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Nuper rosarum flores: The Cathedral Conundrum

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Abstract

In 1436, Pope Eugenius IV consecrated the newly-completed *Santa Maria del Fiore*, more commonly known as Florence Cathedral. The completion of the cathedral's dome was an incredible feat of great significance to the city of Florence, whose cathedral had remained unfinished for over one hundred years, and the splendor of the dedication ceremony reflected this reality. Franco-Flemish composer Guillaume Dufay was commissioned to write a motet for the occasion, and the resulting work, *Nuper rosarum flores*, has sparked a great deal of controversy in the musicological realm. In 1973, musicologist Charles Warren claimed that the isorhythmic proportions of the motet reflected the architectural proportions of the cathedral, but Craig Wright later exposed several flaws within Warren's analysis, suggesting instead that the motet's unique proportional structure was intended to reflect King Solomon's Temple as described in scripture. Yet another hypothesis, presented by Marvin Trachtenburg, claims that both Warren and Wright's arguments are correct in some regard. This article seeks to explore Wright, Warren, and Trachtenburg's respective theories through the study of Dufay's motet, of the dedication of Florence Cathedral, and of the historical context of this event. Due to the speculative nature of the debate surrounding *Nuper rosarum flores*, it is doubtful that scholars will ever agree on an explanation for the motet's unusual structure.

Keywords

Florence Cathedral, Guillaume Dufay, *Nuper rosarum flores*, Charles Warren, Craig Wright, Marvin Trachtenburg, isorhythm

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Nuper rosarum flores: The Cathedral Conundrum

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Melodies were raised by so many and varied singing voices, alternating with songs made with such harmonies lifted up to heaven that to the audience they appeared quite angelic and divine. The ears of the hearers were so delighted by the wonderful sweetness of the varied voices that they seemed completely awestruck.¹

These words, translated from their original Latin, are found in Giannozzo Manetti's account of the magnificent dedication of the Santa Maria del Fiore, more commonly known as Florence Cathedral. Manetti was an Italian diplomat and humanist scholar, and while his description of the music that filled the resplendent cathedral is somewhat hyperbolic, it nevertheless provides a sense of the awe and magnificence that marked the event. A prosperous mercantile city, Florence, Italy was known for its grandiosity, but evidently the dedication of the cathedral was spectacular even by Florentine standards.² The vital role of musical contributions in the cathedral's dedication ceremony is apparent in Manetti's account. One such contribution was Guillaume Dufay's motet, *Nuper rosarum flores*, a piece whose unique structure, isorhythmic statements in the proportions 6:4:2:3, has led to considerable discussion in the field of musicology.

¹ David Marsh, *Giannozzo Manetti: The Life of a Florentine Humanist* (Cambridge: Harvard University Press, 2019), 6.

² Ross King, *Brunelleschi's Dome: How a Renaissance Genius Reinvented Architecture* (New York: Penguin Books, 2001), 137.

Two main theories exist concerning the compositional structure of Dufay's *Nuper rosarum flores*: first, that of Charles Warren, and subsequently, that of Craig Wright. Warren's theory implies Renaissance values such as humanism and secularism by attributing the unusual aspects of Dufay's motet to the novel features of Florence Cathedral.³ Wright, on the other hand, emphasizes a medieval mindset, drawing attention to principles such as biblical numerical symbolism, which he believes serve as the basis for *Nuper rosarum flores*'s structure. While he has presented notable evidence indicating flaws in Warren's calculations, Wright may have made a mistake in discounting the cathedral's dimensions. Marvin Trachtenberg's more recent theory regarding Florence Cathedral's structure serves as a bridge, proposing that, while the motet's isorhythmic proportions reflect the dimensions of King Solomon's temple, the cathedral itself may have been constructed as a representation of King Solomon's temple; therefore, the motet could reflect the proportions of both temple and cathedral. The debate concerning *Nuper rosarum flores* endures, as evidenced by Emily Zazulia's 2019 article entitled, "Out of Proportion: *Nuper rosarum flores* and the Danger of False Exceptionalism." However, as will be noted, indisputable conclusions are not and perhaps, ought not be, the objective of musicological inquiry. *Nuper rosarum flores* has instigated varying viewpoints, including those of Charles Warren, Craig Wright, and Marvin Trachtenberg, but most captivantly, the motet has yielded provocative questions, the likes of which may never be answered.

While Santa Maria del Fiore was consecrated on March 25th, 1436 by Pope Eugenius IV, the magnificent cathedral's construction had actually begun in 1294. The devastating effects of the Black Death during the mid-fourteenth century had significantly delayed the project's completion, but the intimidating enormity of the cathedral's 143-foot drum (base) was an equal hindrance. Since this diameter would "exceed that of even the Roman Pantheon, which for over a thousand years had been the world's largest dome by far," architects and Florentine nobility alike feared that a dome of the size demanded by Florence Cathedral's foundation would collapse.⁴ The cathedral's walls reached 140 feet, and the dome would be built upon a drum which stood 30 feet above that, so if completed, the dome would be well over 170 feet tall. The purpose of such unprecedented height was to elevate the cathedral above the city,

³ Charles W. Warren, "Brunelleschi's Dome and Dufay's Motet," *The Musical Quarterly* 59, no. 1 (January 1973): 103. doi:[10.1093/mq/lix.1.92](https://doi.org/10.1093/mq/lix.1.92).

⁴ King, *Brunelleschi's Dome*, 9.

and thanks to Filippo Brunelleschi's unmatched architectural brilliance, this was undoubtedly achieved: the Santa Maria del Fiore still towers above the city of Florence, causing all surrounding structures to pale in comparison (Figure 1).



Figure 1: View of Santa Maria del Fiore.⁵

Warren

Clearly, the completion of the cathedral's massive dome was an incredible feat and one of great significance to the city of Florence. Perhaps it is this reason that compelled Warren to attribute the unique proportions of Dufay's *Nuper rosarum flores* to Florence Cathedral's dimensions. It seems reasonable that the consecration of a building so prized by Florentine culture could call for a motet tailored to the building itself. In 1973, Warren proposed a complex analysis claiming that the measurement of 50.8 *braccia* serves as the basic unit by which the rest of the cathedral may be measured.⁶ (*Braccio*, the Italian word for "arm," also served as a unit of measurement approximating two feet. Warren obtained the 50.8 figure by squaring the length of the crossing beneath

⁵ "Santa Maria del Fiore in Florence," Wikimedia Commons, March 1, 2012, accessed April 02, 2020, [File:Santa Maria del Fiore - 0968.jpg](https://commons.wikimedia.org/wiki/File:Santa_Maria_del_Fiore_-_0968.jpg).

⁶ Craig Wright, "Dufay's *Nuper rosarum flores*, King Solomon's Temple, and the Veneration of the Virgin," *Journal of the American Musicological Society* 47, no. 3 (1994): 401. doi:[10.2307/3128798](https://doi.org/10.2307/3128798).

the dome.) He found three of the 50.8-braccia units in the nave (the central section of a cathedral), two in the transept (the two sections extending at right angles from the nave), one in the apse (the semicircular recess), and one and one-half in Brunelleschi's dome (Figure 2). Multiplying each of these numbers by two results in the proportions 6:4:2:3, the same ratio found in Dufay's motet.⁷

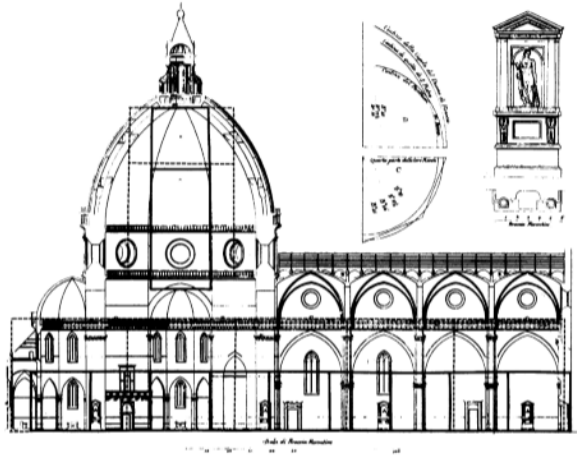


Figure 2: Warren's diagram indicating (with dotted lines) three 50.8-braccia units in the nave, two in the transept, one in the apse, and one and one-half in the dome.⁸

It is easy to understand why Warren's proposal was readily accepted. A theory which provided an alleged reason for the unique structure of *Nuper rosarum flores* would be welcomed in and of itself, but Warren's argument offered a solution which coupled the musical innovations of Dufay with the architectural brilliance of Brunelleschi. It would seem that Warren had discovered an historical and musicological gold mine. In order to fully understand Warren's argument, however, it is important to understand first what is meant by the proportions 6:4:2:3.

Nuper rosarum flores is an isorhythmic motet, meaning that it contains a voice or voices (in this case, two tenors) which are arranged in repeated segments of identical rhythm. The isorhythmic motet became a quite prevalent genre during the early fourteenth century. By the fifteenth

⁷ Warren, "Brunelleschi's Dome," 95–96.

⁸ *Ibid.*, 95.

century and the age of Dufay, the isorhythmic motet became far less popular as the pursuit of *contenance angloise* (English quality) altered the style of many continental composers.⁹ Yet, interest in isorhythm had not died out completely. Although the isorhythmic motet was no longer considered a “genre of current compositional practice,”¹⁰ Dufay and his contemporaries soon recognized that the isorhythmic motet, “like all ancient rituals...was especially appropriate for official state occasions and other great events.”¹¹ The genre’s traditional nature suited the formality of prestigious events, and its elaborate complexity was fitting for a composer’s most distinguished commissions.

Arguably the greatest event for which Dufay composed an isorhythmic motet was the dedication of the Florence Cathedral, and Warren took note of the motet’s unique structure. The *cantus firmus* appears a total of four times, and each iteration is sung at different proportional rates which, in order, form the ratio 6:4:2:3 (Figure 3). The first iteration contains 28 measures of 6 quarter notes, and the second contains 28 measures of 4 quarter notes. The third iteration contains 14 measures of 4 quarter notes, which functionally is equivalent to 28 measures of 2 quarter notes. Finally, the fourth statement contains 14 measures of 6 quarter notes, which is equal to 28 measures of 3 quarter notes.¹² Thus, Warren deciphers the proportions 6:4:2:3.

⁹ J. Peter Burkholder, Donald Jay Grout, and Claude V. Palisca, *A History of Western Music*, 9th ed. (New York: W. W. Norton and Company, 2014), 167.

¹⁰ Charles Turner, “Proportion and Form in the Continental Isorhythmic Motet c. 1385–1450,” *Music Analysis* 10, no. 1/2 (1991): 89. doi:[10.2307/854000](https://doi.org/10.2307/854000).

¹¹ Howard Mayer Brown, “Guillaume Dufay and the Early Renaissance,” *Early Music* 2, no. 4 (October 1974): 219. doi:[10.1093/earlyj/2.4.219](https://doi.org/10.1093/earlyj/2.4.219).

¹² Guillaume Dufay, *Nuper rosarum flores*, ed. Bonnie J. Blackburn (Espoo, Finland: Fazer Editions of Early Music, 1994).

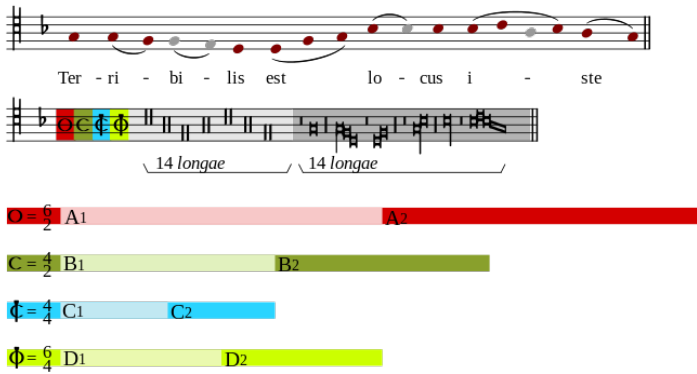


Figure 3: Diagram illustrating the isorhythmic sections of *Nuper rosarum flores* with their respective meters.¹³

While it may be argued that this set of proportions is not unique to Dufay's work (indeed, these proportions are utilized in his *cantus firmus* mass, *Missa se la face ay pale* [ca. 1430]), Warren is correct that the 6:4:2:3 ratio is unique among Dufay's thirteen isorhythmic motets. The fact that Dufay did not utilize these proportions in any other motet rightly alerts scholars to the possibility that Dufay wrote *Nuper rosarum flores* with its special purpose in mind, as does the complex nature of the motet as a genre. The deliberation and care with which motets were constructed caused the genre to be esteemed as an elite form of art. In the words of Johannes de Grocheio, a thirteenth-century theorist, the motet was "not to be celebrated in the presence of common people, because they do not notice its subtlety, nor are they delighted in hearing it, but in the presence of the educated and of those who are seeking out subtleties in the arts."¹⁴ Given the artistically thriving landscape of Florence, Dufay may have utilized distinctive isorhythmic proportions to cleverly reflect the cathedral's structure, pleasing the intellects of his listeners and the civic pride of Florence.

As part of the papal choir, Dufay was in Florence working for Pope Eugenius during the ten months leading up to the dedication ceremony. An assessment of the performance space would have been important for

¹³ "Nuper rosarum flores tenor," Wikimedia Commons, Oct. 12, 2008, accessed Dec. 12, 2019, [File:Nuper Rosarum Flores tenor.svg](#).

¹⁴ Johannes de Grocheio, *Ars musice*, Teams Varia, trans. and ed. Constant J. Mews, John N. Crossley, Catherine Jeffreys, Leigh McKinnon, and Carol J. Williams (Kalamazoo, MI: Medieval Institute Publications, 2011), 85.

acoustic considerations, so it is likely that Dufay was well acquainted with the cathedral before its dedication. Dorothea Baumann and Barbara Haggh describe musicians' careful attention to sound quality in the following way:

What seems a hopelessly difficult acoustic to our modern ears was thus mastered in the Middle Ages...with the precise testing of the position of sound sources. This mastery of practical acoustics rested on the observations of musicians who for years had already known the church interiors concerned and perhaps also on the thoughtful consideration of geometrical truths.¹⁵

In addition to technical considerations, Dufay may have been inspired by the cathedral's grandiosity and significance during his ten months in Florence. In the words of James Storad, "He would have spent time in the cathedral assessing the space for the service, rehearsing the choir, and perhaps even getting inspiration for the motet's content."¹⁶

Furthermore, the historical significance of the cathedral's completion ought not be overlooked. The Black Death had struck the city of Florence during the mid-fourteenth century, decreasing the population by twenty-five to fifty percent.¹⁷ The labor shortage induced by the Black Death led to an increase in wages and consequently, a population remnant with enough financial resources to explore artistic development. Indeed, Florence soon earned status as one of the most prosperous cities in Europe. This prosperity led to a "building boom" responsible for the construction of dozens of new buildings, including the Palazzo Vecchio, a new town hall.¹⁸ Yet, even the artistically thriving city of Florence seemed unable to solve the architectural puzzle created by Santa Maria del Fiore, which was particularly humiliating given that the cathedral

¹⁵ Dorothea Baumann and Barbara Haggh, "Musical Acoustics in the Middle Ages," *Early Music* 18, no. 2 (May 1990): 208. doi:[10.1093/em/xviii.2.199](https://doi.org/10.1093/em/xviii.2.199).

¹⁶ James A. Storad, "Inspiring Art: Brunelleschi's Dome and its Artistic Influence on Donatello's Cantoria, Ucello's Sir John Hawkwood, and Dufay's *Nuper rosarum flores*" (master's thesis, Kent State University, 2001), 57.

¹⁷ Ricardo A. Olea and George Christakos, "Duration of Urban Mortality for the 14th-Century Black Death Epidemic," *Human Biology* 77, no. 3 (June 2005): 299. doi:[10.1353/hub.2005.0051](https://doi.org/10.1353/hub.2005.0051).

¹⁸ King, *Brunelleschi's Dome*, 2–3.

“had as much to do with civic pride as religious faith.”¹⁹ Ross King writes, “The cathedral was to be built, the Commune of Florence had stipulated, with the greatest lavishness and magnificence possible, and once completed it was to be ‘a more beautiful and honourable temple than in any other part of Tuscany.’”²⁰

Upon Brunelleschi’s triumph over the “greatest architectural puzzle of the age” and Santa Maria del Fiore’s long-awaited completion, one would expect nothing but grandiose celebratory measures from the city of Florence.²¹ Accounts of the dedication ceremony show this to be the case. The prosperous, politically powerful Medici family requested papal participation for the ceremony, an important contribution to the event’s prestige. It appears Pope Eugenius could not resist the opportunity, for the chance to “preside over such a great occasion and to appear in more-than-regal splendor was not to be missed.”²² Evidently, a raised walkway for the Pope’s entrance was designed by Brunelleschi specifically for the occasion.²³ It was the Pope who commissioned Dufay to write a motet for the dedication ceremony, and it is not difficult to believe that an event which called for such outrageous pomp would also require a specialized piece of music to be performed.

Equally interesting is the fact that Florence Cathedral, while technically a religious building, would soon house political events such as council meetings and secular events such as the Roman-inspired Certame Coronario, a competition featuring declamation of newly-written vernacular poetry.²⁴ The splendor of the cathedral’s dedication may have foreshadowed this twofold purpose. As James Haar and John Nádas note, “The effect of the Consecration ceremony...was to focus attention on Santa Maria del Fiore as a place where great events could take place. Not all of these were religious.”²⁵ This suggests that the dedication ceremony for Florence Cathedral may have called for a motet related to cathedrals

¹⁹ King, *Brunelleschi’s Dome*, 3.

²⁰ Ibid.

²¹ Ibid., 5.

²² James Haar and John Nádas, “The Medici, the Signoria, the Pope: Sacred Polyphony in Florence, 1432–1448,” *Recercare* 20, no. 1/2 (2008): 30. <https://www.jstor.org/stable/41701491>.

²³ Marsh, *Giannozzo Manetti*, 16.

²⁴ Ibid., 30–32.

²⁵ Ibid., 30.

and Catholic values not only in a general sense, but also in the specific, symbolic way Warren proposed.

Wright

Since Warren's discovery, certain counterarguments arose, the most comprehensive being that of Craig Wright.²⁶ Wright begins by calling attention to certain flaws in Warren's calculations, such as the rounding of their results and even discrepancies in some of the integers themselves. Having indicated faults in Warren's argument, Wright examines alternative explanations for the unique 6:4:2:3 proportion utilized in Dufay's motet. Wright admits that, while *Nuper rosarum flores* could lack mimetic elements altogether, he believes it is much more likely that the motet was inspired by the dimensions of the biblical temple of King Solomon.

Upon reviewing Warren's argument, Wright adamantly disputes Warren's calculations of the architectural proportions of Santa Maria del Fiore. First, Wright makes it evident that the number Warren claims for the height of the dome, 76.2 braccia (the 50.8-braccia module, multiplied by 1.5 according to the number of modules found in the dome), is flawed because the true height of the cathedral's dome is 72 braccia. In addition to numerical discrepancies, Wright finds fault with Warren's methods in calculating the modules for each section of the cathedral. For example, because the nave of Florence Cathedral is 136 braccia long, Warren must begin its measurement approximately 16 braccia inside the crossing and under the dome in order for the 3 units to fit.²⁷ According to Wright, it is this lack of precision that undermines Warren's argument: "Warren's assessment fails to meet the most basic analytical requirement: for any architectural analysis to have validity, it must relate accurately, indeed exactly, to the components of the structure that is being measured."²⁸

While Wright discredits Warren's hypothesis about the motet reflecting the proportions of Florence Cathedral, he agrees with Warren that the structure of *Nuper rosarum flores* is striking. In addition to the

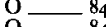
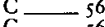
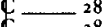

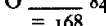
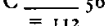
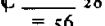
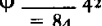
²⁶ Marvin Trachtenberg, "Architecture and Music Reunited: A New Reading of Dufay's *Nuper rosarum flores* and the Cathedral of Florence," *Renaissance Quarterly* 54, no. 3 (2001): 743. doi:[10.2307/1261923](https://doi.org/10.2307/1261923).

²⁷ Wright, "Dufay's *Nuper rosarum flores*," 401–402.

²⁸ *Ibid.*, 402.

proportional chain of 6:4:2:3, Wright points to a second set of numbers which are prominent throughout the motet’s structure: 4 and 7. He utilizes a table (Figure 4) to illustrate that the 6:4:2:3 structure of the four isorhythmic sections of *Nuper rosarum flores* is based on each section’s 28 quarter note values and that 28 is 4 multiplied by 7.²⁹

TABLE 1

<i>Duets</i>		<i>All Four Voices</i>			
28 perfect breves in <i>integer valor</i>		28 perfect breves in <i>integer valor</i>			
28 imperfect breves in <i>integer valor</i> ^a		28 imperfect breves in <i>integer valor</i>			
28 imperfect breves in diminution		28 imperfect breves in diminution			
28 perfect breves in diminution		28 perfect breves in diminution			
	<i>Section 1</i>	<i>Section 2</i>	<i>Section 3</i>	<i>Section 4</i>	
Superius	84 + 84	56 + 56	28 + 28	42 + 42	
Contratenor altus	84 + 84	56 + 56	28 + 28	42 + 42	
Tenor II	O  84	C  56	C  28	Φ  42	
Tenor I	O  84	C  56	C  28	Φ  42	
	= 168	= 112	= 56	= 84	
	= 6	= 4	= 2	= 3	

^aIn section 2 the upper voices switch to diminution while only the lower two maintain *integer valor*. The equivalent durations in the upper voices, however, as stated in the table, are equal to twice twenty-eight imperfect breves in *integer valor*.

Figure 4: Chart utilized by Craig Wright to illustrate his proportional analysis of *Nuper rosarum flores*.³⁰

One can also observe the numbers 4 and 7 in the text of the motet. The two tenor voices sing the first 14 notes of the Introit of the Mass for the Dedication of a Church, *Terribilis est locus iste*, in canon-like fashion with two groups of 7 notes. All the while, the upper voices sing a Latin poem that scholars speculate was written by Dufay himself. The text of the poem is arranged in 4 stanzas of seven 7-syllable lines.³¹ Wright, like Warren, speculates that the proportions of the motet might have been decided by Dufay with an intentional, creative purpose: “Given the distinctive, indeed unique, ratio 6:4:2:3 and the exceptional rigor with which 4 x 7 and 2 x 7 are applied in *Nuper rosarum flores*, it seems reasonable to inquire whether the composer intended to communicate something more specific than proportions that are merely pleasing.”³²

²⁹ Wright, “Dufay’s *Nuper rosarum flores*,” 396–397.

³⁰ Ibid., 398.

³¹ Ibid., 397–400.

³² Ibid., 405.

As described in 1 Kings 6:1–20 (English Standard Version), “The [temple] that King Solomon built for the Lord was sixty cubits long, twenty cubits wide, and thirty cubits high,” and later, “The house, that is, the nave in front of the inner sanctuary, was forty cubits long.” Wright observes that the numbers provided in 1 Kings, divided by ten, equal the proportions evident in *Nuper rosarum flores*. Additionally, the numbers 4 and 7 are significant in many respects to the Temple of Solomon. For example, the temple’s construction began in the fourth year of King Solomon’s reign (1 Kings 6:1). Also, the temple was dedicated during the seventh month of the year, and the service of its dedication lasted two times seven days, as is described in 1 Kings 8:65.³³

Trachtenberg

Trachtenberg shares Wright’s concern with the apparent flaws in Warren’s architectural analysis. However, Trachtenberg notes that Wright, upon discrediting Warren’s calculations, “walked away from the building without looking back, and this may have been a mistake.”³⁴ Trachtenberg’s alternative analysis proposes Santa Maria del Fiore as part of a proportional chain of three buildings: the Battistero di San Giovanni (Baptistery of Saint John), Campanile di Giotto (Giotto’s Campanile), and Florence Cathedral itself. He presents the principal dimensions of the cathedral as 24, 72, and 144, all of which are numerical results of the multiplication of the numbers 6, 4, 3, and 2. Note that Trachtenberg switches the order of the numbers 2 and 3, similarly, he claims, to the way Wright rearranges the order in which the dimensions of the Temple appear in scripture.³⁵ The multiplication of 6 by 4 yields 24, which is the length of the baptistery’s sides, the breadth of the *campanile* (bell tower), and the facets of the cathedral tribunes. Multiplying 6, by 4, by 3 equals 72, a number which acts as the nave width and height as well as the diameter of the dome. Finally, 6 multiplied by 4, multiplied by 3, multiplied by 2 equals 144, which is the length of the nave and the height of the dome.³⁶

Trachtenberg draws largely on the common perception of gothic cathedrals as symbolically looking back to the Temple of King Solomon

³³ Wright, “Dufay’s *Nuper rosarum flores*,” 406–407.

³⁴ Trachtenberg, “Architecture and Music Reunited,” 742.

³⁵ *Ibid.*, 752–755.

³⁶ *Ibid.*, 755.

and ahead to the Universal Church, God's future kingdom on earth. He writes, "Just as Solomon prefigured Christ, so his Temple was the precursor and symbol of the Universal Church, and every sanctuary drew spiritual authority from it."³⁷ This idea is reflected in the liturgical rite of the Catholic church, whose Old Testament lesson is the account of Solomon's dedication of the first temple.³⁸ Typically, a portion of a sermon by Saint Augustine was read after this lesson, which was included to raise listeners' "awareness that the true temple of God is made not of inert rock, but of human hearts and spirits."³⁹ This sermon, combined with related Psalms, guided listeners to consider the New Jerusalem, God's future kingdom on earth which King Solomon's Temple was created to foreshadow, as a city whose light radiates from the Lamb of God, whose gates will never be shut, and whose inhabitants will never again know night (Rev. 21:23–25, English Standard Version). Because Solomon's Temple was esteemed as a model for Catholic worship, Trachtenberg proposes that Santa Maria del Fiore may have been constructed according to the proportions given in 1 Kings 6. Thus, Trachtenberg's theory renders neither Warren nor Wright incorrect. The motet was composed to reflect the cathedral, which was designed to imitate Solomon's Temple. Therefore, the motet symbolizes not only the cathedral, but the temple as well.

Closing Considerations

The *Nuper rosarum flores* discussion is fundamentally complex because its chief arguments are supported by different historical contexts. The medieval mind centered on symbolism, using material things to portray the intangible.⁴⁰ Since Wright and Trachtenberg's hypotheses are both based on symbolism, neither is quite feasible if one views the cathedral, its dedication, and *Nuper rosarum flores* within an exclusively Renaissance framework. On the other hand, Warren's argument is strengthened by an understanding of the Italian Renaissance characteristics such as humanism but makes little sense against a medieval backdrop. Dufay's motet and the various perspectives

³⁷ Trachtenberg, "Architecture and Music Reunited," 745.

³⁸ Laurence Hull Stookey, "The Gothic Cathedral as the Heavenly Jerusalem: Liturgical and Theological Sources," *Gesta* 8, no. 1 (January 1969): 37. doi:[10.2307/766672](https://doi.org/10.2307/766672).

³⁹ Ibid.

⁴⁰ Gerhart B. Ladner, "Medieval and Modern Understanding of Symbolism: A Comparison," *Speculum* 54, no. 2 (April 1979): 226. doi:[10.2307/2854972](https://doi.org/10.2307/2854972).

surrounding its structure call for a delicate understanding of both the medieval and Renaissance ages, and more importantly, the complexity of history itself. Scholars categorize history by way of named eras, periods of time representing a culmination of common ideas, but some have noted the limitations of this process. Jacques Le Goff comments, “Periodizing history is a complicated business. Unavoidably, it is fraught with personal bias and shaped by an interest in arriving at a result that will be widely accepted.”⁴¹ Characteristics of a given society ebb and flow according to an intricate web of factors so that one cannot rightly claim a certain date as the beginning of the Renaissance age, or as the death of medieval thought. The Renaissance was a deliberate movement of revival which saw an increased esteem for the individual and human achievements,⁴² but like any historical transition, it did not happen overnight; indeed, many scholars disagree on precisely which years should be labeled “Renaissance.”⁴³

Perhaps it is this juxtaposition which has inspired such debate regarding the compositional structure of Dufay’s *Nuper rosarum flores*. For in this motet, scholars discover a historical context which exudes Renaissance humanism and isorhythmic proportions which deviated from convention, yet biblical numerical symbolism which harkens back to medieval times. *Nuper rosarum flores* was written for a city’s religious center, yet the cathedral’s purpose was no longer solely spiritual, but heavily influenced by politics and civic pride. Trachtenberg has suggested a comprehensive hypothesis which accounts for Florence Cathedral, Solomon’s Temple, and Dufay’s motet. Yet, perhaps it is unwise to accept such a logically pleasing solution with haste. Attributing medieval or Renaissance qualities to *Nuper rosarum flores* and its context has proven to be as difficult as “trying to cut a river with a carving knife,” to quote medieval historian Brian Pullan, and selecting a definitive answer to the motet’s complexity might just stunt the process of musicological exploration; for “scrupulous attention to exact boundaries thrown across the whole stream of history can only hamstring study and inquiry.”⁴⁴

⁴¹ Jacques Le Goff, *Must We Divide History into Periods?* European Perspectives: A Series in Social Thought and Cultural Criticism (New York: Columbia University Press, 2015), 4.

⁴² Burkholder, *History of Western Music*, 147–148.

⁴³ *Ibid.*, 146.

⁴⁴ Brian S. Pullan, *A History of Early Renaissance: From the Mid-Thirteenth to the Mid-Fifteenth Century* (New York: St. Martin’s Press, 1972), 11.

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