

VISIONARY SCIENCE IN *PURGATORIO* XVII AND *PARADISO* XXX

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For several hundred years prior to the inception of Dante's *Commedia*, the mechanics of sight had been the subject of a rigorous investigation on the part of medieval intelligentsia. This inquiry would contribute to the formation of modern physics. Yet the very title of a treatise by Peter of Limoge, *Tractatus morales de oculo* (1275-1289), illustrates the difference between pre-modern and empirical science—that is, the physical and the moral were viewed as inseparable, as two aspects of the same thing. Even more so, Dante's magnum opus quintessentially typifies this epistemological struggle. His striving to comprehend the meaning of *vision* is central to both the theme and structure of the *Commedia*, which is epitomized in the poem by a relationship between two particular cantos, *Purgatorio* XVII and *Paradiso* XXX. Taken together, they divulge an essential truth about Dante, about the *Commedia*, and about the intellectual currency of the late thirteenth and early fourteenth centuries, which was defined by the rival claims of pagan and Christian wisdom. These cantos reveal the Christian Dante who, like Thomas Aquinas, his doctrinal "father," attempted to reconcile the ideas of Aristotle and Augustine, those two most powerful intellectual forces.

Much has been written about the medieval study of optics.¹ And an even greater amount of scholarly work has been devoted to the crucial thematic role of vision in the *Commedia*. As a poetic element,

¹ By far the most important, comprehensive, and brilliant study is David C. Lindberg, *Theories of Vision from al-Kindi to Kepler* (Chicago and London: Univ. of Chicago Press, 1976). See also Linda Tarte Holley, "Medieval Optics and the Framed Narrative in Chaucer's *Troilus and Criseyde*," *The Chaucer Review* 21, no. 1 (1986): 26-44; and Judith S. Neaman, "Magnification as Metaphor," in *England in the Thirteenth Century: Proceedings of the 1989 Harlaxton Symposium*, ed. W. M. Ormrod (Stamford: Paul Watkins, 1991), 105-22. I am indebted to Paul Spillenger and George Economou for their careful reading of my essay, and helpful comments, at various stages of its development.

the importance of vision can hardly be exaggerated. Concerning the context in which Dante worked, for example, Giuseppe Mazzotta has written

that love, according to the codifications of courtly love and the practice of the Stilnovists, is tied to the eyes. He who is blind, we are told, cannot love. We also know that love, though itself blindfolded, opens the lover's eyes. What we are probably less familiar with is the insight that was overtly formulated by no less an intellectualist than St. Thomas Aquinas. Among all senses, sight is the one the lover values most: "ubi amor ibi oculus."²

As for the *Commedia* itself, Anthony K. Cassell has observed that, beginning with *Inferno* II, "Dante places a notable stress on sight and eye imagery [which] recurs throughout the pilgrim's journey of enlightenment." The patroness of sight, Lucia (Latin *lux*, *lucis*, Italian *luce*), who is widely thought to be Dante's patron saint, is first mentioned here, at the poem's start (the previous canto serving as an introduction to all three canticles). As Edward Hagman has written about the *Paradiso*, "if Dante's ineffable vision of God represents the summit of his journey, it must also be a major key to the understanding of the entire *Commedia*." In that third canticle "[t]he gradual increase in the pilgrim's power of vision is a major theme...culminating in a seeing ability which is not merely greater but of a different order, a 'vista nova.'" Likewise, Cassell writes that "[t]hroughout the *Paradiso* the souls of the blessed appear as lights, and Dante pilgrim learns by means of his own increased vision." More specifically, Rebecca S. Beal points out that the first four tercets of *Paradiso* X—a canto whose esthetic and ideological impulse anticipates the later *Paradiso* XXX and XXXIII—"assert] that the whole of creation is constituted out of a vision."³ Sight or vision, which may either

² Giuseppe Mazzotta, *Dante's Vision and the Circle of Knowledge* (Princeton: Princeton Univ. Press, 1993), 152; Thomas Aquinas, *Commentary on the Sentences* 3 d 35, I, 2, i; quoted in Mazzotta.

³ Anthony K. Cassell, "Santa Lucia as Patroness of Sight: Hagiography, Iconography, and Dante," *Dante Studies* 109 (1991): 77-8; Edward Hagman, "Dante's Vision of God: The End of the *Itinerarium Mentis*," *Dante Studies* 106 (1988): 2, 6; Rebecca S. Beal, "Beatrice in the Sun: A Vision from Apocalypse," *Dante Studies* 103 (1985): 64. Notable among many other studies on vision are, recently, Luigi Blasucci, "Discorso teologico e visione sensibile nel canto XIV del *Paradiso*," *Rassegna della letteratura italiana* 95, no. 3 (1991): 5-19; G. C. Di Scipio, "Dante and St. Paul: The Blinding Light," *Dante Studies* 98 (1980), 151-7; Susan Noakes, "Dante's *Vista Nova*: *Paradiso* XXXIII.136," *Quaderni d'italianistica* 5, no. 2 (1984): 151-70; and Emilio Pasquini, "La metafora della visione nella *Commedia*," *Lecture classensi* 16 (23 Feb. 1985): 129-51.

lead to or constitute imagination or knowledge, depending on how any or all of these four are construed, are linked to each other within a network that has been analyzed by many critics—among them Mazzotta, who has called attention to a significant interplay between *Purgatorio* XVII, the poem's central canto, and *Paradiso* XXXIII, the poem's ultimate canto and crowning glory.⁴ He draws no line, however, between the earlier canto and *Paradiso* XXX, where Dante first arrives in the shining Empyrean. In the context of the pilgrim's entire journey, and thereby of that journey's ultimate meaning, this canto is meant to fulfill a great promise.

Sight and Vision

In the *Commedia*, the *viator's* primary dramatic function is to witness the full range of human suffering, damnation, and redemption. He bears his author's name, and, like him, he is a poet; and in this capacity he performs an allegorical service that is in keeping with the poem's dramatic structure and overarching motifs. In his striving to articulate all that he sees, he is transformed into the representation of sight itself; he becomes a figure, not merely his author's persona but rather a dynamic, dramaturgical synergy. One signal purpose of the poem's drama is to explore a natural relationship that existed for Dante between sight and vision.

This allegory underwrites the profoundly visual richness of the *Paradiso's* late cantos. Indeed, the abundance of visual imagery, throughout all three canticles, is a critical element in a poetic complex that espouses a fully articulated theology, yet Dante also presents his readers with a fully evolved philosophy, and with a "physics" as well; thus, Dante exhibits a fascination with optics. What the *viator* sees, and, more importantly, how he sees, are finally expressed as a struggle to know. This effort is characterized by the weighing of experiences provided by the five senses and memory against simple faith and divine grace. Sight, the chief physical sense, is both like and unlike vision, the analog of grace.

Dante's "scientific" thinking—his theology, philosophy, and physics—are of course indebted to Thomas's grand attempt at reconciling Aristotelianism and Christian dogma; specifically the *Summa theologiae* emphasizes the role of sensory experience in the attainment of knowledge. That work's dichotomy of sense and Grace, which is

⁴ Giuseppe Mazzotta, *Dante, Poet of the Desert: History and Allegory in the "Divine Comedy"* (Princeton: Princeton Univ. Press, 1979), 267.

exemplified by the metaphor of sight, could but only have affected Dante's real journey, through his real life in which, arguably, the poet was attempting to comprehend, as an intellectual, a connection between seeing and faith. And since he was also a poet, the consideration of poetry as a means toward knowledge must inevitably have come into play. Susan Noakes, for instance, has observed that he consistently pairs the words *vita* and *vista* in the *Paradiso*, so to include within the question of sight and knowledge, which he has been pursuing, a "retrospective view of his career as a poet."⁵ Thus this complex—understanding, language, vision, science, and art—devolves upon the question of optics, the machinery of sight and vision.

A world away in time and perspective, Isidore of Seville had written that words were the memory of voices. Dante reminds us of this in the opening lines of *Purgatorio* XVII, where his persona invokes the powers of memory and hearing, but only to juxtapose them with seeing, the more viable force. This canto is remarkable for the insight it supplies into the nature of contemporary scientific inquiry; it is here that Dante investigates a relationship between current beliefs about optics and theology:

Ricorditi, lettore, se mai ne l'alpe
 ti colse nebbia per la qual vedessi
 non altrimenti che per pelle talpe,
 come, quando i vapori umidi e spessi
 a diradar cominciarsi, la sfera
 del sol debilmente entra per essi;

(*Purg.* XVII 1-6)

(Remember, reader, if you've ever been
 caught in the mountains by a mist through which
 you only saw as moles see through their skin,
 how, when the thick, damp vapors once begin
 to thin, the sun's sphere passes feebly through them.)⁶

⁵ Noakes, 163.

⁶ This and all further translations of the *Commedia* are from Dante Alighieri, *The Divine Comedy (Inferno, Purgatorio, Paradiso)*, trans., intro., and notes Allen Mandelbaum, 3 vols. (Berkeley: Univ. of California Press, 1981). All subsequent references will appear parenthetically by line number in the text. The canticles *Inferno*, *Purgatorio*, and *Paradiso* are hereafter cited as *Inf.*, *Purg.*, and *Par.* For similar discussions of this passage, cf. Mazzotta, *Dante, Poet of the Desert*, 267; and *Dante's Vision and the Circle of Knowledge*, 166 ff.

To consider these lines historically is to note how a discipline such as physics is beginning to splinter off from theology, and how the separation occurs as physics acquires its own set of terms. The *Commedia* sought to broaden a general body of scientific knowledge through a fuller articulation of the very field of that knowledge. That field was basically construed as a linguistic matrix that was growing ever more versatile. When Dante's persona says, "Da quinci innanzi il mio veder fu maggio / che 'l parlar mostra," in *Paradiso* XXXIII.55-56 ("From that point on, what I could see was greater / than speech can show"), the poem is also saying that ultimate truth is beyond description; Truth, however, is not the same as truths, just as *vision* is not always the same as *sight*. A few lines earlier, the *viator* has spoken of how his sight has become pure, literally sincere ("sincera," 52), now able "to penetrate the ray of [Eternal] Light" ("intrava per lo raggio / de l'alta luce," 53-4).

According to Dante's *Convivio*, sight occurs because the visual senses are acted upon by rays, or the species of an object, or a combination of these and other things.⁷ This theory was a version of the basic belief in intromission that had gained popularity against its opposite, extramission. Plato and many thinkers after him held that sight occurred because the eye cast its power on an object, thereby making the object sensible. Dante must have been feeling, then, a palpable tension between *auctoritas* and an increasingly diversified *scientia*. Judging by the passage from *Purgatorio* XVII.1-6, one might consider Dante to be an intromissionist, since he writes that the sun's rays pass through the mist to his eyes. Yet, at the conclusion of the *Commedia*, Dante writes of how sight may "penetrate the ray of Light" (*Par.* XXXIII.53-4).

It is easy to understand why Roger Bacon, a contemporary of Dante, had tried to reconcile the two theories, and why he met with certain obstacles, one particularly having to do with the concept of species. As stated in the fifth part of his *Opus majus*, Bacon believed that sight was dependent on a passive reception of the active species of a sensible thing.⁸ In trying to comprehend Dante's optics, and how it becomes woven into the theology expressed in the *Commedia*, it must be noted that Bacon based his optical theory on Alhazen's remarks in *De aspectibus* concerning afterimages when the

⁷ Dante Alighieri, *Convivio*, ed. Maria Simonelli (Bologna, 1966), 3.13. Cf. 2.3 and 2.9.

⁸ *The "Opus majus" of Roger Bacon*, ed. John H. Bridges, 3 vols. (London: Williams and Norgate, 1900); *The "Opus majus" of Roger Bacon*, trans. Robert B. Burke, 2 vols. (New York: Russell and Russell, 1962).

gaze shifts from a bright spot to a darker area or between colors.⁹ His observance of bright light's "injurious character" led to the conclusion that, as David Lindberg has written, "the species of light and color make an impression on the eye and that without such an impression there can be no vision."¹⁰

On the other hand, because Bacon adhered to a doctrine of species that clearly described how they issue from everything, he was forced to consider sight in and of itself as one of their possible sources. At this point in his reasoning Bacon runs into trouble, for he needs to prove that sight is the source of a species, and so he turns to the problem of mirroring. In a mirror, the eye sees itself, which could only occur, he says, because the eye issues a species that subsequently returns to it. However, his supposition includes a confusion of two different species: the "species of the eye (by which the eye is itself observed) [and] the species of vision or the visual power (by which the eye sees)."¹¹

All the same, Bacon's theory of visual radiation stood on the apparently solid ground of authority. Ptolemy, Tideus, al-Kindi, Euclid, and Augustine all attested it, and Aristotle had written in *De animalibus* (according to Bacon's paraphrase) "that seeing is nothing other than the visual power coming to the thing seen."¹² Faced with a contradiction, Bacon rather adroitly adheres to both intromission and extramission. He writes, remarkably, that the "species of the things of the world are not suited to act immediately and fully on sight because of the nobility [*nobilitatem*] of the latter."¹³

What is the warrant for claiming the "nobility" of a species? Bacon has solved his problem conceptually, yet he has had to rely on an unlikely borrowing—the notion of *nobility* could have been moral, political, economic, sociological, even esthetic. In *Paradiso* XXXIII, for instance, Dante employs the word as a synonym for *love*; addressing the Virgin Mother, his persona says, "tu se' colei che l'umana natura / nobilitasti sì, che 'l suo fattore / non disdegnò di farsi sua fattura" ("you are the one who gave to human nature / so

⁹ Alhazen, *De aspectibus*, in *Opticae thesaurus: Alhazeni Arabis libri septem...* (1572; reprint, with intro. by David C. Lindberg, New York: Johnson Reprint Co., 1972), I.4.3-4; Alhazen, *The Optics of Ibn al-Haytham*, trans., intro., and notes A. I. Sabra, 2 vols. (London: The Warburg Institute / Univ. of London, 1989).

¹⁰ Lindberg, 114 and n.

¹¹ Lindberg, 114-5 and nn.

¹² Quoted in Lindberg, 115 and n.

¹³ *Opus Majus*, pt. 5.1, dist. 7, chap. 4, ed. Bridges, 2:52. Cf. Lindberg, 115.

much nobility that its Creator / did not disdain His being made its creature," *Par.* XXXIII.4-6). Yet Bacon apparently uses the term *nobility* to mean something physical or sensible, aligning nobility with *force*:

the act of seeing is the perception of a visible object at a distance, and therefore vision perceives what is visible by its own force multiplied to the object. Moreover, the species of the things of the world are not fitted by nature to effect the complete act of vision at once because of its nobleness. Hence these must be aided and excited by the species of the eye, which travels in the locality of the visual pyramid [the field of vision], and changes the medium and ennobles it, and renders it analogous to vision, and so prepares the passage of the species itself of the visible object, and, moreover, ennobles it, so that it is quite similar and analogous to the nobility of the animate body, which is the eye.¹⁴

This same tendency of Bacon's diction is also revealed in his use of the term *virtue* to mean force, as in "visus cognoscit visibile per suam virtutem" ("vision perceives what is visible by its own force"); this term will be exploited by Dante. In other words, Bacon, the protoscientist, makes a move not unlike the kind of poetic decision Dante must have considered in writing his poem. The synthesis of physics, ontology, epistemology, and esthetics, is embodied in the questions Dante's *viator* poses concerning vision.

Double Vision

These questions are answered through a meditation on the nature of a common visual phenomenon that had come to instigate the science of optics, a discipline that came to be grounded in the observation of physical events and subsequent inductive reasoning about them. That commonly observed phenomenon was *double vision*. If sight per se was a useful trope, the seeing of something twice was an especially powerful heuristic tool in trying to differentiate among experience, reason, belief, and revelation. Augustine not

¹⁴ "...operatio videndi est certa cognitio visibilis distantis, et ideo visus cognoscit visibile per suam virtutem multiplicatam ad ipsum. Praeterea species rerum mundi non sunt natae statim de se agere ad plenam actionem in visu propter ejus nobilitatem. Unde oportet quod juventur et excitentur per speciem oculi, quae incedat in loco pyramidis visualis, et alteret medium ac nobilitet, et reddat ipsum proportionale visui, et sic praeparet incesum speciei ipsius rei visibilis, et insuper eam nobilitet, ut omnino sit conformis et proportionalis nobilitati corporis animati, quod est oculus." (*Opus majus*, trans. Burke, 2:471 from the ed. by Bridges, 2:52)

only writes about double vision but points up its essential paradox and its epistemological implications. In *De trinitate* he analyzes sight into three factors: the object that is visible, the act of vision, and the mind's attention. He also briefly comments on double vision:

even when the little flame of a lamp is in some way, as it were, doubled by the divergent rays of the eyes, a two fold vision comes to pass, although the thing which is seen is one.¹⁵

Augustine's *De genesi* outlines two sources of visual power:

surely the emission of rays from our eyes is an emission of a certain light. And it can be gathered that this [light] is emitted, since when we look into the air adjacent to our eyes we observe, along the same line, things situated far away. Nor does this light sensibly fail, since it is judged to discern fully objects that are at a distance, though surely more obscurely than if the power of sight should [itself] be sent to them. Nevertheless, this light that is in vision is shown to be so scanty that unless it is assisted by an exterior light, we cannot see anything.¹⁶

Whatever the particular manifestation—and we might want to think of double vision as possibly occurring in numerous ways, either within spatial or temporal frames or experience—the very notion that there can be double vision brings with it a range of theological and philosophical implications, as evident in *Purgatorio* XVII. Moreover, I would argue that, since this canto is centrally positioned within the *Commedia*, double vision begs to be considered as a key to the entire poem. There are other important instances of double vision. In *Inferno* XXXII, for example, at the bottom of Hell, one of the Florentine Alberti's sons, looking downward into the ice, asks Dante, "Perché cotanto in noi ti specchi?" (*Inf.* XXXII.54)—literally, "why do you mirror yourself so much in us?" John Ahern has recently pointed out that the phenomenon of mirroring is central to this passage. The brothers are set in the ice so they cannot see one another, but the lake is glassy: "un lago che per gelo / avea di vetro e non d'acqua sembante" ("a lake that, frozen fast, / had lost the look of water and seemed glass," *Inf.* XXXII.22-3):

The literal meaning is clear: unable to look at each other, the two must scrutinize each other's reflection. But the rude query also obliquely conveys unwelcome self-knowledge. Staring at the trai-

¹⁵ *Opus majus*, book 11.

¹⁶ Both quoted in Lindberg, 89-90 and nn.

tors' reflections, Dante sees a mirror image of himself. [Also, there is the] crucial idea that the traitor's lake is a reflection of Dante himself.¹⁷

Perhaps even more reminiscent of Augustine than the above passage from *Inferno* is *Purgatorio* XVII; Augustine's echo here is a pivotal factor in understanding Dante's concerns about sight and vision. And yet more significantly, as we shall see, the later canto, *Paradiso* XXX, echoes Paul's story of being overcome by a bright light on the road to Damascus. To the pilgrim in the *Commedia*'s middle canto, who is climbing up the mountain of Purgatory, the setting sun reappears through the mist. Here we find a visual tension not unlike that described variously by Augustine, Alhazen, and Paul as well. First and foremost, however, Dante employs this tension in his explanation of a Thomistic discussion about understanding, knowledge, and their respective relationships with vision. Thomas's meditation on that set of associations derives from both Paul and Augustine. Thus Dante's readers may hear a number of voices when he turns to them and asks that they ponder what it is like to be caught by a mist through which one can only see "as moles see through their skin." It is then, the pilgrim continues, that "your imagination will be quick / to reach the point where it can see how I / first came to see the sun *again*—when it was almost at the point at which it sets":

e fia la tua imagine leggera
in giugnere a veder com' io rividi
lo sole in pria, che già nel corcar era.

(*Purg.* XVII.7-9; my emphases)

At this moment of second sight the persona becomes a virtual witness; I use the word "virtual" here because he will speak of the ability "to see" as *virtù*. This word's semantic range extends from the ability to negotiate the physical world (à la Bacon), to the comprehension of ideas per se, to spiritual truths, to a moral integrity and/or stature. In *De civitate Dei* (XV.22), Augustine had used the term *virtus* to indicate "rightly ordered love."¹⁸ The word is one of

¹⁷ John Ahern, "Vulgar Eloquence: Dante's Tour through Hell, as Translated by Robert Pinsky," review of *The Inferno of Dante: A New Verse Translation*, by Robert Pinsky, *The New York Times Book Review*, 1 January 1995, 21.

¹⁸ "Nam et amor ipse ordinate amandus est quo bene amatur quod amandum est, ut sit nobis virtus qua vivitur bene. Unde mihi videtur quod definitio brevis et vera virtutis ordo est amoris." ("We must, in fact, observe the right order even in our love for the

numerous linguistic cruxes in the *Commedia* that explore the connections among poetry, epistemology, and morality. Dante employs *virtù* in conjunction with the verb *rividi*—literally, “saw again.” The pilgrim’s re-visioning of the sunset is elegiac and poignant because, in the fading light, the reader’s power of imagination is called upon and aligned with that of the poem’s witness, and is then set against the ebbing, tangible world. When that world is gone, Dante is asking, how does one “see”?

Rividi is set in opposition to *imagine*, to mean “imagine,” in the sense that Dante is appealing to his reader’s imagination. *Vision* and *imagination*, however, are also being used for another purpose. They are meant to evoke two texts, a past text that is philosophically central to Dante’s poem, the *Summa theologiae*, and a particular future text by Dante himself, *Paradiso* XXX. The nexus of these texts is *Purgatorio* XVII, where, as noted by Italo Borzi, “through the speech of Virgil Dante expounds the theory of love that represents the fundamental problem of his philosophical thought [...This theory will lead him finally to the] infinite love [of God....The road Dante will travel is] part poetical and part ideological.”¹⁹ Prudence Shaw has described *Paradiso* XXX as the beginning of the end of Dante’s journey²⁰—an end marked by sheer visual brilliance. The

very love that is deserving of love, so that there may be in us the virtue which is the condition of the good life. Hence, as it seems to me, a brief and true definition of virtue is ‘rightly ordered love’), trans. Henry Bettenson, quoted in Peter S. Hawkins, “Divide and Conquer: Augustine in the *Divine Comedy*,” *Publications of the Modern Language Association* 106, no. 3 (1991): 480-1, n. 10.

¹⁹ Italo Borzi, “Il canto XVII del *Purgatorio*,” *Purgatorio: Letture degli anni 1976-’79* (Roma: Bonacci, 1981), 363; my translation. And note Mazzotta in *Dante, Poet of the Desert*, 178:

[Virgil’s] ‘scholastic’ *demonstratio*...alludes to Augustine’s doctrine of desire as spiritual restlessness:

Ciascun confusamente un bene apprende
nel qual si queti l’animo, e disira;
per che di giugner lui ciascun contende.

(*Purg.* XVII.127-9)

(Each apprehends confusedly a Good
in which the mind may rest, and longs for It;
and, thus, all strive to reach that Good)

This recalls the opening of the *Confessions*: “fecisti nos ad te et inquietum est cor nostrum donec requiescat in te” (“you made us for yourself and our hearts find no peace until they rest in you”). Augustine, *Confessions*, trans. R. S. Pine-Coffin (London: Penguin, 1961), I.1.

²⁰ Prudence Shaw, “*Paradiso* XXX,” in *Cambridge Readings in Dante’s Comedy*, eds. Kenelm Foster and Patrick Boyd (Cambridge: Cambridge Univ. Press, 1981), 191.

canto will synthesize imagistic, philosophical, and theological issues raised in the *Commedia's* middle canto, *Purgatorio* XVII, and thus will bring together preceding and engendered texts. The dualism of Thomas's ideas about knowledge, as typified in the differences he specifies between sight and vision, is elaborated through the interrelationships of these texts.

Vision, Imagination, and Grace

The *Convivio* claimed that sight is mediated by its spirits.²¹ The agency of sight, therefore, was thought by Dante to have been *non-physical*. Thus the act of seeing a three-dimensional world was contingent upon a power deriving from yet another dimension or dimensions. As there can be more than one kind of sight, in the *Commedia* we find, according to Shirley Adams, an "identifiable pattern" involving "the pilgrim's sensory faculties," a progression that is "central to the theme of redemption [in which] Dante demonstrates the role of perception to conversion."²² It is in this regard that we may fully comprehend the significance of the *Summa's* relationship to Dante's later poem, and that we may see how Thomas is crucial to a communication within the poem. The key passage in Dante's parent text deals with the struggle to arrive at the Aristotelian conception of vision through likeness, by way of categories (i.e., briefly, we see an object because its form resides in our soul).²³ More so in the spirit of Plato, Thomas's diction tellingly links the verbs *videre* and *intellegerere*, as if to assert the evolution of natural knowledge out of two kinds of activity. One activity remains within the agent, such as seeing or understanding ("ut videre et intelligere"), and one passes over into a thing outside; each activity is produced in accord with a form. Therefore, "what is understood is in the one who understands by means of its likeness" ("quod intellectum est in intelligente per suam similitudinem"); and, so, "what is actually understood is identical with the intellect as actualized" ("quod intellectum in actu est intellectus in actu").²⁴

²¹ *Convivio*, 3.9.7-10. Cf. above.

²² Shirley Adams, "The Role of Sense Perception in the *Divine Comedy*," (Ph.D. diss., Univ. of California, San Diego, 1983), abstract in *Dissertation Abstracts International* 44/11A (1983): 3379.

²³ St. Thomas Aquinas, *Summa theologiae* I.85.2; gen. ed. Thomas Gilby, 60 vols. (Cambridge, Eng. and New York: Blackfriars and McGraw-Hill, 1964); trans. Herbert McCabe, O.P. (New York and London: Blackfriars and McGraw-Hill, 1963-).

²⁴ *Summa theologiae* I.85.2 ad 1

In *Purgatorio* XVII this natural knowing is to be coupled to the divine through the querying of the origin of any sensible form that might reside in the imagination when no external thing is present. Thomas had written that "with natural reason we only come to know God through images in the imagination." However, he then went on to say that "the same is true of the knowledge we have through grace" ("per rationem naturalem in cognitionem divinorum pervenire non possumus, nisi per phantasmata, similiter etiam nec secundum cognitionem gratiae").²⁵ Even so,

By grace we have a more perfect knowledge of God than we have by natural reason. The latter depends on two things: images derived from the sensible world and the natural intellectual light by which we make abstract intelligible concepts from these images....The light of grace strengthens the intellectual light and at the same time prophetic visions provide us with God-given images which are better suited to express divine things than those we receive naturally from the sensible world.

(per gratiam perfectior cognitio de Deo habetur a nobis, quam per rationem naturalem. Quod sic patet: cognitio enim quam per naturalem rationem habemus, duo requirit, scilicet phantasmata ex sensibilibus accepta, et lumen naturale intelligibile, cuius virtute intelligibiles conceptiones ab eis abstrahimus....lumen naturale intellectus confortatur per infusionem luminis gratuiti; et interdum etiam phantasmata in imaginatione hominis formantur divinitus, magis exprimentia res divinas quam ea quae naturaliter a sensibilibus accipimus, sicut apparet in visionibus prophetalibus.)²⁶

Yet faith, which is necessary to the attainment of grace, "lacks the element of seeing"; hence, faith "fails to be genuine knowledge, for such knowledge causes the mind to assent through what is seen..." ("Et sic in quantum deest visio deficit a ratione cognitionis quae est in scientia, nam scientia determinat intellectum ad unam per visionem...").²⁷ All the same, faith may be necessary to knowledge of the divine, as it may perhaps be a prerequisite to truly prophetic visions ("visionibus prophetalibus").

Dante realizes the fundamental importance of Thomas's effort to chart a progression from physical sight to so called imaginative sight, to divine knowledge that somehow eludes empirical procedures such

²⁵ *Summa theologiae* I.12.13.2

²⁶ *Summa theologiae* I.12.13.3.

²⁷ *Summa theologiae* I.13.3.

as those predicated on sight, understanding, and imagination. He plays out this resultant dialectic of the material-immaterial through a likely metaphor for revelation; first the act of seeing the sun and the question of *how* a reader might be able to imagine such a thing are delineated at the beginning of *Purgatorio* XVII, in order to link the imagination and physical sight. As well, the second act of seeing that occurs may connote the second, suprasensory, imaginary or otherwise intelligent "vision." The canto is nothing less than a paean to the imagination that is frequently invoked in the words "imagine" (6, 21, 31), "imagnar" (43), "imagnativa" (13) and "fantasia" (25)—all of which are grounded in Thomas's assertion (above) that the mortal imagination can at times serve as the vessel for images that are "divinely formed," so to better express divine things of the kind often conveyed in prophetic visions.²⁸ As well, words derived from the Latin *videre* occur in signal fashion²⁹—in "vedessi" (2), "veder" (8, 46, 130), "rividi" (8), "vede" (59), distantly in "visione" (34), more distantly in "vista" (52), and even in a word like "viso" (41, 68, 107; i.e., "face," especially the forehead where sins are inscribed, each to be lifted off with the brush of an angel's wing as the pilgrim makes his way upward [68]).³⁰ There is also "apparivan" (72), "sentiva" (74), "sai" (93), and "comprender" (103). And there are the varied uses of the Latin *virtus*, which first appears in "la mia virtù quivi mancava" ("my power of sight was overcome," *Purg.* XVII.54); "virtù" substitutes for words like *sight*, or *eyes* (compare this with *Par.* XXX.59-60: "che nulla luce è tanto mera, / che li occhi miei non si fosser difesi" ["that even the purest light would not even have been so bright / as to defeat my eyes, deny my sight"]).

Although the Dante pilgrim continually bemoans what seem to be his own perceptual mortal limits, his use of *virtù* progressively transforms him and extends those limits. In his attempt to climb up to the fourth terrace, it is not long before he is moved to exclaim, "O virtù mia, perché sì ti dilegue?" ("O why, my strength, do you melt away?" *Purg.* XVII.73). Virgil's commentary then makes an epistemological leap to: "Quinci comprender puoi ch'esser convene / amor

²⁸ Cf. Pasquini, 144-5, 151.

²⁹ A similar linguistic strategy occurs in *Paradiso* X, as delineated in Beal, 64 ff.

³⁰ On this use in *Paradiso* XXX, see Joan Ferrante, "Words and Images in Dante's *Paradiso*: Reflections of the Divine," in *Dante, Petrarch, Boccaccio: Studies in the Italian Trecento in Honor of Charles S. Singleton*, eds. Aldo S. Bernardo and Anthony L. Pellegrini (Binghamton, NY: Center for Medieval and Renaissance Studies, State Univ. of NY at Binghamton, 1983), 124.

sementa in voi d'ogne virtute" ("From this you see that—of necessity—/ love is the seed in you of every virtue," *Purg.* XVII.103-4). Other word play leads to the same Thomistic knot in which the corporeal somehow becomes the vehicle for the spiritual—a theological construct that is emphatically put forward through a delicate and subtle, greatly removed rhyme bringing together the rays of light, the ability to think about their meaning, and the ability to utter the resultant thought. *Raggi*, in "li ultimi raggi che la notte segue" ("the final rays of [sun]light before the fall of night," *Purg.* XVII.71), is meant to imply, I believe, "reason" (*ragione*), as embodied, moreover, in the verb "to discourse" (*ragionare*), which is shrewdly employed at the canto's end:

L'amor ch'ad esso troppo s'abbandona,
di sovr' a noi si piange per tre cerchi;
ma come tripartito si ragiona,
tacciola

(*Purg.* XVII.136-9)

(The love that—profligately—yields to that
["different good" Dante will meet further on in his journey]
is wept on in three terraces above us;
but I'll not say what three shapes that love takes.)

The confluence of "raggi" and "ragiona" (Dante could have made the connection in his mind in thinking of the Latin *radio* and *ratio*) may delineate how the intellect becomes the mediating force between spirit and body, one which, in its capacity for abstraction, for the non-palpable, mimics or perhaps mirrors truly divine experience. Hence the *Commedia's* loftiest moment, its last canto, includes this apostrophe, whose theme revolves around the difficulties the poet-pilgrim has in reporting the splendor he is witnessing:

O somma luce che tanto ti levi
da' concetti mortali, a la mia mente
ripresta un poco di quel che parevi,
e fa la lingua mia tanto possente,
ch'una favilla sol de la tua gloria
possa lasciare a la futura gente;

(*Par.* XXX.67-72)

(O Highest Light, You, raised so far above
the minds of mortals, to my memory
give back something of Your epiphany
and make my tongue so powerful that I

may leave to people of the future one
gleam of the glory that is Yours.)

The poem ends, furthermore, by pointing out the limits of the mind, and explains the role of light vis-à-vis divine love:

...la mia mente fu percossa
da un fulgore in che sua voglia venne.
A l'alta fantasia qui mancò possa;
ma già volgeva il mio disio e 'l velle,
sì come rota ch'igualmente è mossa,
l'amor che move il sole e l'altre stelle.

(*Par.* XXX.140-5)

(...my mind was struck by light that flashed
and, with this light, received what it had asked.

Here force failed my high fantasy; but my
desire and will were moved already—like
a wheel revolving uniformly—by
the Love that moves the sun and the other stars.)

In *Purgatorio* XVII Dante sees the rays of that same sun, and understands the idea of divine light even if he cannot (yet) experience it. Other ghost rhymes with *Paradiso* XXX make this clear, such as "[O]cchio" (48), "occhi" (60), and "raggio" (106), which denotes the "light that [has made] apparent the Creator to the creature" ("Lume é là sù che visibile face / lo creatore a quella creatura," 100-1); here "raggio" represents the ultimate in Thomistic teleology—that is, how the divine may be apprehended by a mortal. In this context "virtute" (57) denotes the pilgrim's new (divine) knowledge when, concomitantly, he finds himself in a state of levitation due to an agency that "[sormante] di sopr' a mia virtute" (that surmounts, is "beyond the power that was mine"). As has already been indicated, the poem's culmination in *Paradiso* XXXIII contains the same set of rhymes. And, to be sure, light's description as a "living ray" might echo Bacon, Alhazen, and possibly Augustine:

Io credo, per l'acume ch' io sofferesi
del vivo raggio, ch'i' sarei smarrito,
se li occhi miei da lui fossero aversi.

(*Par.* XXXIII.76-8)

(The living ray that I endured was so
acute that I believe I should have gone
astray had my eyes turned away from it.)

Further, "outside" ("fuor di quella," 104) "that Light, what there is perfect is defective" ("è defettivo ciò ch'è lì perfetto," 105). Within the light there are three circles of three different colors, all of the same dimension; they reflect each other (115-20). In thinking how such a phenomenon might be reported, the pilgrim is forced to conclude that language is simply not up to the task:

Oh quanto è corto il dire e come fioco
al mio concetto! e questo, a quel ch'i' vidi,
è tanto, che non basta a dicer "poco."

O luce eterna che cola in te sidi,
sola t'intendi, e da te intelletta
e intendente te ami e arridi!

(*Par.* XXXIII.121-6)

(How incomplete is speech, how weak, when set
against my thought! And this, to what I saw
is such—to call it little is too much.

Eternal Light, You only dwell within
Yourself, and only You know You [etc.]

He also speaks of "light reflected—when my eyes had watched it for some time" ("lume riflesso, / da li occhi miei alquanto circunspecta," *Par.* XXXIII.128-9).

These terms, the concepts they embody, are explored first in *Purgatorio* XVII. The thematically critical passage in this central canto, which makes all that ensues in the poem possible, is an apostrophe that grows out of the pilgrim's recognition of the possible depth of imaginative experience:

O imaginativa che ne rube
tavolta sì di fuor, ch'om non s'accorge
perché dintorno suonin mille tube,
chi move te, se 'l senso non ti porge?
Moveti lume che nel ciel s'informa,
per sé o per voler che giù lo scorge.

(*Purg.* XVII.13-18)

(O fantasy, you that at times would snatch
us from outward things—we notice nothing
although a thousand trumpets sound around us—
who moves you when the senses do not spur you?

A light that finds its form in Heaven moves you—
directly or led downward by God's will.)³¹

Doctrinally, these lines come right out of Thomas, as we have seen, but also evident here is the general, experiential manner in which Dante has come to sympathize with, to understand the very instigation of Thomas's pursuit—for it is out of a state of rapture, in which the normally sensible world would fall away, that the Dantean persona can acquaint himself with an "inner" light. Thus Thomas's basic dialectic is firmly entrenched by the time the reader turns to *Purgatorio* XVIII. In *Paradiso* XXX the play of sensible and divine light is adumbrated in a direct response. The light in paradise is sumptuous and dazzling; Dante writes of it employing forms of the verb "to see" no fewer than 16 times, and he often uses the words "vista" and "occhio-i," the noun "palpebre," and the adjectives "visible" and "visivi," as well as the verb "Mira."³² Especially the canto's earlier tercets contain, as Noakes writes, "a great deal of alliteration [that] draws attention to four words": *vidi*, *viso*, *vita*, and *vista*; the pairing of the latter two in a single line (29) emphasizes the motif of conversion.³³ Beatrice, furthermore, speaks a succession of three sentences that begin with the imperatives "Mira," "Vedi," and "vedi" respectively (128-31).³⁴ Such repetition and alliteration suggest, as Joan Ferrante has put it, "the 'vita nuova' that the vision in each case [each imperative] heralds," particularly in the rhyming of *vidi* with itself (*Par.* XXX.95-99), which focuses on the concept of vision and "also connects Beatrice, the sight of whom started Dante on the journey to God, with the God to whom she has now brought him"; *vidi* is the only self-rhyme in the *Paradiso* apart from *Cristo*.³⁵

Dante means for these lines to crystallize the question of the individual's capacity—the spiritual and intellectual depth as well as volition—to make poetry that can comprehend a truth beyond linguistic expression; more broadly, the lines question how such truth may simply be known. What is remarkable is that Thomas can be seen to be Dante's doctrinal *and* poetic source. Thomas writes, for instance, that "the stronger our intellectual light [is] the deeper the

³¹ Mandelbaum uses "fantasy" and "imagination" interchangeably to designate "that internal sense or power that retains sensible forms drawn from external things through the 'outer' senses" (*Purgatorio*, p. 345, n. for lines 13-18).

³² Di Scipio, 156 n. 7. Cf. Pasquini, 134-5, 138-9.

³³ Noakes, 161-2.

³⁴ Shaw, 211.

³⁵ Ferrante, 124.

understanding we derive from images, whether these be received in a natural way from the senses or formed in the imagination by divine power" ("quod ex phantasmatis vel a sensu acceptis secundum naturalem ordinem, vel divinitus in imaginatione formatis"). Revelation provides a "divini luminis."³⁶ In response to Thomas's explanation of how understanding takes place, Dante creates something new. *Purgatorio* XVII invokes the question of knowing the nonsensible and even the divine, when the sun has almost wholly set; *Paradiso* XXX, where Dante first apprehends the celestial Rose—finally, a rose of light—occurs when the sun is about to rise.

Textual "Vision"

Such a textual relationship is ultimately founded in the linguistic fabric of Dante's doctrinal sources: Thomas, and *his* source, Augustine. In fact, Dante has telescoped their Latin syntax and morphology in his simpler Italian,³⁷ a strategy that has everything to do with the loaded use of the word *virtù*. Thomas speaks of how knowing—and its necessary adjunct, *mental* knowing, by which the *sign* of the object is apprehended (or, as Augustine calls it, the "verbum mentis")—unavoidably means consciousness of both good and evil. And Thomas is paraphrased in *Purgatorio* XVII as follows:

Lo naturale è sempre senza errore,
ma l'altro puote errar per malo obietto
o per troppo o per poco di vigore.

(*Purg.* XVII.94-6)

(The natural is always without error,
but mental love may choose an evil object
or err through too much or too little vigor.)

The authority for Thomas's assertion derives from Augustine, who is quoted in the *Summa* in the general context of the author's discussion of grace as that capacity to bestow divine knowledge.³⁸ He writes that Augustine says in his retractions, "Non approbo quod in oratione dixi; Deus, qui non nisi *mundos* verum scire voluisti. Responderi enim potest multos etiam non *mundos* multa scire vera" ("I do not now approve what I said in a certain prayer, 'O God who hast wished only the *clean* of heart to know truth...' for it could be answered that many who are *unclean* know many truths"). Thomas

³⁶ *Summa theologiae* I.13.3; cf. above.

³⁷ As Ferrante has examined at length.

³⁸ *Summa theologiae* I.12.3.

then adds to Augustine the explanatory phrase, "scilicet per rationem naturalem" ("by natural reason").³⁹

Dante finds, in the idea of a natural understanding, a poetic opportunity to expand, semantically, Augustine's term *mundos* (clean), from, "multos etiam non mundos verum scire" ("many who are not clean know many truths"). In Augustine's Latin, as in the Italian *mondo*, there are two meanings for this word: "clean," and "world" or "universe."⁴⁰ Therefore, privileging the term *mondo* as the end rhyme that will link the canto's first two tercets, *Paradiso XXX* begins with a description of a world in shadow:

...e questo mondo
china già l'ombra quasi al letto piano
(Par. XXX.2-3)

(...and now our world inclines
its shadow to an almost level bed.)

Such a world presages a subsequent paraphrase of Paul's witnessing and conversion:

Come sùbito lampo che discetti
li spiriti visivi, sì che priva
da l'atto l'occhio di più forti obietti,
così mi circunfulse luce viva,
e lasciommi fasciato di tal velo
del suo fulgor, che nulla m'appariva.
(Par. XXX.46-51)

(Like sudden lightning scattering the spirits
of sight so that the eye is then too weak
to act on other things it would perceive,
such was the living light encircling me,
leaving me so enveloped by its veil
of radiance that I could see no thing.)

Saul's life was, in a sense, still in shadow, when he was blinded by a uniquely strong light on the road to Damascus (Acts 22:6-11):⁴¹

³⁹ *Summa theologiae* I.12.3; my emphases.

⁴⁰ Charlton T. Lewis, *A Latin Dictionary* (1879; repr., Oxford: Clarendon, 1980), 1175. Alexander Souter (*A Glossary of Later Latin to 600 A.D.* [Oxford: Clarendon, 1949]), cites *mundus* as an adjective: "clean from (some filth)," and *munido*: "cure, heal; blot out (sins), purify (the sinner)." J. F. Niermeyer (*Mediae latinitatis lexicon minus* [Leiden: E. J. Brill, 1976]), also cites *mundus* as an adjective: "lavé d'un blâme, innocent—clear of guilt, innocent."

⁴¹ Di Scipio, 151-2. It is worth noting, as Cassell (76) reports, that Guido da Pisa's *Expositiones* (written 1327-28) makes a connection between Saint Lucy, who is identi-

Factum est autem, eunte me, et appropinquante Damasco media die subito da caelo circumfulsit me lux copiosa: decidens in terram, audivi vocem dicentem mihi: Saule, Saule, quid me persequeris?...Et cum non viderem prae claritate luminis illius, ad manum deductus a comitibus, veni Damascum.

(And it came to pass, as I was going, and drawing nigh to Damascus at midday, that suddenly from heaven there shone round about me a great light: And falling on the ground, I heard a voice saying to me: Saul, Saul, why persecutest thou me?...And whereas I did not see for the brightness of that light, being led by the hand by my companions, I came to Damascus.)⁴²

Likewise, Dante's pilgrim speaks of a veil of light that can blot out the ordinary light of the world, which derives from Paul's "da caelo circumfulsit me lux copiosa."⁴³ This image turns on the verb for apprehension, "appariva" (*Par.* XXX.51; above).

The Pauline theme is reprised, furthermore, at the very end of the *Commedia* (*Par.* XXXIII.141-2) when the seer's mind is "struck by light that flashed" ("la mia mente fu percossa / da un fulgore"); then, force fails his "high fantasy" ("l'alta fantasia qui mancò possa"). The earlier distant rhyme of "raggi" and "ragiona" foreshadows this revelatory development. Finally, discourse and reason (*ragione, ratio*) must belong only to the clean of heart. The pure, Dante suggests, will experience a second sight, a revision—even a *vista nova*. Alive to both the range and register of his terms, however, he could also be

fied with, as Cassell puts it, "prevenient and illuminating grace," and the biblical passage. Furthermore, Cassell (76) observes:

Lucia's association with infirmities of the eyes is clearly Guido's main motive for expanding on the conversion of the Apostle who was "three days without sight" (Acts 9:9). The sinful Saul, soon to be Paul, is "lumine ocolorum privatus"; the infirmity and the cure of Paul's sight, the physical signs of his spiritual sin and conversion, link the wayfarer's protest "Non Paolo sono," his reluctance and distress, to Lucia's appearance as *gratia illuminans* in the canto [*Inf.* II].

⁴² Vulgate quotation is from *Biblia sacra iuxta vulgatam Clementina*, 4th ed. (Madrid: Biblioteca de Autores Cristianos, 1965); translation is from the Douay-Rheims Version.

⁴³ But note Thomas (*Summa theologiae* I.13.2 and *Sed contra*): "... for Dionysius says, 'It is impossible for the divine ray to shine upon us except as screened round about by the many-coloured sacred veils' [*De caelesti hierarchia* I, *Patrologiae graeca* 3.121]"; and, *Sed contra*: "St. Paul says, 'God has revealed to us through his Spirit [1 *Corinthians* 2, 8, 10] a wisdom which none of this world's rulers knew' and a gloss says [Interlinear Gloss from St. Jerome, *Patrologiae latinae* 30.752] that this refers to philosophers."

recalling Thomas's citation of Matthew. In speaking of the word *visio*, Thomas wrote in the *Summa* that

Any term may be employed in two senses; one in keeping with its original imposition, the other with common usage. This is apparent in the word *visio*, the initial reference of which was to the act of the sense of sight. This term, in view of the special nature and certitude of the sense of sight, is extended in common usage to the knowledge of all the senses...and it is even made to include intellectual knowledge, as in Matthew 5.8: "Blessed are the clean of heart, for they shall 'see' God."⁴⁴

Therefore, the intertextual message embedded in this complex of texts—the testimonies of Paul, Matthew, Augustine, Thomas, and the pilgrim in *Purgatorio* XVII, *Paradiso* XXX and XXXIII—is that only the good, whose sins have been removed, who are now pure, may know a divine and clear light. The diction of the *Paradiso* cantos and perhaps their imagery are anticipated in *Purgatorio* XVII; they are grounded in a dualism that is introduced through imagery in Dante's observation of the sensible light of the stars:

Già eran sopra noi tanto levati
li ultimi raggi che la notte segue,
che le stelle apparivan da più lati.

(*Purg.* XVII.70-2)

(Above us now the final rays before
the fall of night were raised to such a height
that we could see the stars on every side.)

This is a "re-seeing" of the sun, and in this another truth emerges; lights appear through the rays of another (sun)light. The implicit, ultimately Thomistic meaning of an apposition like this is that the sight of the divine is a moral sight, the virtue enjoyed by the purified. Here is the thematic context in which Dante, in *Paradiso* XXX, counterpoints *Purgatorio* XVII's paradox of fully sensible starlight in a night sky, when the sun has yet fully to disappear, with his playfully double use of *vidi* to enact the absolute godly radiance; Dante's

⁴⁴ *Summa theologiae* I.67.1.3: "De aliquo nomine dupliciter convenit loqui; uno modo, secundum primam eius impositionem; alio modo, secundum usum nominis. Sicut patet in nomine visionis, quod primo impositum est ad significandum actum sensus visus; sed propter dignitatem et certitudinem huius sensus extensum est hoc nomen, secundum usum loquentium, ad omnem cognitionem...intellectus, secundum illud Matt. 5.8: 'Beati mundo corde quoniam ipsi Deum videbunt.'" Cf. *Summa theologiae* I-II.77.5 ad 3.

very meter suggests that the power of speech occurs when there is revision.

In *Purgatorio* XVII the sun is seen again ("rividi") as the light of the stars overtakes it. In *Paradiso* XXX there is a twice-seeing (imagistically and in the identical rhyme of *vidi*). Even if Dante does not have the power (the "virtù") to speak of what he sees (he does, however!), he nevertheless has clearly been given a vision that is possible because of both his purity and his "understanding." Thus readers can appreciate how inherently artistic tensions, founded on ambiguity of expression, make possible both the realization of mortal limits and the promise of transcendence through divine aid. The reportage of the pilgrim—pure poetry and pure science—attempts a universal unification. In this attempt, the poet will deny that he has the power authentically to name his experience in Paradise; perhaps, though, he has spoken that name in the sense of, not only Paul's vision that sees as in a distorted mirror (in 1 Corinthians), but, more graphically, in the sense of the parables that end in the double imperative: "let those who have eyes to see, see."

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