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Leon Battista Alberti and the Concept of Lineament

John Hendrix

A core idea in the architectural theory of Leon Battista Alberti, as expressed in the *De re aedificatoria*, is the distinction between "lineament," the line in the mind of the architect, and "matter," the material presence of the building.¹ The distinction between mind and matter plays a key role in architectural design throughout the history of Western architecture. As Le Corbusier would say in *Towards a New Architecture* in the twentieth century, architecture is "pure creation of the mind."² The distinction between mind and matter can be found in Vitruvius (I.I.3), in the distinction between "that which is signified and that which signifies it." ³ This separation between the idea and the material in architecture is suggested by Vitruvius in the first chapter of *De architectura*, where he explained "That which is signified is the object under discussion, while that which signifies is an explanation of it conducted according to scientific principles." That which signifies is the *verba*, or words in rhetoric, like the material vocabulary of architecture, and that which is signified is the idea in the mind.

According to Quintilian in the *Institutio Oratio* at the end of the first century, speech "consists at once of that which is expressed and that which expresses, that is to say of matter and words."⁴ According to Sextus Empiricus in *Against the Logicians* at the end of the second

⁴ Quintilian, Institutio Oratoria, trans. H. E. Butler (Cambridge, Mass: Harvard University Press, Loeb

¹ This essay is a continuation of an investigation begun in my essay "The Neoplatonic Aesthetics of Leon Battista Alberti" in Liana De Girolami Cheney and John Hendrix, eds., *Neoplatonic Aesthetics: Music, Literature, and the Visual Arts* (New York: Peter Lang, 2004). A version of that essay, "Alberti and Ficino," can also be found in *Platonic Architectonics: Platonic Philosophies and the Visual Arts* (New York: Peter Lang, 2004).

² Le Corbusier, *Towards a New Architecture*, trans. Frederick Etchells (London: The Architectural Press, 1946 [1927]), p. 11.

³ Vitruvius, *On Architecture*, trans. Richard Schofield (London: Penguin Books, 2009), p. 5. The Latin can be found in Vitruvius, *On Architecture*, trans. Frank Granger (Cambridge, Mass.: Harvard University Press, Loeb Classical Library, 1944), p. 6: "Cum in omnibus enim rebus, tum maxime etiam in architectura haec duo insunt, quod significatur et quod significat. Significatur proposita res, de qua dicitur; hanc autem significant demonstration rationibus doctrinarum explicate." The translation by Granger reverses the terms though: "that which signifies and that which is signified" (p. 7).

century, "That which signifies is the utterance...what is signified is the specific state of affairs [to pragma] indicated by the spoken word...the existing thing is the external reality..."⁵ According to George Hersey, in *Pythagorean Palaces*, the signifiers (*quod significat*) are the temples, and the signifieds (*quod significatur*) are the descriptions of the temples, the idea of the temples in the mind. The signified can be "written, multiplied, committed to memory," and it "clarifies or confirms the latter's [signifier's] numerical and geometrical values and proportions."⁶

At the Accademia di San Luca in Rome in the seventeenth century, the distinction was made between *disegno interno*, the line in the mind of the artist, and *disegno esterno*, the material line of the design, as influenced by Alberti's distinction between lineament and matter. According to Dalibor Vesely, "The imaginary structure (*lineamenta*) of a possible 'form' or building anticipates the Mannerists' notion of disegno interno..."⁷ Federico Zuccari expressed in *L'Idea de' pittori, scultori ed architetti*, that the form of the work of art exists first in the mind of the artist, considering design universally as the fabrication of every intellectual idea.⁸ *Disegno interno* is a concept formed in the mind.⁹

I would like to suggest that Alberti knew the *Enneads* of Plotinus, perhaps as a result of a meeting with Georges Gemistos Plethon and Nicholas Cusanus at the Academy of Palestrina, and through the translation of the *Enneads* by Marius Victorinus (the fourth-century translation used by Augustine, now lost). Neoplatonism can be found in Alberti's concepts of lineament, proportioning systems, and *concinnitas*. Rudolf Wittkower, in *Architectural Principles in the Age*

Classical Library, 1920), p. 397, III.V.1: "Omnis autem oratio constat aut ex iis, quae significantur, aut et iis, quae significant, id est rebus et verbis." See the discussion in Indra Kagis McEwen, *Vitruvius: Writing the Body of Architecture* (Cambridge, Mass.: The MIT Press, 2003), pp. 77–8.

⁵ Sextus Empiricus, *Against the Logicians (Adversus mathematicos)*, p. 247, 2.11–12, trans. R. G. Bury (London and New York: Loeb Classical Library, 1935, 1961), quoted in McEwen, *Vitruvius*, pp. 76–7.

⁶ George L. Hersey, *Pythagorean Palaces: Magic and Architecture in the Italian Renaissance* (Ithaca and London: Cornell University Press, 1976), pp. 21–2.

⁷ Dalibor Vesely, *Architecture in the Age of Divided Representation: The Question of Creativity in the Shadow of Production* (Cambridge, Mass.: The MIT Press, 2004), p. 134.

⁸ Federico Zuccari, *L'Idea de' Pittori, Scultori e Architetti*, Torino, 1607, in Detlef Heikamp, ed., *Scritti d'Arte di Federico Zuccaro* (Firenze: Leo S. Olschki Editore, 1941), p. 95.

⁹ See Erwin Panofsky, *Idea, A Concept in Art Theory* (Columbia: University of South Carolina Press, 1968), p. 85. See also John Hendrix, "Neoplatonism at the Accademia di San Luca in Rome," in Soumyen Bandyopadhyay, Jane Lomholt, Nicholas Temple, Renée Tobe, eds., *The Humanities in Architectural Design: A Contemporary and Historical Perspective* (London and New York: Routledge, 2010), pp. 160–171.

of Humanism, suggested that Alberti's concepts of harmony and proportion are Pythagorean,¹⁰ and George Hersey suggested a comparison between Alberti's lineament and the *linee occulte* of Sebastiano Serlio, which are "the unmarked or partly marked axes, edges, and coordinates of cubic architecture....the 'unseen' stylus or pencil lines....[and] the imagined geometric scaffolding that the critic applies to the structure he sees."¹¹ According to Hersey, "obeying Neoplatonism's pattern of metempsychosis—of descent from and return to God—linee occulte have two basic roles. They help architecture to descend from Idea to materiality, and they help it to rise back."

Franco Borsi, in *Leon Battista Alberti*,¹² suggests a direct influence of Plotinus on Alberti's ideas. Alberti's concept of *lineamenta*, as described in *De re aedificatoria* I.1, can be traced to *Enneads* I.6.2. According to Alberti in the *De re aedificatoria*, written before 1452 (first printed posthumously in 1486, and in Italian translation in 1546), the proportions of a building correspond to the lineaments of the building. Alberti explained that the *lineamenta* are for "finding the correct, infallible way of joining and fitting together those lines and angles which define and enclose the surfaces of a building."¹³ The *lineamenta* "prescribe an appropriate place, exact numbers, a proper scale, and a graceful order for whole buildings and for each of their constituent parts," the result being that "the whole form and appearance of the building may depend on the lineaments alone." In the *Enneads* (I.6.2) a form "approaches and composes that which is to come into being from many parts into a single ordered whole."¹⁴ A form "brings it

¹³ Leon Battista Alberti, *On the Art of Building in Ten Books (De re aedificatoria)*, trans. Joseph Rykwert, Neil Leach, Robert Tavernor (Cambridge, MA: The MIT Press, 1988), p. 7. *L'architettura*, trans. Giovanni Orlandi, ed. Paolo Portoghesi (Milano: Edizioni Il Polifilo, 1966), pp. 19–20: "Lineamentorum omnis vis et ratio consumiter, ut recta absolutaque habeatur via coaptandi iungendique lineas et angulas, quibus aedificii facies comprehendatur atque concludatur. Atqui est quidem lineamenti munus et officium praescribere aedificiis et partibus aedificiorum aptum locum et certum numerum dignumque modum et gratum ordinem, ut iam tota aedificii forma et figura ipsis in lineamentis conquiescat."

¹⁴ Plotinus, *Enneads*, trans. A. H. Armstrong (Cambridge, Mass.: Harvard University Press, Loeb Classical Library, 1966), p. 239. Ficino translation: *Plotini Opera Omnia, Porphyrii Liber de Vita Platoni, cum Marsilii Ficini*

¹⁰ Rudolf Wittkower, *Architectural Principles in the Age of Humanism* (New York and London: W. W. Norton & Company, 1971 [1949]), pp. 27, 34.

¹¹ Hersey, Pythagorean Palaces, p. 64.

¹² Franco Borsi, *Leon Battista Alberti*, trans. Rudolf G. Carpanini (New York: Harper and Row, 1977), pp.
328–32. A suggestion of a Neoplatonic influence on Alberti's ideas of proportion in architecture can also be found in Heiner Mühlmann, *Aesthetische Theorie der Renaissance: Leon Battista Alberti* (Bonn: Habelt, 1981).

into a completed unity and makes it one by agreement of its parts..."

Alberti continues by saying that the *lineamenta* have nothing to do with material, that the same *lineamenta* can be seen in many buildings, that forms can be projected in the mind with no connection to the material, with the correct lines and angles, which are conceived in the mind.¹⁵ According to Plotinus in *Enneads* I.6.3, the architect fits the form of the house "to the form of house within him."¹⁶ The actual house is the "inner form divided by the external mass of matter, without parts but appearing in many parts." The term *lineamenta* appears in the works of Cicero, mostly to mean "line," but also on occasion to mean "design."¹⁷ The *lineamentum* in Latin is usually the line made by a writing instrument, while the *lineamenta* are the designs produced by the lines.

In the *De re aedificatoria* IX.5, the beauty of a building is something recognized by the reasoning faculty of the mind, and it is necessary that the parts not be changed ("removed, enlarged, reduced, or transferred") for the composition to have effect.¹⁸ In *Enneads* I.6.2, "beauty rests upon the material thing when it has been brought into unity..."¹⁹ The harmonizing of the

Commentariis et ejusdem interpretation castigate (Oxonii: E Typographaeo Academico, 1835), Vol. I, p. 101: "Accedens itaque species id, quod ex multis partibus unum est compositione futurum..."

¹⁵ Rykwert p. 7; Orlandi p. 21: "Neque habet lineamentum in se, ut materiam sequatur, sed est huiusmodi, ut eadem plurimis in aedificiis esse lineamenta sentiamus, ubi una atque eadem in illis spectetur forma, hoc est, ubi eorum partes et partium singularum situs atque ordines inter se convenient totis angulis totisque lineis. Et licebit integras formas praescribere animo et mente seclusa omni material; quam rem assequemur adnotando et praefiniendo angulos et lineas certa directione et connexione. Haec cum ita sint, erit ergo lineamentum certa constansque perscriptio concept animo, facta lineis et angulis perfectaque animo et ingenio erudite."

¹⁶ Armstrong p. 241; *Plotini Opera Omnia*, Vol. I, p. 102: "Dic age: et quomodo extrinsecum aedificium aedificii formae, quae in mente est, architectus accommodans pulchrum esse judicat? Forsan quia, si lapides tollas e medio, aedificium, quod erat extrinsecum, nihil aliud est, quam intrinseca forma, divisa quidem per externam materiae molem, individua vero exitens, et si apparet in multis."

¹⁷ See Susan Lang, "*De lineamentis*: Leon Battista Alberti's Use of a Technical Term," in *Journal of the Warburg and Courtauld Institutes* 28 (1965), p. 335.

¹⁸ Rykwert p. 302, Orlandi p. 813: "Est enim in formis profecto et figures aedificiorum aliquid excellens perfectumque natura, quod animum excitat evestigioque sentiatur. Credo equidem formam dignitatem venustatem et quaevis similia in his consistere, quae si ademeris aut immutaris, illico vitientur et pereant. Hoc si persuadetur, haud erit quidem prolixum ea recensere, quae adimi augeri mutarive praesertim in formis atque figures possint. Constat enim corpus omne partibus certis atque suis, ex quibus nimirum si quam ademeris aut maiorem minoremve redegeris aut locis transposueris non decentibus, fiet ut, quod isto in corpora ad formae decentiam congruebat, vitietur."

¹⁹ Armstrong p. 239; *Plotini Opera Omnia*, Vol. I, p. 101: "...simul ordinat conciliatque invicem, atque

parts is achieved by *concinnitas* according to Alberti, which composes "parts that are quite separate from each other by their nature, according to some precise rule, so that they correspond to one another in appearance."²⁰ *Concinnitas*, the "absolute and fundamental rule in nature," dictates beauty, the sympathy of parts, through "number, outline, and position,"²¹ the *lineamenta*. In the *Enneads* I.6.1, "good proportion of the parts to each other and to the whole" results in "visible beauty," and that which is beautiful is "well-proportioned and measured."²² It is only the whole which can be beautiful. In *Enneads* V.3.8, the intelligible, like the *lineamenta*, exists before the form in the body, and the form in the body depends on the "rational forming principle,"²³ like *concinnitas*. In *Enneads* V.8.1, "the arts do not simply imitate what they see, but they run back up to the forming principles from which nature derives,"²⁴ such as *concinnitas*.

In the *Nicomachean Ethics* (Bk. 2, Ch. 6, 1106^b.10) of Aristotle, "we often say of good works of art that it is not possible either to take away or to add anything..."²⁵ The term *concinnitas* appears in the *Orator* and *Brutus* of Cicero, referring to the balance or symmetry of words in sentences, or a "harmony of style" in oratory.²⁶ Vitruvius (I.II.1) used the similar terms *symmetria*, to indicate the use of a consistent module, and *dispositio*, to achieve a harmony of

ipsa consensione conficit unum..."

²⁰ Rykwert p. 302; Orlandi p. 815: "Atqui est quidem concinnitatis munus et paratio partes, quae alioquin inter se natura distinctae sunt, perfecta quadam ratione sonstituere, ita ut mutuo ad speciem correspondeant."

²¹ Rykwert p. 303; Orlandi p. 817: "...pulchritudinem esse quondam consensum et conspirationem partium in eo, cuius sunt, ad certum numerum finitionem collocationemque habitam, ita uti concinnitas, hoc est absoluta primariaque ratio naturae, postularit."

²² Armstrong p. 235; *Plotini Opera Omnia*, Vol. I, p. 98: "Tradunt enim ferme omnes, commensurationem quondam partium et invicem et ad totum una cum coloris gratia, pulchritudinem pertinentem ad oculos procreare, atque in eo pulchritudinem omnium esse sitam, ut moderata commensurataque sint."

²³ Armstrong p. 97; *Plotini Opera Omnia*, Vol. II, p. 935: "Forsam vero intelligibile quidem ipsum non oportet quaerere tale, qualis est in corporibus sive color, sive figura. Priusquam cuim haec sint, existent illa. Atqui et ratio seminibus insista haec facientibus non est haec ipsa..."

²⁴ Armstrong p. 239; *Plotini Opera Omnia*, Vol. II, p. 1001–2: "…deinde artes non simpliciter, quod cernitur oculis, imitari, sed ad ipsas recurrere rationes, ex quibus constat agitque natura…"

²⁵ Aristotle, *Nicomachean Ethics*, trans. W. D. Ross (Chicago: Encyclopaedia Britannica, 1952), p. 352.

²⁶ Robert Tavernor, On Alberti and the Art of Building (New Haven and London: Yale University Press, 1998), p. 43. See also Christine Smith, Architecture in the Culture of Early Humanism: Ethics, Aesthetics, and Eloquence 1400–1470 (New York and Oxford: Oxford University Press, 1992), p. 89; and Joan Gadol, Leon Battista Alberti: Universal Man of the Early Renaissance (Chicago and London: The University of Chicago Press, 1969), p. 108.

parts through measurement. *Symmetria* and *dispositio* are two of six things of which architecture must consist, according to Vitruvius, the others being proportion (*analogia* or *eurythmia*), order (*ordinatione*), décor and distribution (*oeconomia*), which would all contribute to Alberti's concept of *concinnitas*.

Alberti's concepts of *lineamenta* and *concinnitas* are similar to descriptions of the composition of matter by Plato. Alberti would have been able to refer to the translation of most of the *Timaeus* by Calcidius. In the *Timaeus* (31C), matter was bound according to geometrical proportions, and the best bond is "that which most perfectly unites into one both itself and the things which it binds together,"²⁷ the parts into a whole, through proportion. The material world "has been constructed after the pattern of that which is apprehensible by reason and thought and is self-identical" (29A).²⁸ The archetypal (always existent) is that which is "apprehensible by thought with the aid of reasoning," as in the *lineamenta* and *concinnitas*, the precise and correct outline conceived in the mind, while the sensible is an "object of opinion with the aid of unreasoning sensation..." (28A),²⁹ the "mere fancy" of Alberti. The distinction between reason and opinion in Alberti may also by inspired by the Divided Line of Plato in the *Republic* (509D1–511C2), as described by Calcidius in his commentary.³⁰ Intellect is divided between knowledge (episteme) and opinion (doxa). The highest knowledge, intelligence (noesis), is capable of perceiving the archetypes. Physical things perceived by the senses contribute to belief

²⁷ Plato, *Timaeus*, trans. R. G. Bury (Cambridge, Mass.: Harvard University Press, Loeb Classical Library, 1929), p. 59. *Plato Latinus, Timaeus a Calcidio Translatus*, ed. J. H. Waszink (Leiden: J. Brill, 1962), p. 24: "Quoniamque nulla duo sine adiunctione tertii firme et indissolubiliter cohaerent—nexu enim medio extrema nectente opus est, nexus vero firmissimus ille certe est, qui et se ipsum et ea quae secum vinciuntur facit unum—hoc porro modus et congrua mensura partium efficit."

²⁸ Bury p. 53; Waszink p. 21: "...quod iuxta sincerae atque immutabilis proprietatis exemplum mundi sit institute molitio, sin vero, quod ne cogitari quidem aut mente concipi fas est, ad elaboratum."

²⁹ Bury p. 49; Waszink p. 20: "...alterum intellectu perceptibile ductu et investigatione rationis, simper idem, porro alterum opinione cum inrationabili sensu opinabile proptereaque incertum..."

³⁰ Waszink, *Calcidius Commentarius*, pp. 334–5: "Secat enim intellectum quidem in duo haec scientiam et recordationem, opinionem vero in alia totidem haec, credulitatem et aestimationem, singulaque haec quattor convenientibus sibi rebus accommodate, scientiam quidem altis et sapientia sola percipibilus rebus, cuius modi sunt dues et intellectus eius, quas ideas vocamus, recordationem vero rebus deliberativis, hoc est his quae praeceptis artificialibus et theorematibus percipiuntur, credulitatem porro sensilibus, scilicet quae oculis auribus ceterisque sensibus comprehenduntur, aestimationem fictis commenticiisque et imaginaries rebus, quae iuxta verso simulate e vultus corpora tamen perfecta et viva non sunt."

(pistis) and illusion (eikasia) in opinion, but are simulations and shadows. The visible realm (to horaton) leads to opinion, while the intelligible realm (to noeton) leads to knowledge.

From Cristoforo Landino's descriptions of discussions by Alberti on the subject of Platonic philosophy, and Alberti's many references to Plato and Socrates in his writings, it can be concluded that Alberti's philosophical values were influenced by Plato. As Arnaldo Della Torre described in *Storia dell'Accademia Platonica di Firenze*, "thus Plato, who not only relates but explains and broadens Socratic doctrine, is always named with special reverence in the works of Alberti, and his theories are always quoted with deferential respect."³¹ Marsilio Ficino in the *Opera Omnia* (2¹.1464r) called Alberti a "Platonic mathematician."³² Claims by writers that Alberti had no interest in philosophy, let alone Platonic philosophy, must be discounted.³³ In 1468 he was recorded by Landino in the *Disputationes Camaldulenses* as being active in discussions about Plato in Florence.³⁴ Alberti "donned a Platonic robe" at the convent at Calmaldoli, "and expounded on the virtues of the contemplative life, the Platonic theory of the

³³ For example, Wladyslaw Tatarkiewicz, *History of Aesthetics*, Volume Three (The Hague/Paris: Mouton, 1974 [1962–67]): "He [Alberti] also knew Plato, but did not make use of his philosophy, for philosophy did not interest him, and the Platonic style of thinking was foreign to him" (p. 80). This is clearly absurd, as the author himself goes on to assert that "The concept of harmony accepted by Alberti—concinnitas, understood as the correct proportion of parts, was derived from the classical philosophers: from the Pythagoreans and Plato…" (p. 83). While he "was well familiar with the diversity and transience of things, Alberti nevertheless believed that they contained a stable and unchangeable element (constans atque immutabile), upon which harmony and beauty were dependent" (p. 82), the Platonic archetype. It is a mistake to see Alberti's concepts as purely Aristotelian, as in Branko Mitrović, *Serene Greed of the Eye: Leon Battista Alberti and the Philosophical Foundations of Renaissance Architectural Theory* (München and Berlin: Deutscher Kunstverlag, 2005).

³⁴ Cristoforo Landino, *Disputationes Camaldulenses*, a cura di Peter Lohe (Firenze: Sansoni Editore, 1980 [1472]), p. 4: "Quam quidem rem cum saepe mecum animo repeterem, non ab re visum est, si eos sermons litteris mandarem, quos Leonem Baptistam Albertum, virum omnium, quos ego unquam viderim, omni doctrinarum genere exercitatissimum et summa eloquentia insignem..."; p. 215: "Recte ac memoriter tenes', inquit Baptista. 'Consistit igitur in caelo, ut Platoni, quem poeta sequitur, placer videmus, animus noster ipsius divinae naturae contemplation perfruens, verum illa, quam dicebas, cupiditate infectus et ipsa cogitationis mole degravatus in infera descendere incipit'."

³¹ Arnaldo Della Torre, *Storia dell'Accademia Platonica di Firenze* (Firenze: Tipografia G. Carnesecchi e Figli, 1902), p. 578: "...e così Platone, che delle Socratiche dottrine è non solo divulgatore ma esplicatore e ampliatore, è sempre nominato con riverenza speciale nelle opera dell'Alberti, e le sue teorie riportate sempre con deferente rispetto."

³² Hersey, *Pythagorean Palaces*, p. 34.

highest good, and the allegorical journeys of Aeneas toward wisdom."35

Alberti designed a sarcophagus for Georges Gemistos Plethon at the Church of San Francesco in Rimini. Gemistos Plethon was the leading Platonic scholar of the Byzantine Empire, who came to Florence from Mistras in Greece to introduce Italians to Plato. Marsilio Ficino wrote in the introduction to his translation of Plotinus in 1491 that Gemistos Plethon inspired Cosimo de' Medici to establish an academy for Platonic studies in 1439, but there is no evidence that an academy was established.³⁶ The sarcophagus for Plethon was commissioned by Sigismondo Malatesta for the Church of San Francesco, also known as the Malatestiana, which was also re-designed by Alberti in the form of a classical temple. Malatesta had the body of Gemistos Plethon exhumed while in the Peloponnese, fighting in the Venetian war against the Turks; he took the body with him back to Rimini, and buried it in the sarcophagus designed by Alberti.³⁷

Nikolaos-Ion Terzoglou argues that analogies can be made between Alberti's concept of *lineamenta* and passages in the *Idiota de Mente* of Nicolas Cusanus.³⁸ Terzoglou argues that *lineamenta* should be understood as a "mental activity of planning,"³⁹ "imaginary or ideal structure of design,"⁴⁰ "the pure mental conception of the architectural work," and "the mental concepts and the spatial types of the project." Corresponding to Alberti's conception of *lineamenta* as being the lines, angles and numbers conceived in the mind and applied to the form of the building, Cusanus asserts that "mind is that from which derive the boundary and the measurement of every thing,"⁴¹ and "number and all things derive from mind," including

³⁷ Joseph Rykwert and Robert Tavernor, "Church of S. Sebastiano in Mantua: A Tentative Restoration," in Joseph Rykwert, ed., *Leon Battista Alberti*, Architectural Design Profile 21 (London: Academy Editions, Vol. 49, Nos. 5/6, 1979), p. 90. See also James Hankins, *Plato in the Italian Renaissance* (Leiden: E. J. Brill, 1991), p. 213.

³⁸ Nikolaos-Ion Terzoglou, "The human mind and design creativity: Leon Battista Alberti and *lineamenta*," in Bandyopadhyay, *The Humanities in Architectural Design*, pp. 137–141.

³⁵ Arthur Field, *The Origins of the Platonic Academy of Florence* (Princeton: Princeton University Press, 1988), p. 8.

³⁶ Francis Ames-Lewis, "Neoplatonism and the Visual Arts at the Time of Marsilio Ficino," in Michael J. B. Allen, Valery Rees, Martin Davies, eds., *Marsilio Ficino: His Theology, His Philosophy, His Legacy* (Leiden: Brill, 2002), pp. 333–4. See also Field, *The Origins of the Platonic Academy of Florence*, p. 12.

³⁹ Quoting Caroline van Eck, "The Structure of *De Re Aedificatoria* Reconsidered," in *Journal of the Society of Architectural Historians* 57 (1998), 3, n. 15.

⁴⁰ Quoting Vesely, Architecture in the Age of Divided Representation, p. 139.

⁴¹ Nicholas of Cusa, Idiota de Mente, in Jasper Hopkins, Nicholas of Cusa on Wisdom and Knowledge

multitude and magnitude.⁴²

Alberti and Cusanus probably crossed paths as members of the papal curia in Rome. Cusanus was appointed Cardinal by Pope Nicholas V in Rome in 1450, the year that Alberti wrote the *De re aedificatoria*. Both Alberti and Cusanus were intimates of both Eugenius IV and Nicholas V, and they shared mutual friends such as Giovanni Andrea de Bussi and Paolo Toscanelli, to whom both dedicated works.⁴³ Cusanus and Alberti can be seen to influence each other in certain works. According to Karsten Harries, Alberti's mathematical treatise *De Lunularum Quadratura* shows the influence of Cusanus, while Cusanus owned a copy of Alberti's *Elementa Picturae*.⁴⁴ Ernst Cassirer argues that Alberti's treatment of the squaring of the circle is derived from Cusanus.⁴⁵

I would suggest that passages in the *De amore* of Marsilio Ficino show the influence of Alberti and Plotinus. Ficino made marginal notes in a Byzantine manuscript of the *Enneads* (codex Laurentianus 87.3, from the library of San Marco, from Cosimo de' Medici) as early as 1460, and had the entire Greek text transcribed (codex Parisius graecus 1816, from the library of Palla Strozzi, now in the Bibliotheque Nationale). He began his translation of the *Enneads* in 1484, the year that *De amore* was published. He revised the translation and added commentaries to the *Enneads* by 1490, and it was published in 1492.

In the *De amore*, or *Commentary on Plato's Symposium on Love*, Ficino proposed, "If anyone asked in what way the form of the body can be like the Form and Reason of the Soul and Mind, let him consider, I ask, the building of the architect" (V.5).⁴⁶ Ficino was referring to a

(Minneapolis: The Arthur J. Banning Press, 1996), p. 171: Ch. 1, 57; *Idiota de Mente* in Nicolai de Cusa, *Opera Omnia*, ed. Ludovicus Baur (Lipsiae: In Aedibus Felicis Meiner, 1937), p. 48: "…mentem esse ex qua omnium rerum terminus et mensura."

⁴² Hopkins p. 219: Ch. 6, 92: "Accordingly, number and all things derive from mind." Baur p. 70: "Ex mente igitur numerus et omnia." Hopkins p. 253: Ch. 9, 116: "Mind makes number; hence, multitude and magnitude derive from mind." Baur p. 85: "Facit numerum; unde multitude et magnitude a mente sunt, et hinc omnia mensurat."

⁴³ Hopkins, Nicholas of Cusa on Wisdom and Knowledge, p. 76.

⁴⁴ Karsten Harries, *Infinity and Perspective* (Cambridge, MA: MIT Press, 2001), p. 68.

⁴⁵ Ernst Cassirer, *The Individual and the Cosmos in Renaissance Philosophy*, trans. Mario Domandi (Oxford: Basil Blackwell, 1963), p. 50.

⁴⁶ Marsilio Ficino, *Commentary on Plato's Symposium on Love*, trans. Sears Jayne (Dallas: Spring Publications, 1985), p. 92. *Commentarium in Convivium Platonis* (Opera Basileae 1561), in Sears Reynolds Jayne, "Marsilio Ficino's Commentary on Plato's *Symposium*: the text and a translation, with an introduction," in *The*

section of the *Enneads* in which Plotinus addressed the question that he posed as to how the beauty of the divine intelligences may be revealed to contemplation, and used the example of the architect. Plotinus asked, "How does the architect declare the house outside beautiful by fitting it to the form of house within him?" (I.6.3). The answer for Plotinus is that the inner idea, a copy of the divine intelligence, contains the same principle in indivisible unity that the matter of the building contains in diversity. So it is for the *concinnitas* of Alberti, which is a "harmony of all the parts," parts which are "quite separate from each other by their nature."

Ficino continues, "In the beginning the architect develops a Reason or Idea, as it were, of the building in his soul. Then he builds, as nearly as possible, the kind of house he has conceived. Who will deny that the house is a body and that it is very much like the architect's incorporeal Idea, in the likeness of which it was built?" (V.5).⁴⁷ The architect's "incorporeal Idea" is as the *lineamenta* of Alberti, the lines conceived in the mind. According to Ficino, the house "must be judged as being like the architect more on account of a certain incorporeal design than on account of its matter."⁴⁸ Ficino then suggests to the reader to "subtract its matter if you can (and you can subtract it mentally), but leave the design. Nothing of body, nothing of matter will remain to you." The form of the house, then, is "simple and devoid of matter,"⁴⁹ as a concept in the mind.

These passages recall passages in the *Enneads*: "Let him who can, follow and come within, and leave outside the sight of his eyes and not turn back to the bodily splendours which he saw before" (I.6.8).⁵⁰ If the sphere of the visible universe can be seen in the imagination, then

University of Missouri Studies, Vol. XIX (Columbia: University of Missouri, 1944), p. 70: "Quod si quis quaesierit, quonam pacto corporis forma, animae, mentisque formae, et rationi similis esse queat: is, oro, consideret aedificium architecti."

⁴⁷ Jayne p. 92; *Commentarium in Convivium* p. 70: "Principio architectus aedificii rationem, et quasi ideam animo concipit. Deinde qualem excogitavit domum, talem pro viribus fabricat. Quis neget domum corpus existere, eamque ideae artificis incorporeae, ad cuius similitudinem effecta est, esse persimilen? Porro propter incorporalem ordinem quendam potius, quam propter materiam est architecto similis iudicanda."

⁴⁸ Jayne p. 92; *Commentarium in Convivium* p. 70: "Age igitur materiam substrahe, si potes; potes autem cogitatione substrahere; ordinem vero relinque. Nihil tibi restabit corporis, nihil materiae, immo vero idem erit penitus, qui ab opifice provenit ordo, et qui remanet in opifice."

⁴⁹ Jayne p. 93; *Commentarium in Convivium* p. 70: "Idem in quovis hominis corpora facias. Resperies illius formam animi rationi quadrantem, simplicem esse, materiaeque expertem."

⁵⁰ Armstrong pp. 255–7; *Plotini Opera Omnia*, Vol. I, p. 112: "Ingrediatur ergo, atque progrediatur, quicunque potest, in intima, extra relinquens intuitum oculorum, neque solita spectacula sensuum ulterius a tergo

"Keep this, and apprehend in your mind another, taking away the mass: take away also the places, and the mental picture of matter in yourself..." (V.8.9).⁵¹ A body in matter is a "compound of matter and what forms it—for the matter of the elements is in itself formless..." (V.9.3).⁵² Form is intellect, "one being intellect like the shape on the bronze, and the other like the man who makes the shape in the bronze."

Ficino asked in *De amore*, "But who would call lines (which lack breadth and depth, which are necessary to the body) bodies?" (V.6).⁵³ Arrangement entails spaces between parts rather than the parts themselves, and proportions are boundaries of quantities, which are "surfaces and lines and points,"⁵⁴ or points, lines, and planes. Thus, for Ficino in *De amore*, "From all these things it is clear that beauty is so alien to the mass of body that it never imparts itself to matter itself unless the matter has been prepared with the three incorporeal preparations which we have mentioned,"⁵⁵ arrangement, proportion, and aspect, similar to the Vitruvian *dispositio, analogia* and *eurythmia*, which exist only in the mind, as *lineamenta* and the components of *concinnitas*, in the terms of Alberti.

Alberti was twenty-nine years older than Ficino. Between 1443 and 1465, Alberti spent little time in Florence, being occupied by the papal curia in Rome. When Alberti returned to Florence in the 1460s, he stayed at Ficino's house in Figline Valdarno. Landino, a friend of Alberti's, described a meeting between Alberti and Ficino at the monastery at Camaldoli, in

respiciens."

⁵² Armstrong p. 293; *Plotini Opera Omnia*, Vol. II, p. 1029: "Quum vero horum quodlibet invenias esse compositum ex materia simul atque formante, materia enim elementorum ex se ipsa est informis, inquires, undenam species materiae adsit, quaeres quoque de anima, utrum ipsa sit iam simplex, an potius sit aliquid et in ea, partim quidem ceu materia, partim vero velut forma, intellectus scilicet, qui sit in ea: alter quidem sicut in aere forma, alter autem velut qui formam fecit in aere."

⁵³ Jayne p. 94; *Commentarium in Convivium* p. 71: "Lineas autem quae latitudine profunditateque carent, quae corpora necessaria sunt, quis corpora dixerit?"

⁵⁴ Jayne p. 94; *Commentarium in Convivium* p. 71: "Termini vero superficies sunt lineaque, et puncta, quae cum profunditatis crassitudine careant, corpora non putantur."

⁵⁵ Jayne p. 94; *Commentarium in Convivium* p. 71: "Ex his omnibus patet pulchritudinem usqueadeo esse a mole corporis alienam, ut numquam ipsi materieae se communicet, nisi tribus illis incorporalibus praeparationibus, quas narravimus, sit affecta."

⁵¹ Armstrong p. 265; *Plotini Opera Omnia*, Vol. II, p. 1016: "Tu vero hanc animo servans alteram praeterea finge, hinc auferendo molem: detrahe quoque locum, simulque prorsus omnem imaginationem materiae abs te procul expelle..."

Disputationes Camaldulenses. Alberti arrived with Ficino, after he had stopped in Figline. Some scholars have considered the influence of Alberti on Ficino, but ultimately putting more emphasis on their differences.⁵⁶

Alberti's concepts of *lineamenta* and *concinnitas* clearly contain Neoplatonic influences, although they should not be seen as exclusively Neoplatonic, or exclusively Aristotelian, as Alberti's theories were highly syncretic. Alberti was not a philosopher, but he incorporated a vast knowledge of philosophy into his theories. The Neoplatonic content in Alberti's theories is important to understand because art and architecture are defined by metaphysical ideas which are projected onto matter; the term "architecture" refers to the conceptual structure of a building. As beauty is in the eye of the beholder, so art and architecture are in the eye of the beholder. Each individual work of art and architecture participates in a language communicating ideas, signifiers communicating signifieds, matter communicating *lineamenta* and *concinnitas* as understood in the mind of the beholder.

⁵⁶ Gadol, *Leon Battista Alberti: Universal Man of the Early Renaissance*, pp. 232–4; Tatarkiewicz, *History of Aesthetics*, Volume Three, p. 106; Hersey, *Pythagorean Palaces*, p. 35.