

Valeriana Graeca in Leonardo's Virgin of the Rocks

THE ROOT OF VALOR AND THE RESISTANCE OF FLORENCE

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Abstract

This study investigates the symbolic and subversive function of *Valeriana graeca* (modern *Polemonium caeruleum*) in Leonardo da Vinci's *Virgin of the Rocks*, situating its meaning within the philological, botanical, and political-intellectual ecology of late Quattrocento Florence. Renaissance linguistic theory regarded names as vessels of essence; thus *Valeriana*, from *valere* ("to be strong," "to have power"), signified active valor and moral steadfastness. Medieval and early Renaissance herbalists grouped *Polemonium* under *Valeriana graeca* due to morphological resemblance and classical authority, a nomenclature reinforced in humanist works such as Hermolaus Barbarus and later developed in sixteenth-century herbals. By the 1480s this terminology was firmly established in Italy.

Leonardo worked within a city shaped by acute political and theological pressures: Sixtus IV's aggression against Florence, Lorenzo de' Medici's perilous embassy to Naples, and Vincenzo Bandello's Dominican resistance to the Franciscan doctrine of the Immaculate Conception. In this environment, symbolic communication—especially within a Franciscan commission sympathetic to the papal agenda—became a subtle but essential tool. Florentine intellectual culture, including Leonardo's own practice, prized verbal play, etymological puns, and layered semantic allusions; such habits naturally informed the visual "language" of the painting.

By setting the Florentine *giglio* under John's kneeling posture and the *Valeriana graeca* beneath the foot of Florence's patron saint, Leonardo intimates that the entire composition draws its symbolic force from Florentine adoration and valor—an identity anchored in the city's own resistance and intellectual conviction. This article analyzes that plant as one example within a broader symbolic system. The botany, geology, hydrology, and landscape as a whole function not as naturalistic accessories but as coordinated instruments of subversion. Here, however, we focus solely on the *Valeriana graeca* as one of several equally deliberate elements through which Leonardo subversively embedded a coded Florentine-Dominican critique within a Franciscan devotional setting.

Introduction: The Etymological Virtue of Strength

In the philological landscape of the Renaissance, words were not merely arbitrary signifiers; they were vessels of essence, containing the ontological truth of the objects they named. To understand the botanical history of the plant now known as *Polemonium caeruleum*, one must first understand the potent Latin root that governed its medieval identity: *valere*.

Derived from the Latin verb meaning "to be strong," "to be well," or "to have power," the name *Valeriana* is linguistically inseparable from the concept of **valor**. In the early Renaissance imagination, valor was not a passive state of health, but an active, martial virtue. It defined the "strength of mind in resisting fear and braving danger," and specifically denoted "courage and skill in fighting" in defense of what is right. It was a word of steel and spirit, implying a fortitude that withstands corruption and assault.

This etymological pedigree suggests that when a 15th-century herbalist or artist encountered the plant *Valeriana*, they did not see a mere garden ornament. They saw a vegetative manifestation of strength. This semantic weight is crucial for decoding the plant's role in the cultural and political struggles of late Quattrocento Italy, where "valor" was the currency of survival against ecclesiastical and temporal tyranny.

The Botanical Identity: From Greek Valerian to Polemonium

The plant in question—today known as *Polemonium caeruleum*—has been independently identified in the Louvre *Virgin of the Rocks* by multiple contemporary horticultural experts. John Grimshaw, a respected British plantsman and author, publicly noted that Leonardo "clearly" depicts an iris, a *Polemonium*, and an aquilegia in the rocky foreground of the painting, confirming the botanical precision long suspected by scholars of Leonardo's naturalism. More recently, **Nancy Mafia**, an American horticulturist with an M.S. from the University of Kentucky and professional experience at both Cornell University and the University of Florida, has likewise affirmed the presence of *Polemonium* in the composition. Her identification—based on decades of field, academic, and greenhouse work—further strengthens the case that Leonardo painted *Polemonium caeruleum* deliberately and recognizably.

This convergence of expert testimony has renewed interest in the species' historical nomenclature, which reveals much about the intellectual habits of the medieval and Renaissance world. By the fifteenth century, long before modern taxonomy formalized the genus *Polemonium*, the plant was widely known as **Valeriana graeca**, or "Greek Valerian." This designation emerged from the morphological logic of pre-Linnaean herbalists, who grouped plants by visible affinities rather than by hidden structures, and from the philological tendencies of Renaissance scholars who anchored botanical identity in classical sources.

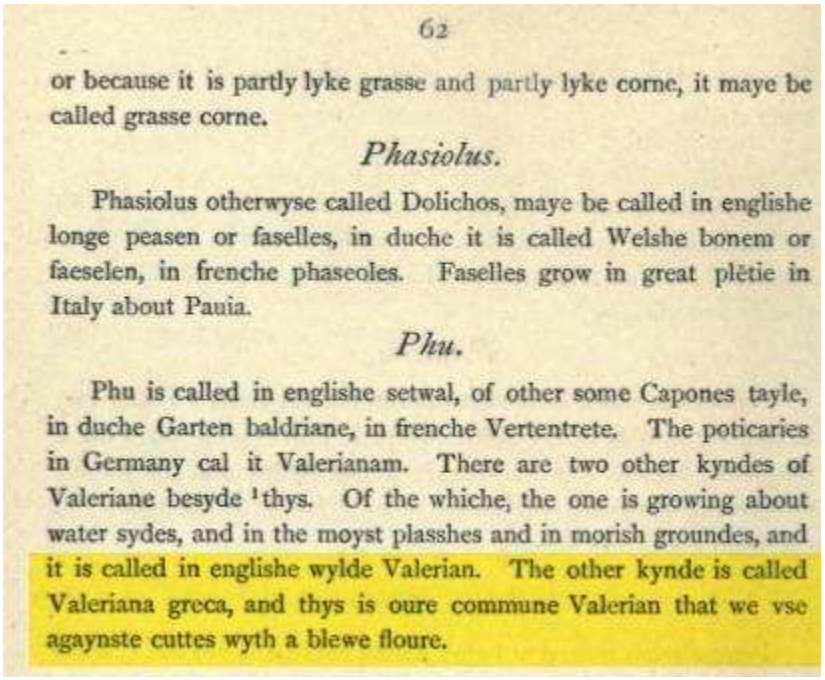
The consolidation of this name is evident in the humanist writings of the late 15th century. Hermolaus Barbarus (1454–1493), the Venetian diplomat and meticulous scholar who sought to purify natural history from medieval corruptions, engaged with the identity of this plant in his *Corollarium* to Dioscorides. Barbarus's discussion demonstrates that by the 1480s and 1490s—the precise moment Leonardo da Vinci was active in Milan—the identity of *Valeriana graeca* was a matter of scholarly discourse.

This identification solidified rapidly in the 16th century, aided by the proliferation of the printing press and the explosion of illustrated herbals. The plant appears as *Valeriana graeca* independently in the works of Rembert Dodoens 1574 (Figure 1) and Castor Durante 1585, where woodcuts began to standardize the visual association for a European readership. While the name "Jacob's Ladder" would eventually emerge in this century—inspired by the same ladder-like leaves evoking the biblical dream of Jacob—it is critical to note that this was a later vernacular development. There is a possibility that the "ladder" association existed in oral tradition earlier, but in the textual record of the 15th century, the plant remained the "Greek Valerian," the herb of strength.



Figure 1

The stability of this identification is powerfully corroborated even earlier by the English naturalist William Turner. In his *Names of Herbes* (1548), Turner discusses *Valeriana graeca*, explicitly linking it to the plant with the blue flower that we now call *Polemonium (Figure 2)*. Turner writes of the plant as a known entity, distinguishing it from the "wild Valerian." The significance of Turner's 1548 entry cannot be overstated: if the association between *Valeriana graeca* and the blue-flowered *Polemonium* was already "common" enough to be codified in England by 1548, it is historically reasonable to assert that this nomenclature was the standard, accepted common name in the intellectual centers of Italy (like Florence and Milan) a half-century earlier. The transmission of botanical knowledge moved from south to north; what was common in London in 1548 was common knowledge in Florence in 1480.



62

or because it is partly lyke grasse and partly lyke corne, it maye be called grasse corne.

Phasiolus.

Phasiolus otherwyse called Dolichos, maye be called in englishe longe peasen or faselles, in duche it is called Welshe bonem or faeselen, in frenche phaseoles. Faselles grow in great plẽtie in Italy about Pauia.

Phu.

Phu is called in englishe setwal, of other some Capones tayle, in duche Garten baldriane, in frenche Vertentrete. The poticaries in Germany cal it Valerianam. There are two other kyndes of Valeriane besyde [1]thys. Of the whiche, the one is growing about water sydes, and in the moyst plasshes and in morish groundes, and it is called in englishe wylde Valerian. The other kynde is called Valeriana greca, and thys is oure commune Valerian that we vse agaynste cuttes wyth a blewe floure.

Figure 2

Leonardo's Grotto: A Botanical Signature

It is within this established nomenclatural framework that we must view the work of Leonardo da Vinci. In the prime version of *The Virgin of the Rocks*, housed in the Louvre and executed between 1483 and 1486, Leonardo painted a botanical specimen of remarkable precision.

Situated directly immediately under the left foot of the infant John the Baptist, growing from the rocky substrate of the grotto, is a plant identified by the horticulturalist John Grimshaw and his team, and confirmed by Nancy Mafia, as *Polemonium caeruleum*—the *Valeriana graeca* of the 15th century.

Leonardo's inclusion of this plant is not decorative; it is deliberate. The plant is rendered with the same scientific fidelity as the geological formations of the grotto. It is rooted in a specific place, relative to a specific figure. By placing the *Valeriana*—the plant of Valor—under the foot of the Baptist, Leonardo establishes a silent but potent symbolic link (Figure 3). However, to understand the "why" of this placement, we must look beyond the canvas to the turbulent political and theological atmosphere in which Leonardo painted.

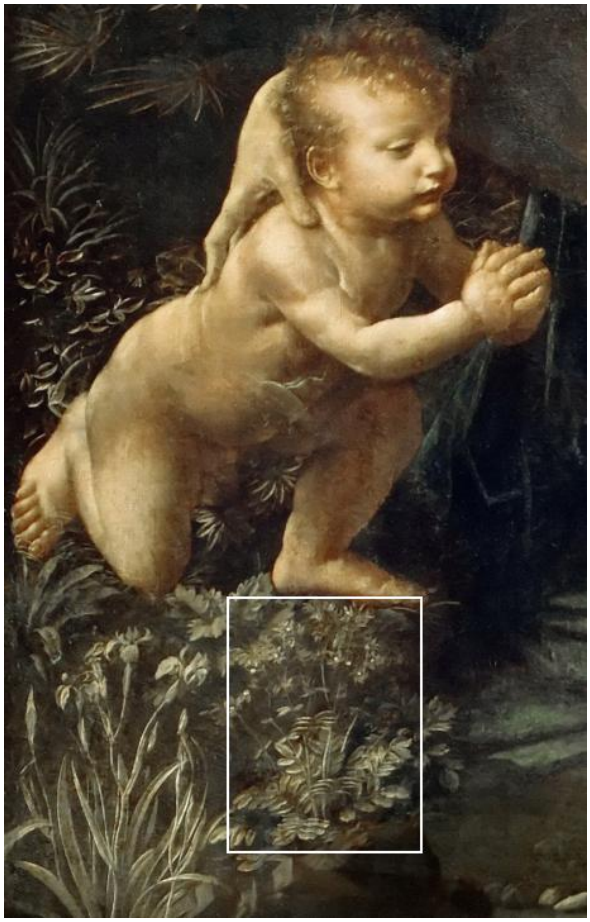


Figure 3

The Crisis of the 1470s: Valor in the Face of the Papacy

The late 1470s and early 1480s brought Florence into direct and dangerous conflict with the Papacy of Sixtus IV. The confrontation was not limited to territorial disputes; it touched the political autonomy and civic identity of the Florentine Republic. The Pazzi Conspiracy of 1478—planned with papal approval and driven by families closely associated with the Franciscan milieu of Santa Croce, at the very moment when Sixtus IV, the first Franciscan pope, sought to extend his influence into Florence—resulted in the murder of Giuliano de' Medici and gravely endangered Lorenzo, who narrowly survived (Figure 4). In the aftermath, Florence faced excommunication, interdict, and open warfare from the combined forces of the Papal States and the Kingdom of Naples.

Amid this collapse of diplomatic and military security, Lorenzo de' Medici made a choice that few contemporaries expected. In late 1479 he undertook a personal embassy to Naples, entering the court of King Ferrante—a ruler known for imprisoning or executing political adversaries. Lorenzo went without military protection or significant leverage, aware that many prisoners sent to Ferrante never returned.



Figure 4

It was this act that fundamentally shaped how Lorenzo was viewed thereafter. Contemporary observers across Italy described the decision as unusually courageous. Florentine chroniclers, Venetian diarists, and Milanese ambassadors all commented on the personal risk involved. Humanists such as Poliziano and Bernardo Rucellai characterized the journey as a bold and decisive intervention undertaken for the safety of the republic. Even in Naples, chroniclers noted that Lorenzo's presence and self-possession had a disarming effect on Ferrante, contributing to the successful negotiation of peace.

The consequences in Florence were immediate. Before 1479, Lorenzo was respected but still regarded by some as a young magnate whose authority rested primarily on lineage and patronage. After his return from Naples, public perception changed markedly. The Florentine elite and the broader populace increasingly viewed him as a leader who had demonstrated personal valor on behalf of the state. His willingness to risk his life for

Florence strengthened his legitimacy and moral authority, transforming him from a prominent citizen into the acknowledged stabilizing figure of the republic.

Later historians—from Machiavelli onward—consistently identified the Naples embassy as the moment Lorenzo proved himself a statesman of exceptional courage. The episode solidified his reputation, and throughout his lifetime he was remembered as an intellectual ruler whose leadership was confirmed through the crucible of this this singular act of personal risk undertaken in defense of Florence against a militeristic Pope.

The Dominican Resistance: Vincenzo Bandello

Parallel to Lorenzo de' Medici's emergence as the principal political defender of Florence, a corresponding form of theological resistance was developing within the Dominican Order. At the center of this intellectual opposition stood Vincenzo Bandello. In the mid-1470s—precisely when Sixtus IV was working to weaken Medici authority by transferring the lucrative papal banking contract from the Medici to their Franciscan-aligned rivals, the Pazzi and Salviati—Bandello challenged the Pope on a second, equally consequential front: the doctrine of the Immaculate Conception.

For the Dominicans, whose identity was rooted in the Thomistic tradition, the Franciscan doctrine championed by Sixtus IV represented far more than a matter of theological nuance. It was a direct test of the Order's intellectual independence at a moment when papal authority was expanding aggressively into Florentine political and ecclesiastical life. The controversy therefore became inseparable from the broader struggle between Florence and the papacy.

In **1475**, at precisely the moment Sixtus was undermining Medici financial power, Bandello—already regarded as one of the most promising Dominican thinkers of his generation—traveled to **Rome** and publicly disputed the Franciscan position before an audience dominated by supporters of the Franciscan Pope, including the Minister General Francesco Sansone himself. The disputation was widely noted for the confidence and clarity of Bandello's arguments, and his *Libellus de veritate conceptionis beatae Virginis Mariae*—published earlier that year—forcefully articulated the Dominican opposition to a doctrine Sixtus would formally endorse in 1476. Predictably, Bandello was declared the loser, the deciding judgment issued by Sixtus IV, a Franciscan adjudicating a Franciscan-Dominican controversy. Yet even in this politically weighted environment, Bandello's performance earned him considerable attention.

Rather than retreat, Bandello continued to defend the Dominican position despite implicit threats of censure. His reputation increased significantly in the following years, especially after his more extensive and provocative publication of **1481**, which questioned the Franciscan claims even more directly (Figure 5). The text spread quickly; Sixtus responded

by publicly threatening excommunication for anyone who possessed it. By this point, Bandello's intellectual defiance was recognized across Italy's scholarly and ecclesiastical communities.

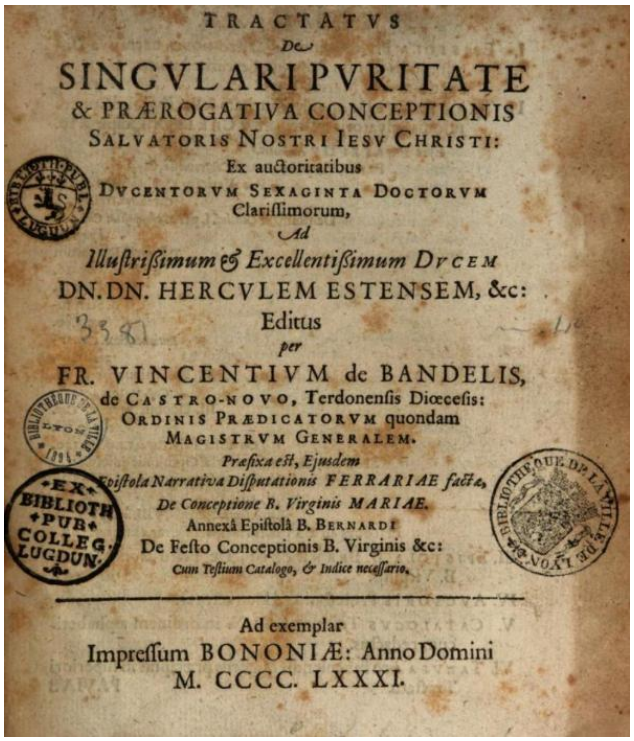

TRACTATVS
De
SINGVLARI PVRITATE
& PRÆROGATIVA CONCEPTIONIS
SALVATORIS NOSTRI IESV CHRISTI:
Ex auctoritatibus
DVCENTORVM SEXAGINTA DOCTORVM
Clarissimorum,
Ad
Illustrissimum & Excellentissimum DVCEM
DN. DN. HERCVLEM ESTENSEM, &c:
Editus
per
FR. VINCENTIVM de BANDELIS,
de CASTRO-NOVO, Terdonensis Diœcesis:
ORDINIS PRÆDICATORVM quondam
MAGISTRVM GENERALEM.
Præfixa est, Ejusdem
Epistola Narrativa Disputationis FERRARIAE factæ,
De Conceptione B. Virginis MARIAE.
Annexâ Epistolâ B. BERNARDI
De Festo Conceptionis B. Virginis &c:
Cum Testium Catalogo, & Indice necessario.
Ad exemplar
Impressum BONONIÆ: Anno Domini
M. CCCC. LXXXI.

Figure 5

It was in this charged context that Lorenzo de' Medici summoned Bandello to Florence, appointing him **Prior of San Marco in 1481**—a moment that also coincided with Leonardo's quiet activity in the convent gardens under Lorenzo's patronage. The timing was deliberate. By then, Lorenzo had become the foremost political adversary of Sixtus IV, while Bandello, as the leading spokesman of Dominican resistance, had become the Pope's most visible theological opponent. Contemporary observers across Italy—and increasingly beyond it—recognized that Sixtus now faced a dual challenge emanating from Florence: Lorenzo defending the civic autonomy of the republic, and Bandello defending the doctrinal integrity of the Dominican tradition.

Their convergence at San Marco thus symbolized a unified Florentine resistance—political and intellectual—against the expanding pressures of Sixtus IV's papacy.

The Synthesis: *Valeriana* as the Symbol of Resistance

It is within the convergence of these two forms of united Florentine resistance—the political resistance led by the Medici and the theological resistance led by the Dominicans

of San Marco—that the presence of *Valeriana graeca* in Leonardo's *Virgin of the Rocks* acquires its deeper significance. Leonardo was working in an environment acutely shaped by these conflicts. The *Virgin of the Rocks* itself was commissioned for a newly established chapel closely aligned with Pope Sixtus IV and Sansone, intended explicitly to support the doctrine of the Immaculate Conception—indeed, it was the first chapel constructed after Sixtus's approval of the feast in 1476. As we will see with the other botanical choices in the painting, Leonardo's placement of *Valeriana graeca*—literally "Greek valor"—directly beneath the foot of John the Baptist communicates more than naturalistic detail. It functions as a coded visual statement aligned with the broader Florentine and Dominican opposition to Sixtus, reflecting Leonardo's sympathy for the intellectual and political currents shaping the city in the early 1480s.

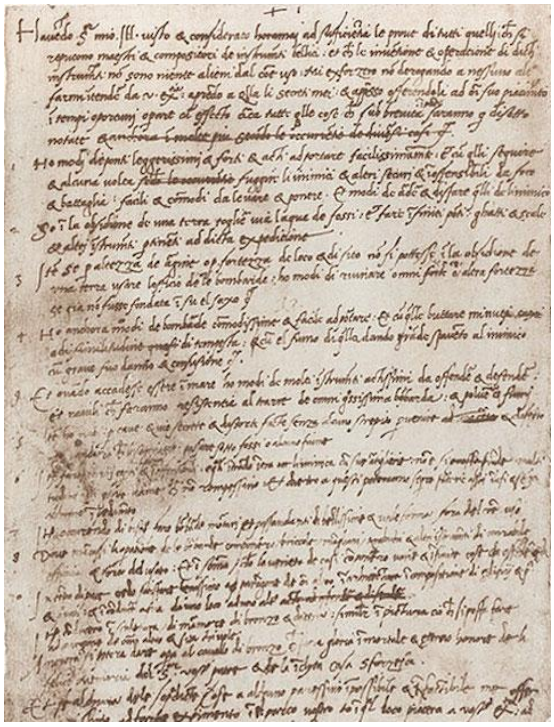


Figure 6

This alignment gains further clarity in light of emerging literary evidence suggesting that Leonardo was later sent to Ludovico Sforza in Milan not only as a cultural and military envoy for Lorenzo during the 'Salt War' with Sixtus—presenting himself as war engineer, designer, and court artist (Figure 6)—but also, as I propose, with the secondary expectation that Ludovico's influence might help secure the commission for the *Virgin of the Rocks*. Under this interpretation, Leonardo's mission takes on a dual character: on the surface, he represented Florence in matters of culture, technology, and artistic innovation; simultaneously, he positioned himself to produce a work for a Franciscan institution closely connected to Sansone and aligned with the theological policies of Sixtus IV. In

doing so, Leonardo created an opportunity for Lorenzo and Bandello to advance a subtle yet pointed visual critique of the Pope's agenda—an encoded affirmation of Dominican theology articulated from within a setting sympathetic to its Franciscan rivals, effectively allowing Florence to challenge Sixtus from behind what might be described as enemy lines. Viewed in this light, we can now understand why the confraternity ultimately rejected Leonardo's first version: recognizing or suspecting its subversive implications, they demanded a new painting with a different thematic orientation. Leonardo, realizing that a new theme would be too labor intensive, however, responded by producing essentially the same composition—but carefully sanitized, stripped of the Dominican-Medicean coded symbolism that had animated the first version.

Reserving a detailed analysis for later, it is sufficient to recall that John the Baptist was universally recognized throughout Christendom as the patron saint of Florence—a city over which the Medici bank effectively presided. The Florin itself makes this clear: one side bears the image of John the Baptist, the other the Florentine iris (the *giglio*), visually uniting civic identity, sacred patronage, and the ruling family (Figure 7). It was likewise widely recognized that the Medici upheld an intimate alliance with the Dominicans of San Marco, the preeminent Observant convent in Italy and a distinguished center of Thomistic scholarship and intellectual authority.



Figure 7

Within this context, the Baptist in the *Virgin of the Rocks* functions not merely as a biblical figure but as a symbol of Florence—more precisely, of a Florence shaped by Medicean patronage and Dominican intellectual leadership. The *giglio* placed in the corner of the painting, serving as Leonardo's encoded signature (much as Filippo Lippi embedded his axe in the Magi Chapel), further anchors the work within a distinctly Florentine visual vocabulary, giving the appearance the Baptist's genuflecting knee is upon the Giglio, signifying Florentine adoration of Christ.

Adjacent to the Giglio and beneath the sole of the Baptist's left foot—appearing almost as though John is standing directly upon it—Leonardo places the *Valeriana graeca*. Its presence signals the quality of valor that Florence claimed as foundational in its struggle against the militant policies of Pope Sixtus IV and the Franciscan theology he promoted. In this reading, John the Baptist—standing for Florence—expresses not only adoration of Christ but the valor with which Florence, under Medici and Dominican leadership, defended the truth as it understood it.



Figure 8

Conclusion

The reexamination of *Valeriana graeca* within Leonardo's *Virgin of the Rocks* illuminates the extent to which the painting's natural environment operates as an encoded field of meaning. In the intellectual culture of fifteenth-century Florence—where etymology, wordplay, and semantic resonance shaped both humanist scholarship and artistic invention—the very name *Valeriana*, grounded in *valere*, invoked the active virtue of valor. This linguistic weight converged with a political moment in which Florence, under Lorenzo de' Medici, defined itself through courageous resistance to the policies of Sixtus IV, and in which Dominican theologians, led by Vincenzo Bandello, upheld Thomistic integrity against Franciscan doctrinal encroachment. It was in this world of contested meanings that Leonardo worked, absorbing the habits of Florentine intellectualism and channeling them into the coded visual vocabulary of his art.

By placing *Valeriana graeca* and Giglio beneath the foot and knee of John the Baptist—patron saint of Florence and emblem of its civic identity—Leonardo inscribed an image of Florentine valor and pride directly into a painting meant for a Franciscan institution aligned with the papal agenda. Yet these plants are only two elements within a larger expansive framework. The grotto, the hydrology, the stony vaults, the atmospheric veils, and the other botanical species all participate in a coherent system of signs, each bearing layers of political, theological, or civic allusion telling a single story. Together they form a deliberately structured program of subversion: a visual counterargument embedded within the very context it resists.

This study has focused on *Valeriana graeca* as one representative component of that system. Its presence demonstrates how Leonardo, fully conversant with Florentine habits of punning, etymological play, and symbolic indirection, could integrate naturalistic precision with subtle political and doctrinal critique, transforming nature itself into the vehicle of Florentine-Dominican resistance.