truth. The first will be one requiring the understanding of substantial form, i.e. the notion of a beautiful horse. The second will demonstrate how accidental form enables one to outline the beauty of a sunset.

1.2.1 Example of Substantial Beauty

Considering the horse, the discussion must center around what aspects of a beautiful horse make it “please when seen?”¹⁹ The answer is found in the precise metaphysical definition of form as “*that by which it is*, inasmuch as it is the principle of being;”²⁰ so the substantial form is the definition which “‘informs’ the material” being of the horse.²¹ Now, recall the three criteria of beauty: proportion, integrity, and clarity. All three of these can be known only insofar as the form is known. Since the form is the principle that arranges matter and informs the intellect, it will also be the matter’s conformity to the form by which the three criteria are to be measured.²² Material beings, therefore, are beautiful according to how close their being is to the perfection of their form. The form, as the defining principle, inherently defines the proper proportion of the members as well as the completeness of each. In this regard, the form composes the first two criteria of beauty. As may be apparent, a horse with a crippled (lack of proportion) or missing leg

17. Alice M. Ramos, *Dynamic Transcendentals: Truth, Goodness, and Beauty from a Thomistic Perspective* (Washington, D.C.: The Catholic University of America Press, 2012), 74–77.

18. Armand A. Maurer, C.S.B., *About Beauty: A Thomistic Interpretation* (Houston, Texas: Center For Thomistic Studies, 1983), 14.

19. *ST* I.5.4 ad 1.

20. St. Thomas Aquinas, *Summa Contra Gentiles*, II.54.6, trans. James F. Anderson (London: University of Notre Dame Press, 1975). Italics in original.

21. Eco, *The Aesthetics of Thomas Aquinas*, 66.

22. Ramos, *Dynamic Transcendentals*, 73.

(lack of integrity) is not as beautiful as one that does not suffer from these defects.²³ Lastly, the criterion of clarity is satisfied because the mind is able to observe the horse and derive joy from the fact that the being is indeed a horse. Without clarity, the pleasing intellectual act which defines beauty is unable to occur, for it is only when the matter and form are composed such as to reveal their pleasing commensurateness to the senses that beauty occurs. This then is the notion that Maritain describes as “the essence of beauty”²⁴ and “ontological splendor,”²⁵ because clarity is the self-revealing criterion of beauty that is present only under appropriate circumstances. Thus without the nature of the being revealing itself through its metaphysical properties beauty does not exist.²⁶ Toward this end, Aquinas states, when discussing spiritual beauty, “accordingly knowledge is the cause of love for the same reason as good is, which can be loved only if known.”²⁷ The significance of this is drawn from the previous article wherein Aquinas states: “the beautiful is the same as the good, and they differ in aspect only.”²⁸ This means that the beautiful is also a cause of love, but that is only possible if the object is known. Therefore, without being able to perceive the clarity of the being, it is impossible to either perceive or love the beauty of a particular being. The result of this is that every substance is beautiful insofar as it can be understood in reference to its form. The significance of this then is that the perception of ugliness is partly due to a lack of knowledge.

1.2.2 Example of Accidental Beauty

Now let us consider the natural beauty of a sunset. In the first place, there is no substantial form of a sunset because it lacks the unity required of substances. Instead, a sunset is a composite

23. *ST I-II.54.1.*

24. Maritain, *Art and Scholasticism*, 29.

25. Maritain, *Art and Scholasticism*, 29n.

26. Maritain, *Art and Scholasticism*, 26–31.

27. *ST I-II.27.2.*

28. *ST I-II.27.1 ad 3.*

of different substances acting together. In the case of a sunset, there is first and foremost the substance of the sun producing light; then there is the substance of the air; and, lastly, the substance of the water.²⁹ Therefore, the beauty associated with this is not of a single substance but instead is due to an accidental form resulting from the relation of several distinct substances. However, what is most striking about the notion of a sunset is that it is a prime example of exterior agents revealing the accidents of substances. Thus, the beauty of a sunset is more spectacular if the water is smooth enough to reflect the light off the surface (accidental property of water) and the air must also be clear enough to properly form the color with the atmosphere.³⁰ Thus it is the perfection of all these beings uniting that enables the beauty of the sunset.³¹

1.2.3 How these Principles Will Apply to All Other Examples of Material Beauty

Although the principles of knowledge are the principles that enable the intellect to perceive beauty, it cannot be forgotten that the human intellect is limited. As Aquinas states: “Our manner of knowing is so weak that no philosopher could perfectly investigate the nature of even one little fly.”³² If then we are unable to fully comprehend the nature of a fly, how much more difficult must it be to see beauty in that which is not so readily available to our senses.

Therefore, in answer to the possible objection that some may claim certain species to be ugly because of a lack of proportion, I insist that the difficulty lies in assimilating the nature of its form to the intellect. For it should be apparent that increased knowledge of a subject will result in a further understanding of the nature therein. Hence, the inability to recognize beauty does not

29. More substances could certainly be added but for simplicity’s sake will limit to these three.

30. Aquinas, *On Being and Essence*, ¶107; 241.

31. Ramos, *Dynamic Transcendentals*, 73–75.

32. St. Thomas Aquinas, *The Catechetical Instructions of St. Thomas Aquinas, Commentary on the Apostles Creed, What is Faith*, trans. Rev. Joesph B. Collins (New York: Joseph F. Wagner, Inc., 1939), 5.

rest solely on the being, (except in the case of privations - cf. §1.3) but rather is due to any difficulties within the intellect of grasping the degree to which a being is actualizing its form.³³

1.3 Privation as the Explanation of Ugliness

Having addressed the notion of formal causes as to their effect on material beauty it is now necessary to address how matter affects beauty. Form alone will not suffice because included in the form of a material being is the idea of existence. Thus, the notion of a beautiful horse is less perfect than the existence of a beautiful horse because existence is a higher degree of perfection.³⁴ Yet, this perfection is subject to corruption because matter is a principle of potency, and as such, it is responsible for change. These changes can either be substantial or accidental. In the first, the result is a completely new subject of being with a new form. In the latter, the subject of being remains constant but the qualities of the subject change; for example, a tree may lose branches or leaves, or a horse may have a crippled leg.³⁵ These changes, because they are deviations from the form, decrease the sense of proportion and integrity of the being, and as a result, make it less beautiful. However, there may still be a degree of beauty insofar as it is still intelligible, that is through the criteria of clarity. For although there may be a defect in being, as regards either integrity or proportion, it may still be apparent what the being is. As such, the beauty of its being can be recognized by acknowledging the distance between it and its perfection. Therefore, it is in this regard that ugliness is to be understood. For ugliness is nothing less than a privation of beauty, just as evil is a privation of good. It is in this manner and this alone that beauty is diminished. It should be noted, however, that ultimately in continuing with the analogy to the

33. Maritain, *Art and Scholasticism*, 26–27.

34. Eco, *The Aesthetics of Thomas Aquinas*, 70.

35. Maritain, *Art and Scholasticism*, 30–31.

good, privation does not imply exclusion.³⁶ Therefore, as will be argued in the later chapters, there cannot exist a being that is pure ugliness, because everything that exists is knowable at least in part, and therefore the criteria of integrity, proportion, and clarity can be described in regards to the being, even if only considered as regards privation.³⁷

36. Piotr Jaroszyński, *Beauty and Being: Thomistic Perspectives*, trans. Hugh McDonald (Toronto, Ontario: Pontifical Institute of Mediaeval Studies, 2011), 227-228 and 231.

37. Maurer, *About Beauty*, 14.

Chapter 2

Intelligible Being: That Which Once Known is Known Perfectly

According to popular legend, written over the top of Plato's Academy was the famous exhortation, "let no one ignorant of geometry enter here." While the inscription itself may be nothing more than a myth, the intuition it provides about the nature of mathematics and Plato's philosophy is nonetheless powerful.¹ Plato's philosophy, which accounts for the existence of physical beings based as grounded in eternal Forms, applies the same concept to mathematical notions.² Aristotle rejected this view, arguing that mathematical objects are immaterial constructions of the mind based on material observations and accordingly are like the Forms in that they lack any defects, but they are derived from material beings and not vice versa.³ Regardless of the differences between Platonic Forms or Aristotelian abstraction, mathematics has long been considered an important realm of intellectual knowledge. This is because mathematical truths are not subject to change due to the fact that they are solely intellectual. Therefore, mathematics provides a perspective on immaterial beings. Hence, to demonstrate beauty as analogical, it will be necessary to discuss the beauty of mathematical objects. The perfect square, circle, parallel line, etc, have never existed in physical beings because there will always be some minute defect in matter. Yet the criteria of beauty such as integrity,

1. David Fideler, *A Short History of Plato's Academy*, <https://platosacademy.org/a-short-history-of-platos-academy/>, Accessed: February 28, 2022, 2021, 26.

2. Øystein Linnebo, "Platonism in the Philosophy of Mathematics," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta (Metaphysics Research Lab, Stanford University, 2018), 1–8, <https://plato.stanford.edu/archives/spr2018/entries/platonism-mathematics/>.

3. Aristotle, *Metaphysics*, in *Aristotle's Metaphysics*, trans. Hippocrates G. Apostle (Grinnell, Iowa: The Peripatetic Press, 1979), M.1-2 1076a8-1077b18.

proportion/harmony, or clarity will be expressed by necessity according to its mode of being. This is because in the absence of matter the mind identifies these criteria solely in relation to the form.⁴

An advanced understanding of mathematics should not be necessary to understand this, for by beginning with geometry and the arithmetic of music it will be possible to explore the characteristics that make something beautiful in a graspable abstraction. Then once these definitions have been demonstrated it will be possible to apply them to the spiritual (cf. Chapter 3) and the metaphysical (cf. Chapter 4) realm to further demonstrate the analogical nature of the term “beauty.” As such, rather than attempting to explain the beauty of Euler’s Identity ($e^{\pi i} + 1 = 0$), this chapter will instead focus on the relationship between mathematical proportions and music.

2.1 Mathematics

The notion that mathematics provides an important understanding of beauty is one that was featured by ancient Greek philosophers. In fact, Aristotle outright rejects the notion that mathematical sciences have nothing to say about beauty.⁵ He states that “the most important kinds of the beautiful are order, symmetry, and definiteness, and the mathematical sciences exhibit properties of these in the highest degree.”⁶ It should be noted that these kinds of beauty could also be restated in a more Thomistic manner as integrity/perfection, harmony, and clarity, respectively. For the notion of order relates to integrity/perfection because that which lacks integrity/perfection may be considered disordered; symmetry relates to the notion of proportion in

4. Maurer, *About Beauty*, 68.

5. Aristotle, *Metaphysics*, M.3 1078a33-34.

6. Aristotle, *Metaphysics*, M.3 1078a37-1078b3.

keeping with the ancient's desire for balance within the work; and definiteness relates to clarity because it may be unequivocally perceived.⁷

The arguments from proportion and arithmetic will best be demonstrated in the mathematical properties of music. Yet, in the hopes of demonstrating a simple and intuitive proof of how the three criteria of beauty are present in Mathematics, I will provide a visual proof of the well-known Pythagorean theorem, $a^2 + b^2 = c^2$ (cf. Figure 2.1⁸).

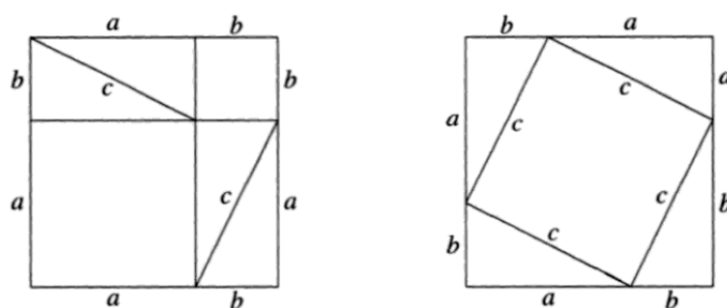


Figure 2.1: Rearrangement Proof of Pythagorean Theorem

I expect that many people will be well familiarized with the Pythagorean theorem, but may not have an understanding of its proof. The merit of this example, therefore, is that by being able to follow the proof via the above figure, one will be able to see the integrity, harmony, and clarity that is contained within the truth of the proof. Now to begin with the proof: For simplicity's sake, we will call the left square α and the right square β (this will be done to differentiate them without directly reusing the variables for the lengths of the non-hypotenuse sides of the triangles). It should be noted that the area of both square α and square β equal $(a + b)^2$. Now the arrangement of the four identical right triangles in square α is to reveal that the squares of area a^2 and b^2 are

7. Crispin Sartwell, "Beauty," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta (Metaphysics Research Lab, Stanford University, 2022), 37–44, <https://plato.stanford.edu/archives/sum2022/entries/beauty/>.

8. Donald C. Benson, *The Moment of Proof: Mathematical Epiphanies*. (Oxford University Press, 2000), 173, <https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=335663&site=ehost-live&custid=ns015417>.

composed in square α . Whereas, the arrangement of the same triangles in square β reveals that the square of area c^2 is in the area of square β . Now as was previously mentioned both squares α and β have the same area which means that we can subtract the four right triangles from each square and the total area left will be equal. Doing so will result in only the squares of area a^2 and b^2 remaining from square α , while only the square of area c^2 will remain for square β . Therefore, since the remaining area of the squares, α and β are equal. It must be that $a^2 + b^2 = c^2$.⁹

The in-depth explanation of the above proof is to hopefully clarify any confusion that may result from Fig. 2.1. The purpose of such a proof is to demonstrate how the intellect comes to a mathematical understanding.¹⁰ For, when the above proof is fully grasped (or any proof for that matter) it possesses the mind with a sense of wonder capable of invoking joy. The reason for this is that the mind has gained possession of the idea in its simple perfection. Thus, there is an integrity resulting from the fact that nothing is lacking in the proof, for if something was lacking the proof would not suffice to accomplish its end. Next, the mind comes to understand that the various elements were not haphazardly selected, but instead are of a specific proportion to form a harmonious agreement. The first two elements of any proof can be said to exist regardless of understanding. Therefore, it is the final criteria of clarity that completes the efforts of the mind. For without clarity the proof is without any significant meaning. However, once clarity is included the mind comprehends the entire proof at once and in that contemplation acquires joy. These comments of course are strictly paralleling those of Aquinas, for it is under this light of understanding that mathematical beauty is discovered.¹¹

9. Brilliant.org, *Proofs of the Pythagorean Theorem*, <https://brilliant.org/wiki/proofs-of-the-pythagorean-theorem/>, Accessed: March 1, 2022, 3–5.

10. Benson, *The Moment of Proof: Mathematical Epiphanies.*, 1–2.

11. *ST* I-II.27.1 ad 3 and *ST* I.39.8.

Mathematics also reveals that beauty is only discernible insofar as it is understood. This is an important distinction that is necessary to clarify how beauty is to be understood analogically in all aspects of being. It is for this reason that beauty is an act of the intellect, and why intelligible beauty can only be understood through the intellect.¹² For instance, although there is immense beauty to be found within the realm of complex numbers, this knowledge is beyond my own intellect, and therefore I will not attempt to describe the beauty therein. There is no shortcut to this limitation and as such, I have only offered some brief remarks on the proof of the Pythagorean theorem in the hopes that they will begin to enlighten some of these challenges.

2.2 Music

My initial thoughts on music were that it would be beyond the scope of this work. Afterall, music must be composed by man and therefore is properly speaking an artifact.¹³ However, it has been noted that harmonious music is that which is congruous with arithmetic and proportion. Music described as such is an intellectual being, and therefore, beautiful music should be subject to the same criteria of beauty as any other being. The criteria are once again integrity, harmony, and clarity. Therefore, if beauty is to be found in music, these criteria will not be found in spatial proportions, as they were in geometry, but instead must exist in temporal harmonic proportion.¹⁴ Therefore, it is necessary to address how music can incorporate the criteria of beauty into its ontology.

Now an important aspect in recognizing that music can be understood mathematically is to recognize that the composition of music often has to do with the ratio of frequencies. Since

12. Maritain, *Art and Scholasticism*, 28–31.

13. The focus of this work is about how beauty is found in being and not in works of art. As such, although the distinctions of what makes art beautiful is fascinating, and will nevertheless have comparisons to this work. The analysis of art has been excluded from this work. It should be noted that music is only incorporated insofar as music relates to mathematics. Therefore, this focus on music is as music *qua* mathematics not music *qua* art.

14. Roger Scruton, *The Aesthetics of Music* (New York: Oxford University Press, 1997), 108–110.

musical notes result from the ear perceiving sound at a specific frequency (for instance middle c correlates to a sound wave of 256 c/s).¹⁵ In which case, music becomes a powerful method of explaining mathematics for “the order of music is a *perceived* order.”¹⁶ The mind then grasps the order of the composition without the same effort that is required of a mathematical proof. It is for this reason that beautiful music must have a clarity of composition.

Now to address the remaining notions properly, it will be necessary to outline the ideas of chords, consonance and dissonance, and finally, melody. Once all these terms have been well-defined it will become apparent how beautiful music is subject to Aquinas’s criteria of beauty.

The first aspect of music that requires proper explaining to describe beautiful music is jointly that of chords and consonance/dissonance. The notion of chords describes a ratio of frequencies. Such that an octave is a 2:1 ratio of frequency, whereas the major third is 5:4 and the major sixth is 8:5.¹⁷ This is because a chord is the playing of two or more notes simultaneously. Meaning that a chord is a musical entity that is composed of two or more different frequencies. The sound that will be produced by any chord will either be consonant or dissonant, depending on the ratio of the frequency. Consonant chords are those that sound most resolved within a piece of music, whereas dissonant chords require further resolution. However, there is no universal set of chords that are either consonant or dissonant. This is because the mode of the chord is dependent on the construction of the musical piece, since music is of a temporal ordering chords must be either consonant or dissonant with the frequencies preceding them as well.¹⁸ This is because “consonance arises when two vibrations nest together, so that the peaks of one coincide with

15. H.E. Huntley, *The Divine Proportion: A Study in Mathematical Beauty* (New York: Dover Publications, 2015), 54.

16. Scruton, *The Aesthetics of Music*, 18. Italics in Original.

17. Huntley, *The Divine Proportion*, 53–55.

18. Scruton, *The Aesthetics of Music*, 65–67.

peaks of the other. Dissonance is explained by ‘beating’—the interference pattern that arises.”¹⁹

Thus consonance reveals the criteria of harmony found within beautiful music because consonant chords do not result in interference.

The last criterion, integrity, requires a further understanding of musical works as a whole. This is accomplished through the analysis of musical melody. The importance of melody to integrity is that “in hearing a melody, we hear a beginning and an end, but also a *movement* between them.”²⁰ Recalling that integrity proposes that nothing is lacking in the subject, melody provides this quality to music. For melody transforms music from a cacophonous arrangement of notes into an ordered temporal series that has a beginning and then moves towards an end.²¹ Therefore, ignoring the concept of genres, beautiful music is that which fulfills all three criteria.

In addition, as a unifying point, it can be observed that music spans both material and intelligible beings. For instance, music is a material being insofar as it is sound waves produced by an instrument and an intelligible being as was described above. Accordingly, a musical instrument that is not properly tuned will not sound as beautiful as one that is because it is not able to physically recreate the mathematical harmony intended, or in the case of a missed note which corrupts the integrity of the piece. Both reveal the physical characteristics of music in which deviations are perceptible to the listening audience. The analogical nature of beauty is thus partially unified under this one subject since the requirements of musical beauty can only be properly expressed if both the intelligible and material requirements are fulfilled. In this neither the material nor the intelligible are precisely identical to each other, but only analogous.²²

19. Scruton, *The Aesthetics of Music*, 242–243.

20. Scruton, *The Aesthetics of Music*, 47. Italics in Original.

21. Scruton, *The Aesthetics of Music*, 36–46.

22. Francis J. Kovach, *Philosophy of Beauty* (Norman, OK: University of Oklahoma Press, 1974), 195 and 199.

Chapter 3

Moral/Spiritual Beauty: That Which Acts in Accord with Reason

Thus far the notion of beauty has been detailed through the principles that enable man to recognize beauty within material beings; then was considered the more abstract notion of beauty known through the unchanging essence of mathematics/music; now we consider another mode of intelligible being, moral/spiritual beauty. This provides evidence that intelligible beauty is not purely a matter of abstraction but also of rational activity. Accordingly, this notion of spiritual beauty directly coincides with man's *hylomorphic* nature¹ when it is considered as a rational activity of an immaterial intellectual soul. In short, the treatment of spiritual beauty will demonstrate how the beauty of the human person is not limited to their physical appearances but, like in the case of St. Mother Teresa of Calcutta, is exemplified through the virtuous life.² For, as Aquinas states, "the beauty of the body consists in a man having his bodily limbs well proportioned, together with a certain clarity of color. In like manner spiritual beauty consists in a man's conduct or actions being well proportioned in respect of the spiritual clarity of reason."³

3.1 The Thomistic Understanding of Moral Beauty

The central argument of this work has been that 'beauty' is an analogical term. Accordingly, the definitions originally offered by Aquinas will apply to moral beauty, but in a different manner than has been observed thus far. This is because moral beauty pleases and inspires the intellect through virtue. Accordingly, this sense of beauty is not to be found within brute animals which only respond to their sensible appetites and therefore are incapable of

1. A caveat can be made about angels/demons, but as far as a practical consideration is concerned the main focus will be on how man enters into spiritual beauty through morality.

2. Ramos, *Dynamic Transcendentals*, 190–191.

3. *ST* II-II.145.2.

understanding/recognizing virtue. As such, man (alone of all animals) possesses the ability to pursue the universal good, which results not from man's sensible appetites but instead arises from the intellectual appetite. To achieve this universal good, man must act in accordance with reason and grow in virtue.⁴

Aquinas considers the nature of moral beauty indirectly through his treatment of the virtue of temperance. For Aquinas, the notion of temperance includes all of our desires, especially those which are in common with brutish animals.⁵ This then leads Aquinas to state that "although beauty is becoming to every virtue, it is ascribed to temperance, by way of excellence, for two reasons."⁶ The first is that temperance is ordered towards the criterion of proportion, in that temperance is the intentional control of the appetites according to reason that ensures that man acts in proper proportion to the appetites. The second is that temperance keeps man away from vices that would disfigure him.⁷

Since Aquinas identifies temperance as the virtue *par excellence* of moral beauty, it is necessary to consider the effects that temperance or intemperance has on the beauty of the soul. All three criteria of beauty can be recognized in Aquinas's writings on temperance. Now, since virtue is an aspect of intelligible being, it will be revealed that all three are to be understood in connection to man's nature as a rational animal, and thus destined for a higher act than the brutish satisfactions of pleasures common to all animals *qua* animal.⁸

Beginning with integrity/perfection, Aquinas states: "In consequence beauty is a foremost attribute of temperance, which above all hinders man from being defiled."⁹ As such, temperance

4. Ramos, *Dynamic Transcendentals*, 150-152 and 157-158.

5. Maurer, *About Beauty*, 73-74.

6. *ST* II-II.141.2 ad 3.

7. *ST* II-II.141.2 ad 3.

8. *ST* II-II.141.8 ad 1.

9. *ST* II-II.141.2.

is the virtue that prevents man from corrupting himself. The reason for this distinction is that the appetites that are primarily restrained through temperance are the ones that are of a brutish nature. Therefore, the intemperate man is unable to exercise his proper nature because “intemperance dim[s] the light of reason.”¹⁰ Thus one sees within intemperance a failure of man to perfect his being. This lack of perfection, therefore, robs his soul of an element of beauty.

Second, concerning proportion/harmony, Aquinas states, “in human affairs a thing is beautiful according as it harmonizes with reason.”¹¹ Accordingly, an intemperate act is one that is not in harmony with reason, and because it is not properly proportioned to man’s actions it cannot be beautiful. Thus Aquinas, in describing honesty as intelligible beauty, declares that “beauty or comeliness results from the concurrence of clarity and due proportion[;] ... spiritual beauty consists in man’s conduct or actions being well proportioned in respect of spiritual clarity of reason.”¹² Thus, the beauty of virtue coincides with the degree to which the action is proportioned to reason.¹³

Last, and closely related to harmony, is the criterion of clarity/brightness. In the first place, Aquinas lambastes intemperance “because it is most repugnant to man’s clarity or beauty; inasmuch as the pleasures which are the matter of intemperance dim the light of reason from which all the clarity and beauty of virtue arises: wherefore these pleasures are described as being most slavish.”¹⁴ The teaching of Aquinas is that intemperance, rather than showing forth the brightness of man, results in the dimming of reason. Thus Aquinas considers intemperance to be the most disgraceful of all the vices because it damages the reason of the soul as such.¹⁵ Now

10. *ST* II-II.142.4.

11. *ST* II-II.142.2.

12. *ST* II-II.145.2.

13. Ramos, *Dynamic Transcendentals*, 161–162.

14. *ST* II-II.142.4.

15. *ST* II-II.142.4.

since intemperance is the antithesis of temperance, temperance will have the opposite effect on the soul. Temperance leads to the beauty of the soul. As Aquinas states, “spiritual beauty consists in man’s conduct or actions being well proportioned in respect of spiritual clarity of reason.”¹⁶ For since spiritual beauty is a mode of intelligible beauty, it must be that the criteria of Aquinas relate to reason, otherwise the actions of man would ultimately be chaotic and disordered. Through the proper use of reason, human actions begin to exhibit order and accordingly are remarked of as beautiful.¹⁷

As another example, Aquinas makes use of these criteria to describe honesty as intelligible beauty. The importance of this becomes apparent when considering the end of man.

A thing is said to be honest, insofar as it has a certain beauty through being regulated by reason. Now whatever is regulated in accordance with reason is naturally becoming to man. Again, it is natural for a thing to take pleasure in that which is becoming to it... A pleasing thing of this kind is beside man’s reason which perfects his nature. Even virtue itself, which is essentially honest, is referred to something else as its end, namely happiness... For a thing is said to be honest as having a certain excellence deserving of honor on account of its spiritual beauty: while it is said to be pleasing, as bringing rest to desire, and useful, as referred to something else.¹⁸

Aquinas is drawing a clear connection between the moral/spiritual beauty of virtue and the intelligibility that results from honesty. Now, these two are directly connected through the notion that honesty connects spiritual and intelligible beauty.¹⁹ Furthermore, the notion of honesty, which is integrally linked with temperance,²⁰ is that which pleases, perfects the nature of man, orders man to the end of happiness, and accomplishes all this through the regulation of reason. Thus, temperance/honesty are most properly ordered toward spiritual beauty.

16. *ST* II-II.145.2.

17. *ST* II-II.142.2.

18. *ST* II-II.145.3.

19. *ST* II-II.145.2.

20. *ST* II-II.145.4.

The significance of this is to demonstrate that the beauty which results from moral virtue is distinct from mathematical or material beauty, and yet the same principles and criteria apply. For since moral beauty is in accord with reason, even the non-virtuous man is capable of recognizing the beauty within the virtuous man. As Aquinas states, “we might also say that although not all men have these virtues in the complete habit, yet they have them according to certain seminal principles in the reason, in force of which principles the man who is not virtuous loves the virtuous man, as being in conformity with his own natural reason.”²¹ Moral beauty is universally recognizable even if it does not immediately lead to imitation. It is in this regard that the work of the Saints, such as Mother Teresa of Calcutta, reveal their beauty. Therefore, sensible beauty is only one aspect of the human person.²² Moral beauty is to be understood analogically to all other instances of beauty discussed thus far; each analogate reveals its own truth about beauty.

3.2 Moral Beauty: Proper to the Contemplative Life

Temperance, which orders actions by reason, is the virtue that enables man to enter into the contemplative life. In order to demonstrate this, it will be necessary to distinguish the difference between the active and contemplative life; afterward, it will become apparent how moral/spiritual beauty is directed to the contemplative life, which in turn directs life towards beauty *per se*.²³

In the first place, the division between the active and contemplative life is primarily regarding the end of intellectual knowledge. At times the intellect is inclined to external actions (i.e. the active life), while at others it is more inclined to seek the truth, not for the sake of action

21. *ST* I-II.27.3 ad 4. This is the same question wherein Aquinas argues for the close similarities between the good and beautiful as regards love. (cf. *ST* I-II.27.1-3).

22. Ramos, *Dynamic Transcendentals*, 151–153.

23. *ST* II-II.180.2 ad 3.

but simply to know it (i.e. the contemplative life). Thus, these two different ends of human reason are divided into either the active or contemplative life.²⁴

Although both the active life and the contemplative life are distinct ends of man's rational nature, the primacy of the contemplative life cannot be overstated. This is because the contemplative life is more in accord with the essence of man as a rational animal, which is to grow in wisdom, an end made possible by the virtuous life. Anything less than this is to choose a lesser good than the one intended for man.²⁵ Happiness, then, is accomplished perfectly through the contemplative life.²⁶ This is not to discredit the active life, but is instead to reveal that man is first and foremost ordered toward the joys of contemplation.²⁷

Aquinas in clarifying this point finds it necessary to restate the definition of beauty in order to demonstrate its significance in the contemplative life:

Beauty . . . consists in a certain clarity and due proportion. Now each of these is found rooted in the reason, to which pertains both the light that makes beauty seen, and the establishing of due proportion among things belong to reason. Hence since the contemplative life consists in an act of reason, there is beauty in it by its very nature and essence.²⁸

The significance of this argument is that the beauty of man's rational nature is revealed by the contemplative life as part of its essence. Furthermore, temperance remains central to the contemplative life, because it is the intemperate passions that take man away from the contemplative life by impairing the use of reason. Moral beauty is hence a necessary element to being able to live the contemplative life.²⁹ Now, given that contemplation is the supreme goal of

24. *ST* II-II.179.1 and II-II.179.2.

25. St. Thomas Aquinas, *Summa Contra Gentiles Books III-IV*, vol. 12 of *Latin/English Edition of the Works of St. Thomas Aquinas: Summa Contra Gentiles*, III.37 trans. Fr. Laurence Shapcote, OP (Green Bay, Wisconsin: The Aquinas Institute, 2012).

26. *ST* II-II.182.1.

27. *ST* II-II.182.1 ad 3.

28. *ST* II-II.180.2 ad 3.

29. *ST* II-II.180.2 ad 3.

man's rational nature; the contemplative life allows man to perfect his nature and achieve the proper beauty of his essence. The contemplative life then is the most beautiful because it is properly proportioned and reveals the clarity found within action ordered by reason. As such, it is now possible to further consider the highest beauty that man can contemplate, which will be the focus of the next chapter.

Chapter 4

Metaphysical Beauty: That Which Properly Applies Only to God

Beauty as an analogical term lacks something in our present situation. For the sight of a beautiful piece of art does not lead to a desire to possess the art except insofar as possession enables one to observe/study it further, because every kind of beauty that has been considered thus far cannot provide an unceasing and perfect appearance of beauty to the intellect.¹ Instead, these beautiful beings are subject to change or, as is the case with Mathematics, they are a bounded perfection. Hence, the intellect will never be fully satisfied with such examples of beauty. Therefore, in order to complete the argument for the analogical nature of beauty, it is necessary to demonstrate the ultimate source of beauty, which is the end of the contemplative life. For the contemplative life, as seeking knowledge of the truth for its own sake, leads one to desire contemplating God within the beatific vision. As it will be argued that the source of beauty that most perfectly fulfills the *telos* of the contemplative life is that of God. Now as this is only obtained in the beatific vision, man will only achieve his ultimate happiness in the beatific vision.² For it is this contemplation of God's beauty that satisfies man and provides the greatest pleasure when seen.³ Therefore, that the only being which completely and unceasingly fulfills the definitions of Aquinas is God, the prime analogate of beauty.⁴

Accordingly, the notion of God herein described will be the focus of philosophical contemplation.⁵ To understand God as the highest object of contemplation it is necessary to

1. Maurer, *About Beauty*, 17-18.

2. *ST* I-II.3.8.

3. *ST* I.5.4 ad 1.

4. Maurer, *About Beauty*, 18.

5. Although I will certainly be adopting a Catholic worldview in this Chapter, I consider it important to acknowledge that even this view is largely derived from Aquinas's Five Ways (*ST* I.2.3). As such, the adoption of the purely philosophical understanding of God solely as the First Cause of all other beings suffices for the argument of this Chapter as well. As such, this is not a god of mathematics, art, or music, but God as Creator of all creation.

understand what is meant in describing God as *ipsum esse subsistens* (i.e., self-subsistent being).⁶ Most fundamentally this can be taken to mean that God is the only necessary being and cause of all creation. This is to recognize that everything in creation is beautiful because it participates in God's true beauty. The beauty of created things can truly be seen as imperfect because they can never equal the totality of that which is present in their source, God.⁷ The truth of this becomes apparent when considering that God, as the only self-subsistent being, is perfect because nothing is lacking in God's being.⁸ This is due to the fact that God's essence is the same as His existence. If God's essence did not include the totality of existence, it must be that something is lacking in God; however, if this were the case, then another more necessary being would have to be the cause of Him.⁹ As such, God would not be a self-subsistent being. Therefore, any being whose essence does not include its existence is not God because it is not the necessary being that is the cause of all being but instead depends on other external causes for its being.¹⁰ This means that everything that exists only does so through participation in being from God.¹¹

4.1 Aquinas on Divine Names

This idea of God as the preeminent instantiation of beauty is a concept that is developed within Aquinas's commentary on Pseudo-Dionysius's (Dionysius) *On the Divine Names*. Aquinas recognizes the goal of Dionysius's work by acknowledging that "a divine name . . . hovers in between the symbolic names translated from creatures to God and the ineffable essence of God himself."¹² This manner of describing God is known as the method of supereminence. This

6. SCG III.19

7. Maurer, *About Beauty*, 18.

8. ST I.4.2.

9. ST I.3.4.

10. ST I.2.3.

11. SCG III.19

12. Brendan Thomas Sammon, *The God Who Is Beauty: Beauty as a Divine Name in Thomas Aquinas and Dionysius the Areopagite* (Eugene, Oregon: Pickwick, 2013), 289.

follows from the fact that God is the cause of all things. Now, since God is the necessary cause of all creation, it necessarily follows that God is the cause of all the perfections therein. For “every cause can be named from the name of its effect, inasmuch as it has in itself a likeness of it.”¹³ Hence God as the cause of all creation is also the cause of all the perfections within it due to His own perfection. Therefore, anything which is considered a perfection within creation properly refers to God as the supereminent cause of its perfection.¹⁴

Shortly after this, Aquinas comments on all the names that Dionysius lists as being ascribed to God in sacred scripture by way of supereminence. Included in the list are “beautiful” and “lovable.”¹⁵ Implying that all the modes of beauty that have been thus far described are only beautiful by their participation in God as the supreme cause of all beauty.

The fact that God is the supereminent cause of beauty ultimately demonstrates that the term ‘beauty’ is analogical. This is because God, as the supersubstantial beautiful, “gives *beauty to all* created beings, according to *the propriety of each*: for beauty of spirit is one thing and beauty of the body another, and the beauty of this body is one thing and of that body another.”¹⁶ Thus, as has been argued throughout the course of this work, the beauty of each individual being must be understood according to the mode of its being because God is “*the cause of the consonance and clarity* in all things.”¹⁷ In this way, the recognition of beauty is more than the acknowledgment of features that are pleasing to sight or to reason, but instead results from the

13. St. Thomas Aquinas, *De Divinis Nominibus Dionysii*, vol. 54 of *Latin/English Edition of the Works of St. Thomas Aquinas*, trans. Urban Hannon (Green Bay, Wisconsin: The Aquinas Institute, 2023), ¶89, <https://aquinas.cc/la/en/~DeDivNom>.

14. Aquinas, *De Divinis Nominibus Dionysii*, ¶88-92.

15. Aquinas, *De Divinis Nominibus Dionysii*, ¶98.

16. Aquinas, *De Divinis Nominibus Dionysii*, ¶339. Emphasis in the original.

17. Aquinas, *De Divinis Nominibus Dionysii*, ¶339. Emphasis in the original.

divine similitude present within the being, for “the beauty of a creature is nothing other than a likeness of the divine beauty participated in things.”¹⁸

It will be recognized that two of the three criteria for beauty are accounted for. God is the cause of radiance/clarity that results from the participation in being God causes in creation: “the divine ray, must be understood according to the participation of likeness, and those handings on are *beautifying*, that is, making beauty in things.”¹⁹ Also, the criterion of consonance/harmony results from an understanding of the ultimate end of creation, which is God. Hence, “God is the cause of consonance, *as calling all things to itself*, inasmuch as he converts all things to himself as to an end, . . . and on account of this beauty in Greek *is called kalos*, which is taken from calling.”²⁰ The ordering of creatures and creation is significant; for, creation is ordered to perfection as a mirror of God’s perfection. Thus the harmony of God is found throughout God’s ordering of creation.

Now, absent from the Commentary is the last criteria of integrity. However, it could be argued that this criterion is present implicitly when recalling the explanation of God as *ipsum esse subsistens*. Since God is the only perfect being, in Him alone is the criterion of integrity perfectly realized.²¹

Therefore, every example that has been described as beautiful previously was only an imperfect beauty. Beauty finds its fullest expression in the essence of God, and everything else that is described as beautiful is only maintained as such in an analogical relation to the beauty of God through participation. The result is that the quest to understand beauty ultimately concludes in a deeper understanding of the joy of knowing God as Creator. For every instance of beauty that

18. Aquinas, *De Divinis Nominibus Dionysii*, ¶337.

19. Aquinas, *De Divinis Nominibus Dionysii*, ¶340. Emphasis in original.

20. Aquinas, *De Divinis Nominibus Dionysii*, ¶340. Emphasis in original.

21. Maurer, *About Beauty*, 114-115.

man experiences results from the *kalos* of God; as such, the true essence of beauty is wholly ineffable.²²

4.2 Beauty as a Transcendental

To briefly return to a more contemporary topic of debate, I would like to briefly discuss how this notion of analogical beauty implies that beauty is a transcendental. In order to accomplish this, it will be necessary to define what a transcendental is and why naming them is so significant.

4.2.1 Introduction to the Transcendentals

A transcendental is a property that transcends all the divisions of being and so is an aspect of all beings (hence the name). Thus through an understanding of being *qua* being it will be possible to identify that which is inseparable from the notion of being.²³

In order to arrive at an understanding of being, it is necessary to understand the distinction between ‘essence’ and ‘being’ which distinguishes what something is and the fact that it is.²⁴ Essence is the metaphysical principle of what something is. That is, the essence is the composition of a thing and its nature,²⁵ such that a being is only intelligible “through its definition and essence.”²⁶ In contrast, the term ‘being’ is a term that is predicated of everything in existence and is grasped by the mind implicitly. Significantly there is only one being whose essence includes existence. For every other being, the essence can be understood absent of being.²⁷ Thus the simplest and most fundamental concept of being is that of God. Accordingly, every perfection

22. Maurer, *About Beauty*, 116-117 and 121-122.

23. St. Thomas Aquinas, *Truth: Questions XXI-XXIX*, trans. Robert W. Mulligan, S.J., vol. 3 (Chicago: Henry Regnery Company, 1952), 21.4 ad 4.

24. Aquinas, *On Being and Essence*, ¶77; 159-160.

25. Bobik, *Aquinas On Being and Essence*, 9.

26. Aquinas, *On Being and Essence*, ¶9; 45.

27. Aquinas, *On Being and Essence*, ¶77; 159-160.

that is predicable of being (in itself) is also predicable of God.²⁸ From this one derives a list of properties, the transcendentals, that are universally present with every being *qua* being. In *De Veritate* Aquinas list five such transcendentals: thing, something, one, good, and true. All of these are of necessity an aspect of every being in existence.²⁹

4.2.2 The Case For Beauty

Once we touch a transcendental, we touch being itself, a likeness of God, an absolute, all that ennobles and makes the joy of life: we enter the realm of the spirit. It is remarkable that the only real means of communication between human creatures is through being or some one of the properties of being.³⁰

Given the above definitions of transcendental properties, let us consider a few aspects of beauty that coincide with these definitions. One of the challenges with beauty as a transcendental has always been the fact that, if beauty is transcendental, then it will be closely connected to the true and the good since Aquinas describes beauty as adding to “goodness a relation to the cognitive faculty.”³¹ The first aspect to explore is the notion of beauty as both cognitive and appetitive. We will summarize the analogical nature of beauty that reveals existence and beauty as both resulting from participation in the being from God. Following this will be another exploration of the metaphysical properties of ugliness. Given all these principles it should be apparent that beauty, as defined in this work, is included in every being insofar as it exists, and therefore is a transcendental, even if the beauty itself is not instantly discernible.

Aquinas’s notion of beauty arises in a discussion of how desire relates to the good and the beautiful. Aquinas states: “The beautiful is the same as the good, and they differ in aspect only. For since good is what all seek, the notion of good is that which calms the desire; while the notion

28. Aquinas, *On Being and Essence*, ¶88-91; 213-214.

29. St. Thomas Aquinas, *Truth: Questions I-IX*, trans. Robert W. Mulligan, S.J., vol. 1 (Chicago: Henry Regnery Company, 1952), 1.1.

30. Maritain, *Art and Scholasticism*, 33.

31. *ST* I-II.27.1 ad 3.

of the beautiful is that which calms the desire, by being seen or known.”³² Beauty, then, is “a species of goodness.”³³ What sets beauty apart as a special aspect of the good is that it involves the cognitive and appetitive powers equally: “beauty adds to goodness a relation to the cognitive faculty: so that *good* means that which simply pleases the appetite; while the *beautiful* is something pleasant to apprehend.”³⁴ Since beauty is properly a result of the cognitive and appetitive together, it has a fundamental relationship to both the good and the true. For, on the one hand, beauty is an object of desire insofar as it pleases and elicits joy; yet on the other hand, this desire seeks only contemplation. Thus transcendental beauty is uniquely formulated as a relation between these two transcendentals. Yet, significantly, beauty cannot be collapsed into either one because the property of beauty adds to being a particular notion of joy that is absent from ontological truth, and likewise, beauty accounts for the cognitive aspect that is absent of the ontological good.³⁵

In addition to this relationship of beauty to the good and the true, it has already been argued throughout the course of this work how beauty is present in many different modes of being (material, intelligible, spiritual, and metaphysical). Now, as has been previously discussed in this chapter, all these beings have their own manner of expression because they are the result of participation in divine beauty. Thus it is on account of a recognition of the divine cause of creation that man comes to understand the nature of beauty. For a being’s complete beauty is revealed in its conformity with God as its cause. Not that knowledge of God is a requirement for perceiving beauty, but that the knowledge of God, as the supersubstantial beautiful, further

32. *ST I-II.27.1 ad 3.*

33. Jacobs, “Beauty as an Excess of Intelligibility,” 22.

34. *ST I-II.27.1 ad 3.* Italics in original.

35. Jacobs, “Beauty as an Excess of Intelligibility,” 22-23 and 25-26.

reveals how other beings are known as beautiful.³⁶ As such, it may become apparent that God, as the universal beauty, most perfectly calms man's desires through knowledge, and is the primary analogate to which beauty most appropriately applies.

4.3 The Difficulties of Beauty

Still left to be explained is why there nevertheless exists beings which are not of themselves clearly beautiful. Our response to this presupposes the understanding of the relationship between beauty, good, and true, for the importance of knowing what the being is was argued to be an important aspect of recognizing beauty. This will be equally so, if not more, when it comes to recognizing the effects of defects in beauty.

God, as the supersubstantial beautiful, is without defect, but other beings can suffer from defects. In the first place, it is easily observed that material beings are subject to corruption. As such, when a man loses an eyebrow, a hand, or any other part of his being, it is plainly observed that a corruption has occurred, thus disrupting his proper integrity and proportion. Yet this is only discernible if one knows what is proper to the nature of man. The same will be the case for every other material being. Hence, a corruptible defect decreases the beauty of the particular being. Moreover, it follows, that beauty in created beings is only apparent under a particular mode and not an absolute mode. Thus a horse, a mathematical equation, and a Saint are all representative of beauty in their own particular mode. Accordingly, if one does not know what is proper to any particular mode of being then one will not be able to discern its beauty. Therefore, only as regards God, as the absolute perfection of all creation, can beauty truly be experienced in its totality.³⁷

36. Aquinas, *De Divinis Nominibus Dionysii*, ¶339-340.

37. Aquinas, *De Divinis Nominibus Dionysii*, ¶345.

Next, it seems necessary to explore whether there can exist a being which is absolutely ugly, or completely devoid of beauty. If beauty were not a transcendental, it should be possible that such a being exists. Therefore, the beauty of a being is dependent on its actuality.³⁸ Should ugliness be something that can be added to being it would make sense that there be an absolute ugliness, “that in general could not be beheld, that was unknowable, and so that could not please at all; in general this would mean that no matter from which angle we looked at this being, it would not evoke love in us.”³⁹ Furthermore, if ugliness is considered to be something that is a positive description of being as an opposite parallel of beauty, it would also follow that God must be supremely ugly. This is because God as the source and summit of all being’s perfections, must therefore simultaneously include ugliness.⁴⁰ Ugliness, then, would not be limited solely to the physical/material beings but would be considered a metaphysical property applicable to all beings.⁴¹ The absurdity of this position should be clear, as it would ultimately violate the principle of non-contradiction.

All of the above thus implies that every being that is created by God possesses elements of His beauty. For creation is not something to be considered as mundane but something which should elicit joy when understood. God is the efficient, final, and exemplar cause of beauty. Every being’s participation in God is the initial cause of its beauty; which therefore orders it to its own perfection which will further express its participation in divine beauty; so that it may further come to fulfill the design God has made for it.⁴² Therefore, given that beauty is included with all being, it follows that *beauty* has the properties of a transcendental.

38. Maurer, *About Beauty*, 115.

39. Jaroszyński, *Beauty and Being*, 228.

40. *ST* I.4.2.

41. Meaning that absolute ugliness follows necessarily from the rejection of the idea that ugliness is a privation of beauty.

42. Aquinas, *De Divinis Nominibus Dionysii*, ¶350-354.

The culmination of metaphysical beauty, then, is to identify God as the most supreme beauty. This, therefore, is the source and summit of all other elements and aspects of beauty that have been explored throughout this work. It is only through the understanding of God as a being of perfect integrity, proportion, and perfection that the previous arguments of beauty have a solid foundation. For although man is implicitly ordered towards these ideals their perfection is most completely centered within the metaphysical realm.

Conclusion

In closing, I would like to address a couple of objections that have been raised against the understanding of beauty as a transcendental. One of the more notable scholars of this position is Jan Aertsen, who offers two serious objections and then a well-formed critique of the modern opinions on beauty as a transcendental.¹ The first objection that Aertsen offers is noting that such a declaration never appears in the writings of Aquinas; the second objection is that beauty is properly a synthetic transcendental requiring other transcendentals for interpretation and therefore is not at the status of a unique transcendental.²

To the first objection: I do not think that the absence of beauty as a transcendental in the philosophy of Aquinas discredits modern scholarship on the subject. Although it is surprising that Aquinas would have neglected such a topic given the tremendous amount of scholarship he produced, this is still only an argument from omission rather than explicit rejection. As such, Aertsen's argument is centered around the fact that Aquinas does not directly relate beauty to being but instead to the other transcendentals.³ However, it can be easily argued that with the other transcendentals one does have a direct connection to being, and beauty is, therefore, an aspect of every being. Since there never exists a being that does not include all of the transcendentals simultaneously.

Now to the second objection; I would argue that once again this is not a particularly problematic issue. The difference here is rather than questioning an omission from Aquinas:

1. Jan A. Aertsen, *Medieval Philosophy and the Transcendentals: The Case of Thomas Aquinas* (Leiden, The Netherlands: Brill, 1996), 351–354.

2. Aertsen, *Medieval Philosophy and the Transcendentals*, 351–352.

3. Aertsen, *Medieval Philosophy and the Transcendentals*, 351.

Aertsen is addressing the decision of contemporary philosophers to adopt beauty as a transcendental through a relation to other transcendentals as opposed to having a direct connection to being.⁴ Once again, it would seem that beauty would still be present as an intrinsic aspect of every being even if only considered as a second-order transcendental. Aertsen's argument would be persuasive only if it is made explicit that all the properties of beauty, that have been described above, are included in relation to the other transcendentals. However, it seems that, following the writings of Aquinas, the cognitive aspect of beauty is excluded when discussing the good.⁵ As such, it is important to define the good such that a proper understanding of beauty is still portrayed.

The simplest way to accomplish this is to acknowledge the analogical nature of the term beauty. For as an analogical term it will be apparent that beauty provides a real and significant aspect to every mode of being which is in some ways related and in others distinct. This then is the argument that I provide against Aertsen that beauty is indeed a unique transcendental because it adds to being a necessary calming desire through knowledge. For beauty is a metaphysical reality that is present in all aspects of being which is not easily discernible without asserting the analogical nature of beauty.

Admittedly, Aertsen concludes with the view that beauty is "the extension of the true to the good."⁶ This is done to recognize the significance of beauty in regard to the other transcendentals. As such, Aertsen's primary concern is whether beauty deserves to be counted among the transcendentals or to be considered as an innate property of being proceeding from the transcendentals. Aertsen supports the view of the later position.⁷ It seems to me that the danger of

4. Aertsen, *Medieval Philosophy and the Transcendentals*, 351–352.

5. *ST* I-II.27.1 ad 3.

6. Aertsen, *Medieval Philosophy and the Transcendentals*, 359.

7. Aertsen, *Medieval Philosophy and the Transcendentals*, 359.

this position is to leave room for confusion concerning a positive understanding of ugliness which is detrimental to both the nature of beauty and God, as was argued in the previous Chapter.

This brings me to my ultimate point. To focus on the question about the transcendental of beauty is to miss the point. For in much of my research many philosophers have said nearly identical statements and yet arrive at somewhat differing conclusions.⁸ It seems to me that Aertsen's position is the most prone to confusion, and it is for that reason that I tend to favor the views of modern scholarship regarding this topic from the likes of Maritain, Maurer, Jaroszyński, etc. This is also why I do not find the lack of commentary from Aquinas significant because what matters is a deeper understanding of the joy that beauty creates, as was been described above. If one wants to say that this is completely contained in the notion of the good then I can accept that. However, that does not commonly appear to be the case from the general definitions of the good. As such it is important to recognize the distinction that is made by the term 'beauty,' a distinction that most clearly manifests itself in light of transcendental. Lastly, it seems that the notion of beauty as a transcendental simply was not a significant concern for Aquinas. He has provided the philosophical tradition with an immensely robust definition of what beauty is, but his writings do not appear to stress beauty as transcendent. There are many instances in his writings where it appears to imply that beauty is a transcendental and then there are others where it is more questionable. Thus the question of whether beauty is understood as a transcendental according to Aquinas is a completely different question from whether beauty is a transcendental simply. It appears to me that the former is ambiguous whereas the latter is something that can be answered clearly. Beauty, as analyzed throughout this work, is a transcendental. However, there is still much more that could be said about this subject to further illustrate this point. From the context of

8. See Aertsen, *Medieval Philosophy and the Transcendentals*, 359. Jacobs, "Beauty as an Excess of Intelligibility," 22-23. Maritain, *Art and Scholasticism*, 28. Maurer, C.S.B., *About Beauty*, 16. Sevier, *Aquinas on Beauty*, 127.

beauty's analogical nature, which ultimately points back to God, and from the reality that nothing which is absolute ugliness appears to exist, I argue that this point is valid.

If I may be so permitted I would like to conclude with one or two points that may draw daringly close to theology, but which have significant import given the philosophy discussed thus far. When God creates “we say that in Him there is a procession of love, we show that God produced creatures not because He needed them, nor because of any other extrinsic reason, but on account of the love of His own goodness.”⁹ This also means by extension that God created creation on account of beauty. Therefore, God wills and holds all of creation into existence on account of its goodness and beauty. For it is in the beauty of creation that man experiences the joy of contemplating God and God the love and joy of contemplating himself.

In addition, it can be argued that the crucifixion of Christ which redeems the fallen nature and perfects creation is, therefore, the most beautiful act that has ever taken place. In fact, it can only be through this lens that the horrors of a literally excruciating execution are transformed into a beautiful act of redemption. For without this understanding there should be nothing pleasing to the crucifixion.¹⁰

9. *ST* I.32.1 ad 3.

10. John Conley, S.J., *A Piercing Light: Beauty, Faith, and Human Transcendence*, in “Toward a Christian Philosophy of Art,” ed. James M. Jacobs (Washington, D.C.: American Maritain Association, 2015), 164-165.

Bibliography

- Aertsen, Jan A. *Medieval Philosophy and the Transcendentals: The Case of Thomas Aquinas*. Leiden, The Netherlands: Brill, 1996.
- Ainsworth, Thomas. "Form vs. Matter." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta. Metaphysics Research Lab, Stanford University, 2020. <https://plato.stanford.edu/archives/sum2020/entries/form-matter/>.
- Aquinas, St. Thomas. *De Divinis Nominibus Dionysii*. Vol. 54 of *Latin/English Edition of the Works of St. Thomas Aquinas*, translated by Urban Hannon. Green Bay, Wisconsin: The Aquinas Institute, 2023. <https://aquinas.cc/la/en/~DeDivNom>.
- Aquinas, St. Thomas. *De Principiis Naturae*. In *Aquinas on Matter and Form and the Elements: A Translation and Interpretation of the de Principiis Naturae and the De Mixtione Elementorum of St. Thomas Aquinas*, translated by Joseph Bobik. Notre Dame, Indiana: University of Notre Dame Press, 1998.
- Aquinas, St. Thomas. *On Being and Essence*. In *Aquinas On Being and Essence: A Translation and Interpretation*, translated by Joseph Bobik. Notre Dame, Indiana: University of Notre Dame Press, 1965.
- Aquinas, St. Thomas. *Summa Contra Gentiles: Book 2: Creation*. Translated by James F. Anderson. London: University of Notre Dame Press, 1975.
- Aquinas, St. Thomas. *Summa Contra Gentiles Books III-IV*. vol. 12 of *Latin/English Edition of the Works of St. Thomas Aquinas: Summa Contra Gentiles*, translated by Fr. Laurence Shapcote, OP. Green Bay, Wisconsin: The Aquinas Institute, 2012.
- Aquinas, St. Thomas. *Summa Theologiae Prima Pars, 1-49*. Vol. 13 of *Latin/English Edition of the Works of St. Thomas Aquinas: Summa Theologiae*, translated by Fr. Laurence Shapcote, OP. Green Bay, Wisconsin: The Aquinas Institute, 2012.
- Aquinas, St. Thomas. *Summa Theologiae Prima Secundae, 1-70*. Vol. 15 of *Latin/English Edition of the Works of St. Thomas Aquinas: Summa Theologiae*, translated by Fr. Laurence Shapcote, OP. Green Bay, Wisconsin: The Aquinas Institute, 2012.
- Aquinas, St. Thomas. *Summa Theologiae Secunda Secundae, 92-189*. Vol. 18 of *Latin/English Edition of the Works of St. Thomas Aquinas: Summa Theologiae*, translated by Fr. Laurence Shapcote, OP. Green Bay, Wisconsin: The Aquinas Institute, 2012.

- Aquinas, St. Thomas. *The Catechetical Instructions of St. Thomas Aquinas*. Translated by Rev. Joesph B. Collins. New York: Joseph F. Wagner, Inc., 1939.
- Aquinas, St. Thomas. *Truth: Questions I-IX*. translated by Robert W. Mulligan, S.J. Vol. 1. Chicago: Henry Regnery Company, 1952.
- Aquinas, St. Thomas. *Truth: Questions XXI-XXIX*. translated by Robert W. Mulligan, S.J. Vol. 3. Chicago: Henry Regnery Company, 1952.
- Aristotle. *Metaphysics*. In *Aristotle's Metaphysics*, translated by Hippocrates G. Apostle. Grinnell, Iowa: The Peripatetic Press, 1979.
- Benson, Donald C. *The Moment of Proof: Mathematical Epiphanies*. Oxford University Press, 2000. <https://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=335663&site=ehost-live&custid=ns015417>.
- Bobik, Joseph. *Aquinas On Being and Essence: A Translation and Interpretation*. Notre Dame, Indiana: University of Notre Dame Press, 1965.
- Bobik, Joseph. *Aquinas on Matter and Form and the Elements: A Translation and Interpretation of the de Principiis Naturae and the De Mixtione Elementorum of St. Thomas Aquinas*. Notre Dame, Indiana: University of Notre Dame Press, 1998.
- Brilliant.org. *Proofs of the Pythagorean Theorem*. <https://brilliant.org/wiki/proofs-of-the-pythagorean-theorem/>. Accessed: March 1, 2022.
- Clarke, S.J., W. Norris. *Person and Being*. Milwaukee, Wisconsin: Marquette University Press, 1993.
- Conley, S.J., John. "A Piercing Light: Beauty, Faith, and Human Transcendence." Chap. Toward a Christian Philosophy of Art, edited by James M. Jacobs, 157–167. Washington, D.C.: American Maritain Association, 2015.
- Eco, Umberto. *The Aesthetics of Thomas Aquinas*. Translated by Hugh Bredin. Cambridge, Massachusetts: Harvard University Press, 1988.
- Fideler, David. *A Short History of Plato's Academy*. <https://platosacademy.org/a-short-history-of-platos-academy/>. Accessed: February 28, 2022, 2021.
- Huntley, H.E. *The Divine Proportion: A Study in Mathematical Beauty*. New York: Dover Publications, 2015.

- Jacobs, James M. "Beauty as an Excess of Intelligibility." *Logos: A Journal of Catholic Thought and Culture* 19, no. 2 (2016): 18–32. <https://www.stthomas.edu/media/catholicstudies/center/logosjournal/archives/2016volume19/192/19.2Jacobs.pdf>.
- Jaroszyński, Piotr. *Beauty and Being: Thomistic Perspectives*. Translated by Hugh McDonald. Toronto, Ontario: Pontifical Institute of Mediaeval Studies, 2011.
- Kovach, Francis J. *Philosophy of Beauty*. Norman, OK: University of Oklahoma Press, 1974.
- Linnebo, Øystein. "Platonism in the Philosophy of Mathematics." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta. Metaphysics Research Lab, Stanford University, 2018. <https://plato.stanford.edu/archives/spr2018/entries/platonism-mathematics/>.
- Maritain, Jacques. *Art and Scholasticism*. Translated by J. F. Scanlan. Providence, Rhode Island: Cluny, 2020.
- Maurer, C.S.B., Armand A. *About Beauty: A Thomistic Interpretation*. Houston, Texas: Center For Thomistic Studies, 1983.
- Ramos, Alice M. *Dynamic Transcendentals: Truth, Goodness, and Beauty from a Thomistic Perspective*. Washington, D.C.: The Catholic University of America Press, 2012.
- Sammon, Brendan Thomas. *The God Who Is Beauty: Beauty as a Divine Name in Thomas Aquinas and Dionysius the Areopagite*. Eugene, Oregon: Pickwick, 2013.
- Sartwell, Crispin. "Beauty." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta. Metaphysics Research Lab, Stanford University, 2022. <https://plato.stanford.edu/archives/sum2022/entries/beauty/>.
- Scruton, Roger. *The Aesthetics of Music*. New York: Oxford University Press, 1997.
- Sevier, Christopher Scott. *Aquinas on Beauty*. Lanham, Maryland: Lexington Books, 2015.
- Twain, Mark. *Mark Twain: Life On The Mississippi*. New York: P. F. Collier & Son Company, 1917.