NICHOLAS OF CUSA ON WISDOM AND KNOWLEDGE

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I. Wisdom

A. Historical Context. The ancient philosophers regarded wisdom (σοφία) as an excellence (αρετή). Plato devoted much of the *Pro*tagoras to a "proof" that holiness (ὁσιότης), courage (ἀνδρεία), justice (δικαιοσύνη), and self-control (σωφροσύνη) are but variants of wisdom, which he there also sometimes referred to as knowledge (ἐπιστήμη). In not distinguishing explicitly between either various notions of wisdom or various notions of knowledge, Plato—or, at least, the Platonic Socrates—found himself troubled as to whether moral excellence, i.e., moral virtue, could be taught. Is it really teachable, really knowledge, or is it, instead, a special gift of the gods to some men but not to others?, he asked in the Meno. As we witness from the Laws, but also from the Republic, Plato came to favor the view that moral virtue is indeed teachable and is indeed a kind of knowledge. In general, he depicted the philosopher—the lover of wisdom—as desirous, foremostly, of knowing the Good. This pursuit of Goodness was thought to have both a contemplative 1 and a noncontemplative dimension to it, so that the philosopher was characterized both as someone given to reflecting upon the eternal Form of the Good and as someone knowing how to behave well. Although in the *Phaedrus* the gods alone are said to be wise (278D), with the philosopher being described as striving to become ever more godlike as he draws intellectually nearer to wisdom, none of the other Platonic dialogues insist upon this exclusivistic use of the epithet "wise".²

Aristotle advanced significantly beyond Plato when in the *Nicomachean Ethics* he differentiated the intellectual virtues (αἱ ἀρεταὶ διανοητικαί) from the moral virtues (αἱ ἀρεταὶ ἡθικαί), defining the latter in such a way that they could not be possessed in total separation from the former. In particular, he distinguished five intellectual virtues: τέχνη (art, craft), ἐπιστήμη (systematic knowledge), φρόνησις (practical wisdom), σοφία (theoretical wisdom), and νοῦς (intellectual insight). And one of these, viz., φρόνησις, he said to be essential to the acquisition of courage, self-control, patience, generosity, friendliness, or any of the other moral virtues. Moral virtue he understood to pertain primarily to emotions, dispositions, choices,

and actions. Insofar as moral virtue characterizes the soul, it is "a firm, choice-related disposition and is situated in a mean in relation to usa mean determined by a rational principle and determined as the man of practical wisdom would determine it." In accordance with this definition practical wisdom is required in order for a man to know where the mean between moral excess and moral deficiency is located. A man who has practical wisdom determines the mean by reference to a λόγος (rational principle); those men who have not yet attained practical wisdom are to imitate the choices and actions of the man-of-practical-wisdom (φρόνιμος). In doing so, they will presumably cultivate a firm disposition to choose that which is positioned as the mean. An individual becomes courageous, says Aristotle, by acting courageously on many different occasions; he becomes patient by repeatedly exercising patience in diversely trying circumstances; etc. Accordingly, the attainment of moral virtue comes through training and through habituation, and it comes partly in response to one's being motivated through being praised or shamed by those whom he respects. To learn in this socializing way how to be good is different from learning, in an intellectual way, what it is to be good. Thus, although both moral virtue and intellectual virtue are teachable, they are taught by two quite different methods—as different as training is from didactic.

Unlike practical wisdom, which is focused on human action, theoretical wisdom (Aristotle explains) consists in a knowledge of the cognitively most prized objects—viz., the knowledge of first causes and first principles, some of which causes and principles may be called divine. In addition, theoretical wisdom $(\sigma o \phi (\alpha))$ encompasses both systematic knowledge $(\dot{\epsilon} \pi \iota \sigma \tau \dot{\eta} \mu \eta)$ and intellectual insight $(\nu o \hat{\nu}_S)$, so that it is the most perfect of the five intellectual virtues. Yet, one's having $\sigma o \phi (\alpha)$ is no guarantee that he will also have the intellectual virtue $\phi \rho \dot{\rho} \nu \eta \sigma \iota_S$.

St. Augustine, living as he did at the end of the Roman Empire, drew upon the classical tradition as well as upon the biblical tradition for his understanding of wisdom (*sapientia*). From Cicero he borrowed the view that wisdom is the knowledge both of things divine and of things human:

Princepsque omnium virtutum illa sapientia, quam $\sigma o \phi (a \nu \text{ Graeci vocant—prudentiam enim, quam Graeci } \phi \rho \delta \nu \eta \sigma \iota \nu$, aliam quandam intelligimus, quae est rerum expetendarum fugiendarumque scientia; illa autem sapientia, quam principem dixi, rerum est divinarum et humanarum scientia 6

Cicero did not claim to have originated this definition; rather, he ascribed it to the ancient philosophers: "Sapientia autem est, (ut a veteribus philosophis definitum est) rerum divinarum et humanarum causarumque, quibus hae res continentur, scientia" ⁷ In *De Trinitate* Augustine divided the definition by stating that *sapientia*, properly speaking, is the knowledge of things divine, whereas *scientia* is the knowledge of things human. ⁸ And he hesitated to call himself a wise man, preferring to follow the example of Pythagoras (whom he mentions) and of Plato's *Phaedrus* (which he does not mention) in professing himself not to be wise but to be only a lover of wisdom. ⁹

In Augustine's early dialogue Contra Academicos the discussants agree on the somewhat different definition of "wisdom" as "not only a knowledge of, but also the diligent quest of, things human and things divine that pertain to the happy life." And they furthermore agree that God's beatitude consists in His actual knowledge of these things, whereas man's happiness consists in the continual search for this knowledge—consists, that is, in the search for truth. Augustine attempts to defeat the skeptics of the New Academy (as they are portrayed in Cicero's Academica) by pointing out that they contradict themselves. For they believe that it is possible for there to be a wise man, while also believing at the same time that it is not possible for any man to attain knowledge either of things human or of things divine, so that they are tacitly committed to the absurd view that the wise man would be wise apart from having knowledge. Augustine finds another absurdity in the Academicians' claiming to know that their skeptical doctrine is reasonable. And, finally, he accuses them of folly when they profess to know "what is truthlike" but not to know what is true. For if they do not know truth, then how can they differentiate, he asks, between what does and what does not resemble it?

In *Contra Academicos* Augustine concentrates on the nature of human wisdom as a quest for knowledge and happiness.¹¹ A man cannot be happy if he does not know what-is-to-be- feared and what-is-to-be-cherished, what is beneficial to him and what is harmful to him, what to avoid and what to seek out. In other words, in *Contra Academicos* Augustine concentrates on the issue of man's knowledge of things human. By contrast, in *De Trinitate* he focuses on the issue of man's knowledge of things divine and, in particular, on a knowledge of the divine nature and the divine persons. And this nature and these persons he refers to as Wisdom:

Et ideo sapientia Pater, sapientia Filius, sapientia Spiritus sanctus; et simul non tres sapientiae, sed una sapientia: et quia hoc est ibi esse quod sapere, una essentia Pater et Filius et Spiritus sanctus. Nec aliud est ibi esse quam Deum esse: unus ergo Deus Pater et Filius et Spiritus sanctus. 12

God, Augustine further states in *De Trinitate*, is His own Wisdom.¹³ Moreover, He is the cause of His own Wisdom in that He is, so to speak, the cause of the Son, who is eternally begotten from Him as Father.¹⁴ Human wisdom, Augustine now emphasizes, consists in *contemplatio aeternorum*—consists in the contemplation of things eternal, or better, in one's contemplation of God.¹⁵ As if in confirmation of this view he quotes from an older version of Job 28:28: "*Ecce pietas est sapientia; abstinere autem a malis est scientia*": "Behold, *pietas* is wisdom, but to abstain from evils is knowledge." He hook of Job intended to signify the worshipping of God. Accordingly, he views Scripture as teaching that *sapientia* pertains to contemplating God, whereas *scientia* pertains to action—the action of abstaining from evils in order to arrive at eternal goods.

In contrast to Aristotle, Augustine considers the highest level of theoretical wisdom, or contemplative wisdom, to be a special gift of God. God. Moreover, it is a wisdom that humbles rather than inflates. It is not that worldly wisdom which is foolishness with God; God. Tather, it is an edifying wisdom that commences with one's fearing the Lord and that has as a necessary prerequisite a life lived wisely in imitation of the life of Christ, the Wisdom of God. In last analysis, Augustine's thought is syncretistic: it shows appreciation for the classical Greek conceptions of sofiva and frovnhsi" as these conceptions were mediated through Cicero's writings; but it also combines therewith the teachings of the Holy Scriptures and of the evolving tradition of the earlier church Fathers. This syncretistic understanding of wisdom as *pietas*, *contemplatio*, and *prudentia* Augustine first molded and then funneled, as a heritage, to the Medieval world.

In the thirteenth century Thomas Aquinas drew heavily upon both Augustine and Aristotle for his conception of wisdom. He adapted the Aristotleian notion so as to make it better cohere with the Augustinian account, which could be viewed as a superadditum. Theoretical wisdom, observes Thomas, is both a knowledge of the highest causes²³ and a knowledge of divine things.²⁴ Combining these ideas, he sometimes speaks singularly: wisdom is a knowledge of *causa altissima*.²⁵ This latter expression he construes in a twofold way: as referring to God as the Highest Cause, and as referring to the supreme

cause within a particular genus, such as the genus medicine or the genus architecture. Wisdom of the latter sort is attained by study. Wisdom of the former sort may also to some extent be achieved by the study of metaphysics and theology. And yet, the loftier recesses of such knowledge are obtainable, thinks Thomas, only in conjunction with God's enlightening the intellect through special grace. Wisdom that in this way is associated with the gift of illumination is referred to by Aquinas as sapientia infusa, and it is distinguished from sapientia acquisita: "dicendum [est] quod sapientia quae ponitur donum differt ab ea quae ponitur virtus intellectualis acquisita. Nam illa acquiritur studio humano, haec autem est de sursum descendens" ²⁶ Infused wisdom, Aquinas goes on to state, concerns a knowledge-ofdivine-mysteries that God discloses to some men's understanding but not to others'. What is infused is not a concept but is, rather, a supernatural aid to the intellect, so that it may attain comprehension. Ultimately, for Thomas as also for Augustine, all wisdom derives from God,²⁷ with the consequence that human wisdom of whatever sort is a participated wisdom—i.e., a wisdom that participates in Divine Wisdom. Thomas also shares Augustine's view that the Divine Essence is its Wisdom, 28 just as it also is its Love, Goodness, Justice, and so on. And, together with Augustine, 29 he teaches that in the second member of the Trinity, called the Word of God and the Wisdom of God,³⁰ are to be found the exemplars of all created things.³¹ Yet, when he is considering sapientia acquisita, he speaks of it, à la Aristotle, as an intellectual virtue. And like Aristotle he distinguishes the contemplative (or speculative) intellectual virtue theoretical wisdom (σοφία, sapientia) from the calculative (or practical) intellectual virtue practical wisdom (φρόνησις, prudentia): "prudentia est sapientia in rebus humanis, non autem sapientia simpliciter, quia non est circa causam altissimam simpliciter " 32 Yet, man's ultimate happiness consists not in the preparatory acquiring of wisdom during this lifetime but rather in the contemplation of Wisdom itself, viz., God, during the life to come.³³ And such was exactly Augustine's position as well. 34

Thomas's clear distinctions between (1) sapientia vs. prudentia, (2) sapientia infusa vs. sapientia acquisita, and (3) sapientia simpliciter vs. sapientia in aliquo genere allow him to synthesize Augustinianism and Aristotelianism as regards the notion of wisdom. And what results, we see, is his fuller awareness that in this mundane life sapientia is sapida scientia—is a delicious knowing, a savoring of

knowledge—whose possession prepares us for the future intellectual feast, the *visio divinae substantiae per essentiam dei*.³⁵

B. *Idiota de Sapientia*. Cusanus himself calls attention to believers' present foretaste of the future intellectual feast. For wisdom is something that is intellectually relishable; indeed, "nothing is more delightful to the intellect than is Wisdom." ³⁶ Moreover,

Eternal Wisdom is tasted in everything tasteable. It is the delightfulness in everything delightful. It is the beauty in everything beautiful. It is the deliciousness in everything delicious. And you may say something similar about any desirable things whatsoever. How, then, is it possible that Wisdom *not* be tasted of? ³⁷

This tasting which is also a foretasting of a possible greater future apprehension of Eternal Wisdom, is available even to unbelievers, since it arises out of a concreated, or innate, intellectual desire ³⁸ in accordance with which all men may be said to have a natural propensity to seek wisdom.³⁹ For wisdom is the nourishment that sustains the life of the intellect. 40 In seeking wisdom, men are also seeking (whether wittingly or unwittingly) Eternal Wisdom, which is God, from whom their concreated intellectual desire derives. Indeed, God has created the intellectual spirit in man to be a living and natural likeness of Eternal Wisdom. And this likeness, or image, says Cusa, is not at rest unless it finds repose in Eternal Wisdom itself. 41 As iron filings are naturally drawn to a magnet, so the intellectual spirit in man is naturally drawn to Wisdom. However, unlike the iron filings, the human being, being free, can choose either to pursue wisdom or to turn against his natural inclination to pursue it. The more a man chooses the pursuit, the more he will be filled with wondrous desire to continue onward.⁴² However, if he decides not to accede to wisdom's beckoning, he will be exposed to unending vexation, viz., the vexation of having intellectual being but never attaining understanding.⁴³

Nicholas's thought moves on two levels, for in speaking of *sapientia*, he is speaking at times of Divine Wisdom and at times of wisdom in a more ordinary sense (and at still other times of both at once). In either sense, *sapientia* is available to all who will hearken unto its voice, for it "proclaims [itself] openly in the streets; and its proclamation is that it dwells in the highest places." ⁴⁴ The wisdom that Nicholas describes is not best learned from books, for it is not an erudition. Rather, it begins along Socratic lines with one's recognition of his own ignorance. Thus, it begins with humility and with the con-

viction that much is to be learned, even by men of ordinary intelligence, from the "book of nature," which has been "written," so to speak, by the hand of God.⁴⁵ A mind that is wise but without erudition gives no place to *curiosa inquisitio*—to idle inquiry.⁴⁶ Such a mind is far different from the minds of the sophisticated thinkers referred to by the Apostle Paul in Acts 17. Those philosophers, congregating regularly at the Areopagus, preferred nothing better than to hear or to relate some new view. Yet, their curiosity was idle because they were unwilling to permit any new views to affect their lives.

To epitomize his conception of wisdom Nicholas chooses the figure of the man with no formal schooling (*idiota*), who, in having no academic expertise, is a simple layman. The layman, though without formal education, is anything but an ignoramus; indeed, he is depicted in *Idiota de Mente* as having more philosophical insight than does the professional philosopher. Nor is he necessarily illiterate or altogether unacquainted with books. Yet, his minimal knowledge of literature comes from self-education rather than from instructed study in the classroom. Nicholas, in using the figure of the layman, is attesting to his conviction, expressed earlier in *De Docta Ignorantia*, that the ordinary citizen is endowed with a natural capability for wonderment and with an innate sense of judgment:

The naturalists state that a certain unpleasant sensation in the opening of the stomach precedes the appetite in order that, having been stimulated in this way, the nature (which endeavors to preserve itself) will replenish itself. By comparison, I consider *wondering* (on whose account there is philosophizing) to precede the desire-for-knowing in order that the intellect (whose understanding is its being) will perfect itself by the study of truth.⁴⁷

Wherefore, we say that a sound, free intellect knows to be true that which is apprehended by its affectionate embrace. (The intellect insatiably desires to attain unto the true through scrutinizing all things by means of its innate faculty of inference.⁴⁸ Now, that from which no sound mind can withhold assent is, we have no doubt, most true.⁴⁹

On the one hand, Nicholas's view is quite optimistic and is proleptic of Descartes' confidence in the inner light of reason. On the other hand, his view is vastly other than Descartes', because it demarcates the limits of the intellect in a way that Descartes was never to countenance. In fact, an essential ingredient of Nicholas's notion of wisdom is his doctrine that the wise man is a man of learned ignorance—i.e., is a man who has become aware of his ignorance regarding what the Divine Nature is and what the precise essence of any given finite

thing is.⁵⁰ The human mind is fundamentally ignorant of God's nature, Cusa says, inasmuch as there is no comparative relation between the finite and the Infinite, since the Infinite is altogether undifferentiated. Nicholas *symbolizes* God as Being itself (*ipsum esse; entitas ipsa*), while stressing that God is not Being in any sense that is analogous to being as it can be conceived by the human mind:

Hence, Wisdom (which all men seek with such great mental longing, since by nature they desire to know) is known in no other way than [through the awareness] that it is higher than all knowledge and is unknowable and is inexpressible by any speech, incomprehensible by any intellect, unmeasurable by any measure, unlimitable by any limit, unboundable by any bounds, disproportional in terms of any proportion, incomparable in terms of any comparison, unbefigurable by any befiguring, unformable by any forming, immovable by any movement, unimaginable by any imagining, unsensible by any sensing, unattractible by any attracting, untasteable by any tasting, inaudible by any hearing, unseeable by any seeing, inapprehensible by any apprehending, unaffirmable by any affirming, undeniable by any negating, undoubtable by any doubting, inopinable by any opining.⁵¹

Accordingly, Nicholas adopts the position that although wisdom is available to all, no man can become so wise as to arrive at a knowledge of the nature of Eternal Wisdom. This view he sometimes expresses paradoxically by saying: (1) Eternal Wisdom "is known in no other way than [through the awareness] that it is higher than all knowledge and is unknowable"⁵² Furthermore, (2) it is "untasteable by any tasting,"⁵³ and yet it "is tasted in everything tasteable,"⁵⁴ so that it is "tasted untasteably through our affections."⁵⁵ (3) It "is all things in such a way that it is nothing of all things. ⁵⁶ (4) It is signified, even though it is unsignifiable. ⁵⁷ Indeed, (5) supreme wisdom consists in knowing that "the Unattainable is attained unto unattainably."⁵⁸

How are these paradoxical claims to be construed so as to be intelligible? Or are they, in last analysis, unintelligible? In *De Sapientia* II Nicholas characterizes three modes of discourse about God: the mode that belongs to negative theology, which signifies what God *is not* ("God is not an existent thing"); the mode that belongs to locutional theology, i.e., to affirmative theology, which attempts truly to signify what God *is* ("God is something existent"); and the mode that belongs to neither of these two theologies but which attempts to signify God insofar as He transcends both all affirmation and all removal ("God is neither existent nor nonexistent, nor is He both existent and nonexistent").⁵⁹ By means of locutional theology God can be signified only symbolically and metaphorically. By means of negative the-

ology what-God-is-like cannot be expressed even symbolically. And by other than either locutional theology or negative theology God can be signified only to be ineffably beyond all signification. In last analysis, then, the human mind attains unattainably unto God (the Unattainable One) only in the sense that affirmative theology apprehends, and successfully signifies, only a symbolic likeness of Him-whose-nature-is knowable-only-to-Himself. These symbolic likenesses are drawn from the natural world; they serve as illustrations that support metaphorical discourse about God. Nicholas in various dialogues recurs to many such illustrations: e.g., the illustrations of a spinning top (*De Possest*), an infinite line (*De Docta Ignorantia*), a depicted "omnivoyant" countenance (*De Visione Dei*), a beryl stone (*De Beryllo*), a ball with a concave segment (*De Ludo Globi*), an inexhaustible treasure (*De Sapientia* I), a spring-filled lake (*Cribratio Alkorani* II, 9), a mapmaker (*Compendium*), a nut tree (*De Visione Dei* 7), and so on.

Just as the human mind does not and cannot really know what the Divine Nature is, so in a certain parallel way it does not know precisely what the essence of any real finite object is. 60 In supporting this claim Nicholas points to the perspectival nature of human perception and to the constructive nature of knowledge. Only God, who views each object from an infinite number of perspectives at once, knows exactly what each thing is in itself. Nicholas's claims, both epistemological and metaphysical, are often misinterpreted by readers, who become easily confused by his difficult terminology. For example, some interpreters suggest that Nicholas is a radical skeptic because he states that all our supposed knowledge of the material world is only a form of surmise (coniectura). Yet, Nicholas is not denying that we have empirical knowledge; rather, he is maintaining that empirical knowledge is not exact knowledge; and in order to emphasize this point he uses the expression "coniecturalis cognitio" ⁶¹ or simply the term "coniectura".⁶²

Finally, Nicholas retains three theses from Augustine and Aquinas: (1) that God is Wisdom, (2) that the Son of God is the Wisdom of the Father, ⁶³ and (3) that God infuses wisdom into certain men's souls in the sense that He illumines their minds, i.e., He assists them to understand. Regarding this latter point Nicholas's account is so appreciative that he describes the intellectual pursuit of *sapientia* in mystical language:

[Eternal Wisdom's] radiating, or infusing, [of wisdom] into a holy soul is a movement that inflames with [intellectually] arousing desire. For if someone

seeks Wisdom by an intellectual movement: being affected inwardly and becoming oblivious of himself, he is caught up (in the body but as if outside the body) unto [that] foretasted Delightfulness (the weight of all sensible objects cannot hold him down)—caught up unto the point where he is united to [that] attracting Wisdom. His leaving behind the senses renders the soul senseless because of stupefying amazement, so that he esteems as nothing all things except Wisdom. And it is delightful to these men to be able to leave behind this world and this life, so that they can be conveyed more expeditiously unto Immortal Wisdom.⁶⁴

Nicholas's paean to Wisdom reaches its zenith when he relates Wisdom in an essential way to human being as such: mind, he says in *De Mente*, is a *living description* of Eternal, Infinite Wisdom. And, by now, it should be clear that this "description" is a *symbolical* characterization.

II. Knowledge

A. Theoretical considerations. Nicholas nowhere gives a formal definition of "mind" since he regards every human being as understanding, in a commonsense way, what mind is. 66 He does, however, describe mind—the human mind—in a variety of different manners. Mind, he maintains, is a power of conceiving (virtus concipiendi).⁶⁷ It is a conforming and a configuring power.⁶⁸ It is a living substance,⁶⁹ a living number,⁷⁰ a living image of God,⁷¹ "an intellectual life that moves itself," "self-moving motion," 72 a power that "enfolds conceptually the exemplars of all things,"73 "a living description of Eternal, Infinite Wisdom,"⁷⁴ a living mirror⁷⁵ that mirrors reality (including itself).⁷⁶ Though we refer to this living substance fittingly as mind, nevertheless (states Nicholas) the word "mind" is not a precise name for it, since no names given by imposition are precise.⁷⁷ At best, such names reflect, or in some way signify, a respective natural (or essential) form, to which a thing's natural name is united.⁷⁸ Whereas conventional names are inexact and are imposed arbitrarily by different language groups, natural names are precise and are bestowed and known only by God, the Creator of all natural forms. Because on Nicholas's view the human mind can never know precisely what any natural form is,⁷⁹ it never knows precisely its own essential form either, so that its attempted descriptions of its exact essence are only approximations. And all of these approximations have the status of metaphor.⁸⁰ This statement does not mean, however, that all descriptions of the human mind are metaphorical, for not all descriptions are putative descriptions of the mind's exact quiddity.

The human soul, Nicholas explains, is one and the same substantial entity as the human mind. Considered in and of itself this entity is mind, whereas considered in relation to the body it is soul.⁸¹ Sometimes Nicholas articulates his point somewhat differently, preferring to call the single entity mind and to call soul "mind as it exists in a body."82 Clearly, however, he is identifying the self with mind-as-itexists-without-respect-to-body; and mind as thus considered he also calls intellect, 83 since of the four operations (or powers) of the mind, understanding is the highest. Together with the other powers (viz., perceiving, imagining, and reasoning) the power of the understanding, i.e., the power of the intellect, forms a unified whole. Accordingly, "the whole mind is called the power of understanding, the power of reasoning, the power of imagining, and the power of perceiving."84 Mind is said to precede the body ontologically, or "by nature." Hereby Nicholas means to indicate that the human mind is more excellent than is the human body—as evidenced, among other things, by its incorruptibility. Although the body depends upon the mind in more ways than the mind does upon the body, there is, nonetheless, a mutual dependency. For just as the body would not move and grow apart from mind-qua-soul, so also the mind would never begin to know apart from the corporeal instrument that contributes to making sensations possible. Unlike Plato, Nicholas denies that a mind exists temporally prior to its existence in its body. Rather, like Aristotle, he holds that at birth the infant's body is associated with a mind that is largely in potency—a mind that is like a *tabula rasa*, devoid of concepts.⁸⁶ This mind, having only an innate power of judgment (vis iudiciaria), needs the stimulation of objects in order to awaken its powers of sensing; and it needs sensations in order to evoke its conceptual activity:87 "Mind has within itself that unto which it looks and in accordance with which it judges about external objects But in our minds, at the beginning, that life resembles someone asleep, until it is aroused to activity by wonder, which arises from the influence of perceptible objects."88

Mind, Nicholas surmises, derives its Latin name, "mens," from the Latin verb "mensurare," meaning "to measure." He finds this etymological relationship altogether appropriate because it highlights the active role that mind plays in cognizing the world. Mind, though containing no a priori concepts at birth, is by no means a mere passive recipient of sensory data. It discriminates, discerns, compares, assimilates, synthesizes, recognizes, identifies, abstracts, reconstructs, clas-

sifies, and names—to mention some of its more indisputable cognitive activities. In all these ways it demarcates the limits of objects and distinguishes one object from another. For example, sometimes it distinguishes trees as a genus from the genera of other plants; sometimes it discriminates one species of tree from another; sometimes it discriminates individual trees from one another; and sometimes it distinguishes a single tree into its various parts, each of which parts can be analyzed into even smaller parts. In *De Mente* 6 (93) Nicholas goes as far as to attribute the *plurality* of the world's objects to the presence of mind. But he hastens to add that the plurality of objects would continue to exist even if there were not at all any differentiating human mind. For the Divine Mind is the ultimate guarantor of an objective plurality, inasmuch as plurality originally arose because the Divine Mind understands "one thing in one way and another thing in another way."90 That is, plurality arose because when God created, He could not create another God; and so, He created things that participate in His likeness and that do so unequally, in accordance with His understanding them differently from eternity.⁹¹

Similarly, when Nicholas states that "only mind numbers" and that "if mind were removed, then no longer would there be discrete numbers," he does not mean that if there were no human minds, there would be no numbers. For the Divine Mind would continue to exist, and in the Divine Mind "number is the First Exemplar of things." Accordingly, numbers as they exist in the human mind are images of the divine number, he which is the Exemplar-of-things, even as in a human mind number is an exemplar of concepts:

I say that number is the exemplar of our mind's conceptions. For without number mind can do nothing. If number did not exist, then there would be no assimilating, no conceptualizing, no discriminating, no measuring. For without number, things could not be understood to be different from one another and to be discrete. For without number we [could] not understand that substance is one thing, quantity another thing, and so on regarding the other [categories]. Therefore, since number is a mode of understanding, nothing can be understood without it.⁹⁵

When, as above, Nicholas calls number a mode of understanding and when, as elsewhere, ⁹⁶ he states that mind by its own power produces numbers, he is not implying that mathematical numbers are purely subjective. (Indeed, they could not be so, because they are various images of the divine number and because plurality, as it originates in the act of creation, has objective status.) Rather, he is pointing out that just

as the human mind classifies and groups and organizes its perceptual data in various manners, so also the human mind may be said to number these data variously—i.e., to understand them variously. Is a tree one thing, or is it many things (leaves, branches, trunk, etc.)? We may consider it either way, and we will number in accordance with our consideration. Numbers, Nicholas maintains emphatically, do not exist independently of any and every mind (as if they were Platonic Forms or were the intermediates that Aristotle regarded Plato as having postulated⁹⁷): "You see, too, how it is that number is not anything other than the things enumerated. Herefrom you know that between the Divine Mind and things there is no actually intervening number. Instead, the number of things are the things."98 So number exists only in mind; and yet, the plurality of objects in the world is an objective plurality, and both the essential and the numerical distinctions among those objects are real distinctions. Because numbers exist in the human mind and because these numbers are images, so to speak, of number qua Exemplar in the Divine Mind, Nicholas speaks of the human mind as itself "a certain living divine-number." This living number which both numbers and constructs geometrical figures "produces the mathematical branches of knowledge, which [deal in] certainty." ¹⁰⁰

Nicholas only hints at a theory of mathematicals. As a result, interpreters have reached differing conclusions about what his fuller theory might be, had he articulated it, and about whether what he does say is consistent with other parts of his epistemology. Karl Bormann regards the theory as teaching that mathematical concepts are abstracted from sense-experience. 101 Moreover, he regards this tenet, as he purports to find it in De Docta Ignorantia, to be consistent both with Nicholas's view of mathematicals in De Mente and with his overall theory of knowledge. 102 By contrast, Norbert Henke denies that the ideas either of numbers or of geometrical figures are abstracted from sensory data; and he judges Nicholas's epistemology to contain glaring contradictions. Henke interprets Nicholas's example of the mathematical circle in *De Mente* 7 (103) as showing that mathematicals, far from being abstracted, are unabstracted products of the mind: "If [according to Cusanus] the soul, confronted with the object to be depicted, is seen as a blank wax tablet that is caused to receive its contents through sense-experience, then the case is reversed for the circle [inscribed in a patterned floor]: the circle's measurement and exemplar result only from the mind. Hence, the statement that there is in reason nothing which was not previously in the senses is not applicable to the mathematical, even if the mathematical is regularly accompanied by imaging." ¹⁰³

Also misconstruable are Nicholas's statements regarding time in its relation to mind. For example, in *De Ludo Globi* I Nicholas writes: "Cessante enim motu caeli et tempore, quod est mensura motus, non cessat esse mundus. Sed mundo penitus deficente, deficeret tempus." Having explained, à la Aristotle, Albertus Magnus, and Aquinas, that time is the measure of motion, he observes in *De Ludo Globi* II that the human mind invents devices for measuring motion and that it marks off time in accordance with different markers: hours, months, years. In this respect, he says, time is "the instrument of the measuring soul," so that "if the rational soul is removed, then time, which is the measure of motion, can neither *be* nor be known, since the rational soul is the scale or number of motion." In the extended passage he writes:

[Cardinal]: Likewise, time, since it is the measure of motion, is the instrument of the measuring soul. Therefore the rational power of the soul does not depend on time, but rather the scale of the measure-of-motion—a measure which is called time—depends on the rational soul. Therefore, the rational soul is not subordinate to time but is [ontologically] prior to time, even as the power of sight is prior to the eye. Although sight does not see in the absence of the eye, nevertheless it does not have from the eye the fact that it is sight, since the eye is its instrument. Similarly, although the rational soul does not measure motion in the absence of time, nevertheless the rational soul is not for that reason subordinate to time, but vice versa—since the rational soul uses time as its instrument for discriminating motions. Hence, at no time can the soul's movement of discrimination be measured. And so, that movement is not limitable by time. Consequently, the movement is perpetual.

Albert: I see very clearly that the discriminating movement of the rational soul—a movement that temporally measures all motion and rest—cannot be measured with time. What else are the temporally immutable arts and disciplines than a [respective] rational structure (ratio)? Who doubts that the form (ratio) of a circle transcends time and naturally precedes all circular motion and so is altogether free from time? Moreover, where the form of a circle is seen, it is not seen apart from reason (ratio). Where is reason except in a rational soul? So if a rational soul sees within itself the form of a circle—a form that transcends time—then whether or not the rational soul is this form (or this abstract learning, or this art, or this knowledge), assuredly (as is evident) the rational soul transcends time. And these points suffice for my knowing that a rational soul cannot at any time perish or cease to be.¹⁰⁷

On the basis of such passages interpreters have been quick to claim that Nicholas's teaching anticipates Kant's doctrine of time. According to Norbert Henke, Nicholas is asserting that "the mental concept of time makes possible empirical succession."¹⁰⁸ Just like Kant, alleges Henke, Nicholas

represents the *a priority* of time as an ordering schema of mind. Kant, too, states that "if we were removed as subject ..., space and time would disappear ... "[.] Therefore, time is an ordering concept on the part of the subject. Accordingly, it is not arrived at by means of abstraction, because each act of abstraction already presupposes it. Necessarily, we bring it to experience. Nevertheless, this statement does not deny the empirical succession of events. Rather, the concept of time joins together empirical reality and its own conceptual ideality. ¹⁰⁹

However, Henke purports to see an important difference between Cusa and Kant—viz., that for Cusa "mind, which measures the temporal according to a measure-of-time that is determined by the mind itself, is itself not temporal. In order to be able to measure and to judge the temporal, mind itself must be nothing temporal; rather, it must be ordered antecedently to what is temporal." Lending credence to Henke's interpretation, Pauline Watts views Nicholas as contending that "it is not time that controls man but rather man who controls time, for man has, in effect, *invented* the measures of time Because the human soul is the inventor of time, it can be in no way limited by it. From this Cusanus concludes that the existence of the soul is outside time, or perpetual"

In their different but overlapping interpretations Henke and Watts, articulate six half-truths. For, in truth, (1) Nicholas does not claim that the mental concept of time (Henke's *mentaler Zeitbegriff*) makes empirical succession to be possible. (2) Nicholas does not assert that if human minds were removed, time would completely cease. (3) He does not maintain, either, that the human mind is altogether nontemporal. (4) Likewise, he does not assert that the human soul is the inventor of time. (5) Nor does he claim that man can in no way be limited by time. (6) Nor does he assert unqualifiedly that the human soul is outside of time.

In *De Ludo Globi* II Nicholas is arguing that the human soul is immortal. He points out, after the fashion of Aquinas, ¹¹² that the soul has knowledge of imperishable truths; and herefrom he infers (fallaciously) that the soul, too, is imperishable, i.e., is perpetual. Yet, for the soul to be perpetual is not for it altogether to escape the confines of time. According to Cusa only God is absolutely timeless and eternal. The soul remains temporal, for even though it cannot measure its own measuring-standard of time, it can nonetheless measure its own mental

activities by using the measuring-standard of time that it has adopted. Moreover, and more importantly, God knows the temporal measure of these mental activities 113 and of all succession of every kind, for God can measure succession in accordance with an infinite number of measuring-standards, i.e., from an infinity of perspectives. The human mind does not invent *time*: it invents various *measures* of time. Time was created by God along with His creation of the world, maintains Nicholas, 114 in the company of Augustine and Aquinas. In De Ludo Globi II, when the discussant Albert states that "if the rational soul is removed, then time, which is the measure of motion, can neither be nor be known ...,"115 he means that if there were no rational souls, nonetheless succession would remain but not any human measure of succession: there would no longer be years, months, hours perhaps because in the eyes of the Lord a single day is as a thousand years. 116 However, God would continue timelessly to know how the human race had previously measured succession; i.e., God would know all possible measures of the succession that would continue on.

To be sure, man is limited by temporal constraints; he cannot return to the past; nor does his memory of the past remain altogether unfailing. He cannot jump years ahead into the future; nor is his anticipation of the future altogether reliable. When Nicholas asserts that the rational soul transcends time, he means that it will not at any time perish; and so, in this qualified sense, it is not limited by time. Similarly, when he states that the soul's power is not subordinate to time any more than the power of sight is subordinate to the eye, he is making a restricted point: the soul is not mortal; it will not come to an end; its life will not run down in the future; 117 time does not contain a boundary point beyond which a given soul cannot continue to exist. The soul's not being delimited in this way by time is partially evidenced by the fact that the very scale of time is constructed by the mind. The point that Nicholas is making is not at all Kantian, for to construct a scale for the measurement of time is not at all identical with imposing the form-of-time onto an unordered sensory manifold. Indeed, just as (according to Cusa) the world's plurality would continue to exist if every rational mind perished, 118 so too, we have seen, the world's succession of states would continue on. And, in principle, the succession could still be measured by a human mind, if there were one. Moreover, the succession, its duration, and its measure would still be known to God, who, as Supreme Cause, knows "both the gradedperfection of [all] beings and the number, weight, and measure of their powers and operations."¹¹⁹ In *De Aequalitate*, an earlier work, Nicholas refers to the soul as situated between what is temporal and what is eternal; he speaks of it as located on the "horizon" of eternity, so to speak. ¹²⁰ The soul sees that it itself is conjoined to what is temporal. It recognizes that its own mental operations are temporal. And yet, affirms Nicholas paradoxically, the human soul "sees itself to be nontemporal time." ¹²¹ That is, the human soul's intellect approximates eternity the more it understands *immediately, nondiscursively*, and at a *distance* from temporal succession. In some respect, then, human reality does transcend the temporal order, while in other respects it remains bound thereto.

Nowhere in Nicholas's metaphysics do we find (1) a doctrine of antinomies, (2) a positing of forms of intuition, or (3) an argument based on the consideration of incongruent counterparts. Accordingly, there can be no serious comparison of Nicholas's view of time with Kant's. Indeed, any talk of his anticipating Kant is but idle chatter—just as surely as would be statements to the effect that he anticipates Berkeley because he declares that if there were no mind, there would be no plurality. In the end, we must remember that Aristotle himself taught that if there were no observer who was able to count, there would be no time; 123 and we must remember that Aquinas, too, spoke of the soul's approaching eternity. 124

In De Aequalitate Nicholas refers to the mind's operations of sensing and reasoning as temporal operations—i.e., as operations that take time, not as operations that project temporal conditions onto nontemporal objects or data. 125 In *De Mente*, we have seen, he points to four major cognitive powers, or cognitive faculties, of the mind: viz., the powers of sensing (or perceiving), imagining, reasoning, and understanding. 126 And among the various activities of each of these faculties is the activity of assimilating (assimilare): "In the senses [mind assimilates itself to things perceptible, in the imagination to things imaginable, and in reason to things accessible by reasoning."¹²⁷ The intellect, too, operates through assimilation, because "to understand is to make to be like (assimilare)."128 An assimilation (assimilatio) is a likeness; and for the mind to assimilate itself to an object is for it to make a cognitive likeness of that object. As a substitute for the expression "se assimilare" Nicholas also speaks of the mind as conforming itself (se conformare) to objects and as contracting itself (contrahi) to objects. 129 The mind, in perceiving a material object, receives an imprecise replica, or imprecise likeness, of the object's natural

form. ¹³⁰ This replica is a perceptual image, or perceptual form, which in certain respects resembles the natural form but which is far from being a passive mirroring of the object. Nicholas does, however, use the language of mirroring ¹³¹ and the language of imitating. ¹³² Moreover, he states unequivocally that "there is a very express likeness (*similitudo*) between the mode-of-being of all things insofar as they exist actually and insofar as they are present in the mind." ¹³³ Accordingly, perceptual images are likenesses of material objects; images reproduced by the imagination are likenesses of perceptual images; and concepts (which are in the understanding) are likenesses of both kinds of images.

We have seen previously that Nicholas considers the mind at birth to be a tabula rasa, devoid of innate concepts but having an innate power of judgment and of inference. 134 Empirical knowledge, therefore, arises from the mind's somehow 135 receiving sensory images that mirror, imitate, resemble, or in some way mentally capture the natural, specific form of the perceived object (or objects). In this respect, it is true that "sentire quoddam pati est," 136 "nihil ... [est] in ratione quod prius non fuit in sensu, 137 and "nihil tale potest esse in intellectu quod prius non fuit in sensu."¹³⁸ However, the mind's reception of sensory data is not altogether passive. In this respect Nicholas follows Thomas's view, of which Frederick Copleston correctly writes: "Aquinas did not think that the mind is purely passive He was convinced that even on the level of our knowledge of visible things mental activity, a process of active synthesis, is involved. Moreover, nobody else really supposes that the mind is no more than a passive recipient of sense-impressions. If it were, not only metaphysics would be impossible, but also the scientific work of a Newton or an Einstein."139 Similarly, Anthony Kenny rightly observes:

A human being, he [Thomas] maintains, once he knows what a whole is and what a part is, knows that every whole is greater than any of its parts; but, he continues, a man cannot know what a whole is or what a part is except through the possession of concepts or ideas derived from experience To this extent Aquinas agrees with empiricists against the rationalists that the mind without experience is a *tabula rasa*, an empty page. But he agrees with the rationalists against the empiricists that mere experience, of the kind that humans and animals share, is impotent to write anything on the empty page. ¹⁴⁰

Along the foregoing lines Nicholas of Cusa, too, combines three views: (1) that perceiving is a kind of undergoing, (2) that "knowledge occurs by means of a likeness," ¹⁴¹ and (3) that the mind discriminates,

measures, compares, synthesizes, abstracts, and arranges. Sight, in and of itself, is said by Nicholas to apprehend confusedly and "in a certain undifferentiated totality."142 And yet, except in infants, human sight apprehends only in conjunction with a higher discriminating power that is ordered to reason or that is reason itself. A similar fact holds true for imagination, which "in association with reason ... conforms itself to things, while discriminating one state from another." ¹⁴³ In De Mente 7 (100) and 8 (114) Nicholas analyzes the role of the imagination as it differs from the role of the senses and from the role of reason. Yet, he makes clear that actual perception, as we experience it, occurs with the simultaneous cooperation of the mind's powers and not in the successive stages into which it can be analyzed. 144 Thus, he can state in a more general way: "When our mind is stimulated by encountering the forms conveyed, in a replicated way, from the objects unto the spirit [of the arteries]: by means of [these perceptual] forms our mind assimilates itself to the objects, so that by way of the assimilation it makes a judgment regarding the object." 145 Although in a typical case of perception perceptual images are called likenesses of the forms that naturally exist in the perceived material objects, and although empirical concepts are called likenesses of things¹⁴⁶ because they are abstracted likenesses of the images, they both are nonetheless modified likenesses. When Nicholas speaks of the mind's conforming itself to objects and of its likening and assimilating itself to them, he does so in the context of the abstraction theory. For just as the senses assimilate themselves to a material object by receiving and modifying an image of that object's natural form, so the intellect assimilates itself to that same object by abstracting—from the sensory and imaginative images—a concept.

In order properly to assess Nicholas's theory of knowledge, we need to remind ourselves of a number of important points.

1. The fact that in *De Mente* Nicholas principally uses the language of *assimilation* and rarely refers to the intellect's activity as that of *abstracting* does not mean that he is shunning the view that the intellect makes concepts by abstracting them from the images that it finds in the senses. Indeed, for Nicholas, the notion of assimilating, when applied to the intellect's activity, includes the notion of abstracting. This point is clear from *De Mente* 15 (156:15-27), where the verb "*abstrahere*" is used:

If someone takes note of the fact (1) that the mind's viewing attains unto what

is invariable and (2) that forms are freed (abstrahi) from variability by the mind and are reposited in the invariable domain of necessary connection, he cannot doubt that the mind's nature is free from all variability. For mind draws unto itself that which it frees (abstrahit) from variability. For example, the invariable truth of geometrical figures is found not in [patterned] floors but in the mind. Now, when the soul inquires by way of the [sense] organs, that which it finds is variable; when it inquires by way of itself [alone], that which it finds is stable, clear, lucid, and fixed. Therefore, [mind] is not of the nature of variable things, which it attains unto by means of the senses; rather, it is of the nature of invariable things, which it finds within itself.

Thus, Nicholas teaches that geometrical figures are initially abstracted from experience and are subsequently perfected by the mind, with the result that a geometrical circle as the mind thinks it abstractly and ideally is invariable, even though the circular floor-pattern can be altered. However, that very activity which he here calls the mind's abstracting, he previously referred to (in *De Mente* 7) both as the mind's making assimilations and as its assimilating itself to abstract forms. 147 Clearly, assimilating and abstracting are not opposing activities—not for Nicholas any more than for Thomas. 148 In other of his works Nicholas also explicates concept-formation by pointing to the mind's operation of abstracting. De Venatione Sapientiae 36 (107:2) tells us that "abstrahit ... intellectus de sensibili intelligibilem speciem": "the intellect abstracts the intelligible form from what is sensible." Likewise, as early as De Docta Ignorantia (1440) Nicholas speaks of the intellect as "intellectus abstrahens." 149 And as late as the Compendium (1464) he asserts that "man has from his intellectual power the ability to compound and to divide the natural [perceptual] forms and to make from them intellectual forms and contrived forms and conceptual signs." This making of intellectual forms involves, in part, the process of abstracting. Accordingly, Bormann discerningly judges that Nicholas never abandoned the theory of abstraction. 151

2. Furthermore: if we are properly to delineate Nicholas's theory of knowledge, then we must correctly construe his statements about the mind's unfolding of concepts: "Because the mind is a 'divine seed' that conceptually enfolds within its own power the exemplars of all things, it is at once placed by God ... in a suitable earthen body, where it can bear fruit and can unfold from itself, conceptually, an all-encompassing unity of things." According to Henke, Nicholas's doctrine of the mind as *notionum complicatio* stands in contradiction to his doctrine that the mind is a *tabula rasa*. Moreover,

if from out of itself mind—characterized additionally as "vital life"—assimilates itself to essences, then assimilation can no longer be interpreted as passive receptivity. Rather, the mind's *per se* [activity] is to be understood as a spontaneous power. Moreover, how could mind at all assimilate itself to all essences if it did not already somehow contain everything within itself? This assimilation, then, is made possible through *a priori* contents of a productive mind. 154

Henke adds that "because mind contains already within itself the concepts of all things, it is already, qua containing mind, the source of all knowledge of essences."155 Like many others, Henke misunderstands Nicholas's teaching regarding the mind's unfolding of concepts. Henke's misunderstanding begins with his incautious interpretation of De Filiatione Dei 6 (85:6-8): "sed cum mens ipsa virtutem absolutam intellectualiter participet, ita quidem ut secundum naturae suae exuberantem virtutem notio quaedam sit omnium intelligibilium"156 For this passage does not support his claim that, for Cusa, mind is the source of all knowledge of essences. Rather, in both De Filiatione Dei and De Mente Nicholas consistently maintains (1) that "mind enfolds ... the exemplars of all things" in the sense that it has the power to liken itself to all things by way of making concepts of things and (2) that mind *unfolds* concepts from itself in the sense that it actually assimilates itself to things by means of making concepts of them. These two points hold true even for mathematical forms and concepts:

[Mind] finds its power to be the power (1) of assimilating itself to things insofar as they exist in a necessary connection and (2) of making concepts of things¹⁵⁷ insofar as they exist in a necessary connection.¹⁵⁸ Mind is stimulated to [make] these assimilations for abstract [forms]—stimulated by phantasms, or images, of [actual] forms. Mind detects these images—themselves having been made by assimilation—in the [sense] organs.¹⁵⁹

Because mind has the power to conform itself to all geometrical shapes, continues Nicholas, the concepts of them all are present in the mind's power. They are not innately and germinally present in the mind, independently of experience. This fact about the intellect's abstracting, assimilating operation leads Nicholas to speak symbolically of the mind as a "mirroring power" and to like the mind symbolically to a diamond tip: the cognitive situation, he says, is "as if an indivisible and most simple pointed tip of an angle of a very highly polished diamond were alive and as if in this pointed tip were reflected the forms of all things. By looking at itself this [living tip]

would find the likenesses of all things; and by means of these likenesses it could make concepts of all things."¹⁶³ Here it is important to recognize (1) that Nicholas speaks of the forms of all things as being in the tip *reflectedly* and (2) that the reflected forms are perceptual forms, from which the mind makes conceptual forms.

In conjunction with the doctrine that the concepts are "unfolded" from the mind's innate *vis iudiciaria*, three ancillary, clarificatory points must be mentioned.

a. Nicholas believes, and expressly states, that the senses *causally influence* the intellect. In addition to the indented quotation two paragraphs above, we may note his statement that mind—or better, in this case, the intellect—"is aroused to activity by wonder, which arises from the influence of perceptible objects." This same idea is articulated in *De Quaerendo Deum* 3 (43) through the use of metaphor:

For our intellectual spirit has within itself the power of fire. [This spirit] was sent by God to the Earth for no other purpose than to blaze and grow into a flame. It grows [inflamed] when it is aroused by wonder—as a wind blowing on a fire fans, as it were, its potentiality into actuality. And, indeed, in apprehending the works of God we marvel at Eternal Wisdom. And we are aroused by the external wind both of works and of creatures of such varied powers and operations, in order that our desire may grow into love of the Creator and [may lead us] unto an intuition of that Wisdom which miraculously ordained all things.

Likewise, in *De Filiatione Dei* 6 (87) Nicholas indicates that in this lifetime the intellect seeks to actualize its potency and to assimilate itself to particular forms, i.e., to perceptual images. But the intellectual power, he says, cannot, initially, actualize *itself*; rather, initially, it must be actualized by sensory stimuli. ¹⁶⁵ In *De Coniecturis* II, 16 he speaks of the intellect as descending to *species sensibiles* (sensory, or perceptual, images) and of these *species* as being absorbed (*absorbentur*) into the intellect's light. ¹⁶⁶ Likewise, in discussing cognition in *De Coniecturis*, he intimates that the sensible ascends unto reason and that what is present in reason is assumed (*absumitur*), in an altered way, into the intellect. ¹⁶⁷ He adds that in a certain respect "[*intellectus*] *fit sensus, ut sic hoc medio de potentia in actum pergere queat*": ¹⁶⁸ the intellect becomes the senses, in order by this means to be able to proceed from potency to act.

As Nicholas makes clear, mind knows the sensible world by making use of both images and concepts. At times, when he is differentiating the role of the intellect from the role of the senses, he as-

serts that the intellect understands only intelligible objects (i.e., concepts), even as the senses sense only sensible, or perceptible, things. The Yet, the senses and the intellect are so closely affiliated that the sensitive soul is called "a likeness of the intellect." Moreover, reason is said to be present, in some respect, in the senses—even as intellect is said to be present in reason. Accordingly, mind knows the world through the cooperative activities of the five senses, the communal sense, the imagination, reason, and the intellect. And to be sure, what it knows is the world—not just its images and concepts of the world. The world.

So although Nicholas's theory accentuates the *active* cognitive role of the intellect (active in terms of the intellect's likening itself to *species sensibiles*), Nicholas does not altogether deny that the intellect is modifiable by the senses or deny that it is at all subject to causal influences.¹⁷⁵

b. A second point must now be noted: viz., that Nicholas nowhere teaches, tout court, that the intellect is the "enabling ground" of the sensory manifold—a doctrine that has sometimes been ascribed to him: "With Cusa, on the other hand, what is mentally one is not conditioned by the manifoldness of experience but, vice versa, is its enabling ground (Ermöglichungsgrund)—similarly to the way in which the Platonic Ideas [allegedly] made possible the objects of experience."176 But this ascription by Henke fails. For we have already seen that, according to Nicholas, succession exists independently of the human mind. Moreover, we have just cast a glance at the several passages in which Nicholas asserts that sensory stimuli are the precondition—the enabling ground, or the Ermöglichungsgrund, if you will of the intellect's initially being moved from potentiality to actuality. Now, unless the intellect were thus moved, it could not ever have begun its operations. Accordingly, the ascribed doctrine actually reverses Cusa's real position.

c. Thirdly, Nicholas does not unqualifiedly deny that the ten (Aristotelian) categories characterize the world apart from the human mind. Yet, he has been interpreted as making such a denial:

Cusa's transcendental starting point manifests itself very clearly in his conception that the categories are not present outside the mind. Instead, their mode of being is to be present in the mind's forms, because the mind thinks them thusly. One must see herein a preliminary step toward the modern view of the immanence of forms in the mind.

Accordingly, mind is the power that gives form to beings. Beings first be-

come beings through the human mind. For mind determines a being's true being. Only in contrast to Aristotle, who taught that the categories are present not only in the mind but also in reality, does one recognize the claim that Cusa makes with his thesis that forms are immanent in the mind.¹⁷⁷

The interpreter—once again Henke—cites two passages, neither of which make his point about Cusa's transcendental starting point: viz., a passage from *De Ludo Globi* II and a passage from *De Mente* 11. The first of these reads: "[Cardinalis:] Unde et decem praedicamenta in eius¹⁷⁸ vi notionali complicantur (similiter et quinque universalia, et quaeque logicalia et alia ad perfectam notionem necessaria), sive illa habeant esse extra mentem sive non, quando sine ipsis non potest discretio et notio perfecte per animam haberi."¹⁷⁹ But this text decidedly leaves open the possibility that the categories and the predicables characterize reality apart from the human mind, for it says "sive illa habeant esse extra mentem sive non." The second passage requires greater subtlety of interpretation:

Philosophus: Non habent ergo decem generalissima hos essendi modos extra mentis considerationem?

Idiota: Decem illa generalissima non in se, sed ut in mente sunt, modo formae vel compositi intelliguntur; in suis tamen inferioribus habere istos essendi modos considerantur. Neque, si recte attendis, in se extra mentem modo formae et compositi esse possunt.¹⁸⁰

We must look at this text in the light of Nicholas's wider aims in *De Mente* 11 (especially sections 132-136). Nicholas is intent on showing that in all things that come into being there is present "a trinity in a oneness of substance," so that in this respect each thing reflects the Divine Trinity. Thus, in all originated things there is (1) a capability-to-be-made (i.e., a "material" component), (2) a power-to-make (i.e., a "formal" component), and (3) the union of the two. Since the human mind itself is an originated thing, it too is trinitarian in the foregoing way. But the mind has, as well, a *second* set of capabilities: the capability-to-be-made-like (its "material" component) and a power-to-make-to-be-like (its "formal" component). The mind can understand only because it is a union of both these latter capabilities—a union that is a single essence. Accordingly, in a twofold way—viz., as an originated thing and as a knower—the human mind is a triunity that is symbolic of God's triunity.

Nicholas maintains that all actual existents exist in terms of matter, form, and the union of both; indeed, an individual substance is a composite of what is material and what is formal, as is also an instantiated accident. For example, says Nicholas, an individual man is a composite of the capability of human nature to become an individual man (the "material" component) and the power of human nature to make to be human (the "formal" component). Similarly, a white thing qua white is a composite of color's capability of being made white (the "material" component) and the power to make color to be white (the "formal" component). Obviously, all of this strikes a reader as very much contrived.

But Nicholas goes still further with his contriving. The human mind itself, he has already said, can understand only because its mode-ofbeing is trinitarian (viz., capable of becoming likened, a "material" mode; capable of likening, a "formal" mode; and their union). But, in addition, we are now told, when the mind understands some object in the world, it understands that object in a trinitarian way viz., as a union of the material and the formal. So (in accordance with the present paragraph and the previous one) both of the following statements are true: (1) an actually existing thing is a composite of the material and the formal (i.e., is a composite of a capability-tobe-made-what-it-is and a power-to-make-it-to-be-what-it-is), and (2) the mind apprehends an actually existing thing as a composite of the material and the formal. Now, the mind has some leeway in its modes of apprehending; however, this leeway does not diminish the fact that an individual substance or an instantiated quality exists and is trinitarian irrespective of its relationship to a given human mind or to all human minds. 181 In particular, the mind has a certain leeway insofar as it can apprehend in a material way or in a formal way or in both ways together. When it apprehends something in terms of that thing's capability to be made what it is, then the mind is said by Nicholas to make genera, for it grasps that thing in a general and material way. When the mind apprehends something in terms of a power to make it to be what it is, then the mind is said by Nicholas to make differentiae, for it grasps that thing in a discrete and formal way. And when the mind apprehends something in terms both of what it is capable of being made and of the power to make it to be what it is, then the mind is said by Nicholas to make species, for it grasps that thing in a specific way. Nicholas goes on to state that the mind can also apprehend something in terms of impressions about what is *proper* to that thing, thereby making propria.¹⁸² And the mind can also apprehend something in an adventitious way, thereby making accidents. So the mind makes predicables (genus, differentia, species, proprium, accident),

and these predicables correspond (though inexactly) to real characteristics in the object that is apprehended; in this latter respect they may be said to exist in objects, just as in the former respect they may be said to exist in the mind. However, considered in and of themselves, they have no existence other than in mind or in objects.

Given the foregoing context, we come now to the text presently in question. The ten categories, insofar as they are made by the human mind to be first principles (i.e., to be basic and foundational), exist only in the human mind. And yet, they also have objective correlates in the world ("in suis tamen inferioribus habere istos essendi modos considerantur"), so that the world may be said to consist of substances and accidents, which exist for the omnivoyant, omniperspectival Divine Mind. (It is little wonder that De Visione Dei speaks of God's causing all things as His seeing all things.)¹⁸³ In De Mente 11 Nicholas acknowledges, with Aristotle, that the categories do not exist in themselves either as forms or as composites of form and matter. 184 That is, an actually existent individual substance is a composite of something material and something formal; and the mind apprehends it to be such. But substance qua category, considered in itself, is not a form and is not a composite (of the formal and the material) but is something basic. In maintaining that only as the ten categories exist in the mind, and not as they are considered in and of themselves, are they composites of something material and something formal, Nicholas is not claiming that they are nothing but mental classifications, with no corresponding "likenesses" in the extramental domain. Nonetheless, it should be clear that his conception of certain of the categories, such as the category of substance, is somewhat different from Aristotle's and Thomas's. 185 And it should be equally clear that without his recourse to the doctrine of God, his epistemological "critical realism" would risk lapsing into phenomenalism—and his metaphysical realism, into nominalism. By invoking the doctrine of God, he is able to maintain that objects—in their plurality, successiveness, substantiality—exist independently of the human mind, inasmuch as they exist for the Divine Mind, whose infinity of perspectives 186 includes all possible human perspectives. Apart from the human mind these objects retain even their accidental features such as location, temporality, quantity, etc.—in the double sense that (1) if a human mind were present, it would apprehend them as having location, temporality, etc., and that (2) God eternally knows that this is how they would be apprehended by a human mind.

3. Rightly grasping Nicholas's theory of knowledge requires, furthermore, that we correctly construe his illustration of the mapmaker in *Compendium* 8:

A completely developed animal in which there is both sense and intellect is to be likened to a geographer who dwells in a city that has the five gateways of the five senses. Through these gateways messengers from all over the world enter and report on the entire condition of the world Suppose the geographer to be seated and to take notice of every report, in order to have within his city a delineated description of the entire perceptible world [The geographer] endeavors with all his effort to keep all the gateways open and to continually receive the reports of ever-new messengers and to make his description ever more accurate.

At length, after he has made in his city a complete delineation of the perceptible world, then in order not to lose it, he reduces it to a well-ordered and proportionally measured map. And he turns toward the map; and, in addition, he dismisses the messengers, closes the gateways, and turns his inner sight toward the Creator-of-the-world, who is none of all the things about which the geographer has learned from the messengers, but who is the Maker and Cause of them all.

Some interpreters, in applying the illustration, emphasize that the mapmaker is reconstructing the order of the world as he maps out the data in his mind. He is "creating an order of his own, one other than that which actually exists in the external world." Cusa is said to propound an "immanent idealism"; and man is said to create the world in which he operates, even as he also creates time and space. In a wider context (i.e., encompassing but going beyond the reference to the mapmaker-illustration), Cusa is said to believe in "the fundamentally psychological and subjective nature of vision" and to emphasize what Kant referred to as the productive imagination and to draw near to endorsing nominalism.

No matter how wide the context, though, the illustration of the mapmaker lends no support at all to the claim that Nicholas tends toward nominalism or toward a Kantianlike doctrine of the productive imagination. For the mapmaker, as Cusa explicitly states, attempts to make his description of the world as accurate as possible. To that end, he keeps open the city gates until such time as he has gathered enough information to ensure accuracy. When he closes the gates and dismisses the messengers, he does so not with the aim of restructuring the external ordering but so as better to meditate upon how his activity of "creating" the map symbolically illustrates God's creating of the world. At any moment, the mapmaker can reopen the

city gates, summon new messengers, and check on whether his map needs revision. Although he is acquainted with the outside world only by means of the information brought to him by the messengers, he is nevertheless acquainted with *the world* and not just with his *map of the world*. In mapping the world beyond the gates of his city, he proportionately reproduces its dimensions; he does not produce, by way of some spontaneous faculty of the imagination, new or differently drawn boundaries or alignments.

Similarly, in *De Mente* 2, where Nicholas introduces his illustration of the spoon and points out that the form of the spoon does not imitate the visible form of any natural object, he does not claim that the mind is producing from itself an altogether new form. Rather, he puts into the Layman's mouth the words: "My artistry involves the perfecting, rather than the imitating, of created visible forms So the spoonmaking Layman, insofar as he is a "creator" of forms, is mentally and artistically and "productively" transforming and perfecting forms that he has already found in nature. Nicholas never veers from the empiricism implicit in the Compendium's statement: "caecus a nativitate non habet phantasma coloris et imaginari nequit colorem." 193 In De Bervllo 7 (Chap. 6) he notes that man makes rational entities (such as numbers) and artificial forms (such as a spoon); and he compares this mode of "creating" with God's creating and calls man a second god (secundus deus), thereby appropriating an expression from Hermes Trismegistus.

Interpreters have served Cusa badly by taking as paradigmatic of empirical knowledge what he states with regard to geometrical figures:

And [mind] conceives the immutable quiddities of things, using itself as its own instrument, apart from any instrumental [corporeal] spirit—as, for example, when it conceives a circle to be a figure from whose center all lines that are extended to the circumference are equal. In this way of existing no circle can exist extra-mentally, in matter. For it is impossible that in a material there be two equal lines; even less is it possible that any such [perfect material-]circle be constructible. Hence, the circle in the mind is the exemplar, and measure-of-truth, of a circle in a [patterned] floor. Thus, we say that in the mind the [respective] true nature of the things is present in a necessary connection, i.e., in the manner in which the true nature of the thing dictates (as was said regarding the circle). 194

This passage has reference only to geometrical figures and their idealized shapes. Although, as Nicholas subsequently states, ¹⁹⁵ the mind is stimulated by sensory images to make concepts of these figures, and although these concepts are the measure-of-truth of the geometrical

shapes that actually accompany material objects, it does not follow that *empirical* concepts are the measure-of-truth of empirical objects. Indeed, the reverse is true, since (unlike the concepts of geometrical figures) empirical concepts are subject to uncertainty, "because they are [made] in accordance with images of the [true] formal natures rather than in accordance with the true formal natures themselves." 196 The material object is the measure-of-truth of the empirical concept, which, qua uncertain, may be progressively revised in accordance with new knowledge of the object. Henke confounds Cusa's distinction between mathematical concepts, which are certain, and empirical concepts, which are uncertain, when he regards Cusa's notion of the mathematical as contradicting his theory that perception is representative. 197 Yet, there can be no contradiction between the a priori and the empirical, between the necessary and the contingent. Our ideal concepts of geometrical forms are such that we would not have them unless we had experience of the world; but these concepts themselves, insofar as they are ideal and perfect, go beyond experience. Henke, whom we have seen earlier to have misunderstood Nicholas's statement that mind contains and unfolds from itself the concepts of all things, ¹⁹⁸ pushes his misunderstanding to an extreme, doing so partly because he views the mind's conceptualizing of a circle as paradigmatic of the mind's measuring and determining all things:

The actual annulling of the idea of representation, and of the subject-object duality connected with it, occurs through the mental coinciding of oneness and otherness, of universal and particular. The oneness of the subject is just such a oneness of otherness and oneness. It manifests itself in the unfolding of multiplicity from out of the mental oneness, which must already have contained this multiplicity in order to be able to unfold it. But the mind, in unfolding from out of its oneness the archetypal being for each existent, therewith declares the existent to be an image, to be a mere appearance. Accordingly, mind is the presupposition [hypothesis] of sensory experience. 199 For whereas (because of otherness) sensory perception is confused, shadowlike, merely representational, untransfigured, and, hence-in the domain of the concrete-sensible—nothing to which knowledge could adjust itself: the reality of things in the mind is marked by necessity. For in the mind the circle is conceived in the way that the mind necessitates. The conceptual circle is the norm for the circle on the [patterned] floor, a circle which never completely attains unto its archetype.

If in this way we recognize, in principle, the inexactness of sensory perception, then we see, too, that the concrete particular object can no longer impart its form. The perceivable existent object loses the certain and evident givenness that could be copied. It becomes fluid, so that it no longer conditions cognition. ²⁰⁰

Now, as an interpretation of Cusa's epistemology, all of the foregoing quotation is woefully misguided. Nicholas nowhere and never adopts the foregoing view (nor is such a view inferable from anything he states): viz., the view that material objects no longer become apprehensible as concrete particulars which can communicate their form to the sensing subject but are apprehensible only as insubstantial fluctuations that have no determining effect upon cognition. Moreover, it is false that, for Nicholas, the mind constitutively unfolds the archetypal being of every existent and that, therefore, a material object becomes only an image of this unfolded archetypal being—becomes only a mere appearance. Henke erroneously construes Nicholas's example of the circle as applying also to empirical concept-formation an error that leads to an utter distortion of Nicholas's theory of knowledge. In last analysis, we must keep in mind that when Nicholas is speaking of the realm of determinate necessary connection (determinata complexionis necessitas), as in De Mente 7 (103-104), he is speaking of the mathematical or the logical, not of the empirical.²⁰¹

4. If we are rightly to comprehend Nicholas's theory of knowledge, then we must also avoid misconstruing his statements about *homo mensura*. Historically, the dictum "Man is the measure of all things" derives from the Sophist Protagoras. It was the object of a vigorous repudiation by Plato in his *Theaetetus*. Nicholas himself introduces Protagoras's dictum—or, at least, favorably alludes to it—on several occasions in *De Beryllo*.²⁰² In Chapter 5 he writes (as freely translated):

... you will note the saying of Protagoras that man is the measure of things. For with the senses man measures perceptible things; with the intellect [he measures] intelligible things; and he arrives transcendently at things that are beyond intelligible things When man knows that the soul's becoming knowledgeable is the purpose of things' being knowable, he knows, on the basis of his perceptual power, that perceptible things are to be such as can be perceived. [He knows] about intelligible things [that they are to be] such as can be understood, and [he knows that] things that transcend [the intellect] are to be things such as transcend. Hence, man finds all created things to be within himself as in a measuring scale. ²⁰³

In *De Beryllo* 71 (Chap. 39) Nicholas generalizes his point: "cognoscere ... mensurare est": "knowing is measuring"—for God as well as for man. And in *De Mente* 1 he tells us that "mind is that from which derive the boundary and the measurement of every [respective] thing."²⁰⁴ Interpreters such as Norbert Henke make much out of what

they regard as a contradiction between the doctrine of *homo mensura* and the doctrine of representational perception. "Such an essential determining on the part of mind," writes Henke, "excludes the idea of representation, with its program of imitating multiplicity—excludes it as being merely a superficial determining. But a decided refutation of the specific theory of representation is given only by the *homo mensura* proposition. Things are not the measure of knowing, but, conversely, mind—with its own *a priori* measure—measures and orders the world."²⁰⁵ Eusebio Colomer, in an otherwise rich and powerful article, follows this same line of interpretation:

Die Tätigkeit des Messens bringt die Unterwerfung des Gemessenen unter die Einheit des Masses mit sich. Und das bedeutet, dass uns die Welt als etwas gegeben ist, dem der Mensch sein eigenes Mass auferlegt. Aus dieser Sicht erscheint die Erkenntnis bei N[ikolaus] v[on] K[ues] als Selbstentfaltung des Geistes, nicht im Sinne einer materiellen Angeborenheit der Ideen, sondern im Sinne eines dynamischen und formalen Apriorismus, bei dem, wie J. Koch nahelegt, der Begriff der *complicatio* irgendwie dem transzendentalen *a priori* von Kant entspricht.²⁰⁶

Although Colomer rightly turns away from ascribing to Nicholas a theory of innate ideas, he nonetheless becomes incautious in attributing to him a view of the mind's complicatio that "somehow corresponds to Kant's [doctrine of the] transcendental a priori." For although Nicholas regards mathematical propositions as known a priori (in the sense that their justification does not depend on experience), he considers geometrical *concepts* (circle, triangle, line, etc.) as initially derived abstractively from, and subsequently perfected beyond, experience. Thus, geometrical concepts have a preliminary empirical basis qua concepts even though the geometrical propositions that make use of them are altogether a priori. By contrast, Kant regards the very concepts of Euclidean geometry not as perfected abstractions from experience but as altogether ideal determinants of experience. Moreover, for Nicholas, the concepts of the natural numbers (two, three, four, etc.) are derived recursively from the concept of oneness (unitas). 207 Nicholas may indeed regard oneness as an a priori concept—but not in Kant's sense of being transcendentally constitutive of empirical (vs. noumenal) reality. ²⁰⁸ Similarly, Nicholas may indeed regard the proposition "In movement there is found nothing but rest" [DM 9 (121:7)] as what nowadays would be called analytic; but he regards the *concept* of rest as an empirical concept, not as a Kantianlike category, as Colomer alleges him to be doing.209

We must insist that Nicholas's less clear utterances be interpreted in the light of his more clear utterances, and not vice versa. Now, in *De Mente* two of his clearest utterances are that (1) mind, which originally lacks all conceptual form, can assimilate itself to every form and can, when stimulated by images, make concepts of all things,²¹⁰ and that (2) "in our reason there is nothing that was not previously in our senses."²¹¹ Each of these statements, by itself, excludes the view that there are Kantianlike transcendental categories. To allege, as Henke, Stadler, Blumenberg, and others do, that Nicholas's epistemology is blatantly contradictory points not to a genuine problem in Nicholas's position but rather to impoverished exegesis on the part of those who are expounding his position.

Mind is said by Nicholas to produce its own numbers by its own power; and multitude and magnitude are said by him to derive from mind.²¹² But we must beware of inferring that whenever Nicholas unspecifyingly uses the word "mens," he is using it to refer to the human mind—a mistake made by many interpreters. Magnitude and multitude derive from mind; but they derive from the Divine Mind. Mind measures all things; but the constitutive measuring is done by the Divine Mind, with the human mind measuring, chiefly, in the sense of taking the measure of things and, secondarily, in the sense of setting the measure of things. When Nicholas says, at De Mente 1 (57:5-6), "mind is that from which derive the boundary and the measurement of every [respective] thing,"213 he goes on to differentiate mind as Infinite Mind (viz., God) from mind as an image of the Infinite Mind (viz., the human mind). Now, Infinite Mind, not its image, is the ultimate measurer of all things. So when the human mind—an image of the Divine Mind—is called "a living measure that attains unto its own capability by measuring other things,"214 we must remember that it is setting neither its own measure nor the measure of other things, except in a very reduced sense, for God sets the measure for all things, including the human mind: "Thus, the measure or end-point of each thing is due to mind. Stones and pieces of wood have a certain measurement—and have end-points—outside our mind; but these [measurements and end-points] are due to the Uncreated Mind, from which all the end-points of things derive."215 This same theme was articulated by Nicholas already in his first major philosophical work, De Docta Ignorantia: "the unqualifiedly Maximum is the measure of everything "216 Or again, "since the Maximum is like a maximum

sphere, ... it is the one most simple and most congruent measure of the whole universe and of all existing things in the universe; for in it the whole is not greater than the part, just as an infinite sphere is not greater than an infinite line."²¹⁷ And at *De Mente* 15 (158: 19-20) we are reminded that "only the Uncreated [Divine] Mind measures, delimits, and bounds our mind "Furthermore, in De Venatione Sapientiae 28 (83:10-14) we are told that the Divine Mind "has determined for every creature its measure, its weight, and its number" and that, indeed, "the Divine Mind is the Measure and the Boundary of all things because it is the Constituting Ground (ratio), and the Definition, both of itself and of all things." Finally, in De Li Non Aliud 5 (16) we read that Not-other, viz., God, "is the most adequate Constituting Ground (ratio), Standard, and Measure of the existence of all existing things, of the nonexistence of all nonexisting things, of the possibility of all possibilities, of the manner of existence of all things existing in any manner, of the motion of all moving things, of the rest of all nonmoving things, of the life of all living things, of the understanding of whatever is understood, and so on for all other things of this kind."218

Accordingly, when Nicholas speaks approvingly of the doctrine that *homo mensura est*, we dare not construe in a radical way the doctrine that he is approving. Man measures things; he develops measuring scales; he discriminates, analyzes, modifies, synthesizes. Even his knowing is a measuring. However, when mind measures, it measures primarily by conforming and likening itself to the object measured:

[Mind] conforms itself to [absolute] possibility in order to measure all things with respect to their possibility. Likewise, it conforms itself to absolute necessity in order to measure all things in their oneness and simplicity, as does God. Likewise, it conforms itself to necessary connection in order to measure all things in their own being, and it conforms itself to determinate possibility in order to measure all things as they [actually] exist. Mind also measures symbolically and in a comparative way—for example, when it uses number and geometrical figures and makes itself to be a likeness of these. Hence, to one who views the matter subtly, mind is a living, [quantitatively] uncontracted likeness of Infinite Equality.²¹⁹

Here Nicholas emphasizes mind's ability to take the measure of all things, to become like them, so as to cognize them. Principally, then, in *this* way *homo mensura est*. Indeed, even when the human mind produces numbers, "our mind's number is an image of the divine number—which is the Exemplar-of-things" Plurality itself, we have

seen, is fundamental to creation, so that only secondarily, and in a reduced sense, is it a product of the human mind [DM 6 (93:1-5)].

5. In order correctly to apprehend Nicholas's theory of knowledge, we must also recognize that his appropriation of the Thomistic definition of "truth" as *adaequatio rei ad intellectum*²²¹ does not conflict with any other tenet of his theory. This fact has often been contested. But the contesting has always been generated by one or another fundamental misapprehension of Cusa's texts. For example, Michael Stadler acknowledges that Cusa advances a doctrine of *assimilatio*. But then he asks: "So isn't the Cusan theory of knowledge to be construed as an *adaequatio intellectus ad rem*? Or does a contradiction, an inconsistency, appear within this philosophy—an inconsistency that comes up right in the theory of knowledge?" And he continues:

The difficulties of orienting oneself with respect to Cusa's theory of knowledge have been addressed again and again. These difficulties manifest themselves focally in Chapter 3 of De Mente. For there, so it seems, Cusa presents two conceptions of knowledge that are contradictory. Completely in line with the previously sketched interpretation, the human mind brings forth things. Mind is the first image of God; thereafter come the things whose archetype mind is: ... ut mens sit imago Dei et omnium Dei imaginum post ipsum exemplar. Unde, quantum omnes res post simplicem mentem de mente participant tantum et de Dei imagine, ut mens sit per se Dei imago et omnia post mentem non nisi per mentem. The Divine Mind creates things by way of mens, which, as being their archetype, brings them forth. They exist only through mind. However, in stark contrast to the foregoing view seems to be the position that is found only a few sentences earlier. There we read: Conceptio divinae mentis est rerum productio. Conceptio nostrae mentis est rerum notio. Si mens divina est absoluta entitas, tunc eius conceptio est entium creatio. Et nostrae mentis conceptio est entium assimilatio Herewith an obvious contradiction appears: on the one hand, objects are ordered subsequently to mind, as being images of it; on the other hand, as res creatae, objects seem to be antecedently ordered to human thought.222

Stadler draws the wrong conclusion. Rather than concluding that Nicholas is so foolish as egregiously to contradict himself in statements made a few lines apart, Stadler should infer that his own initial interpretation of *De Mente* 3 might need to be rethought. And, to be sure, therein lies the problem. For Nicholas does not mean, à la Stadler's interpretation, that God creates things other than the human mind by way of the human mind, which produces them and which is their constitutive archetypal form. In *De Mente* 3 (73) Nicholas is merely claiming that although *all* things were created by God in His

own image, still the rational mind is the closest image of God. Indeed, the human mind resembles the Divine Mind in many ways.²²³ One such way is the following: "Just as God is Absolute Being itself that is the Enfolding of all beings, so our mind is an image of that Infinite Being itself—an image that is the enfolding of all [other] images [of God]."224 Things other than the human mind are an image of God (says Nicholas) insofar as the Divine Mind shines forth in them qua creatures possessed of that which is mental or vital: "All things [ontologically] subsequent to mind are an image of God only insofar as mind shines forth in them—even as mind shines forth more in more highly developed animals than in less highly developed ones, more in things capable of perceiving than in vegetative things, and more in vegetative things than in minerals. Hence, creatures that lack mind are unfoldings of the Divine Simplicity rather than images thereof although in being unfolded in accordance with the shining forth of the image of mind, they partake variously of that image."225 So insofar as things other than the human mind are possessed of a sensitive or a vegetative power, they are diminished images of the Divine Mind by way of being diminished images of the rational soul, which itself has perceptual and nutritive powers.²²⁶

A second example of a misunderstanding of the theory of *adae-quatio* may be drawn from an earlier position taken by Karl Bormann—a position that, presumably, he no longer holds. Bormann alludes, not altogether without merit, to what he perceives to be a difference between *adaequatio* as it applies to the intellect and *adae-quatio* as it applies to the senses:

In order for the doctrine "Truth is assimilation" to be understood and to be made consistent with [the doctrine of] the spontaneity of the human mind, equality in the domain of reason must be distinguished from equality in the domain of the senses. "With respect to knowledge of that which is knowable by mind, the intellect is not dependent on anything at all ..., since it is the origin of its own activities." Hence, the intellect cannot assimilate itself to the object; rather, the object assimilates itself to the intellect: veritas ... est adaequatio rei ad intellectum. In the domain of the senses the situation is otherwise: the object sends forth signs of itself—signs that reach the sense organs through the medium of the air and that are noted in the sensible faculty of perception. The likenesses, images, or signs are not at all, as with Thomas Aquinas, simply the object in a different mode of being. Therefore, they cannot guarantee the objectivity of the perceptions. Rather, they are very distant shadings of the object²²⁷ (my italics).

Yet, Bormann's remarks may mislead some people in several respects.

In quoting Nicholas's definition of truth, Bormann should give the fuller expression used by Nicholas: " ... veritas, ... quae est adaequatio rei ad intellectum aut aequatio rei et intellectus."228 Nicholas regards the two disjuncts as equivalent: adaequatio rei ad intellectum is the same thing as aequatio rei et intellectus. Nicholas is making one essential point: viz., that when the intellect understands truly, there is a certain agreement (correspondence, equality, conformity) between the intellect and the thing understood. Nicholas might just as well have written "adaequatio intellectus ad rem" as the other way around. For his emphasis is upon adaequatio, not upon some invocable difference between ad intellectum and ad rem. St. Thomas, for example, makes clear that the known object is the measure of human knowledge thereof, for the putative knowledge is judged to be true or not true, he says, by comparison with the reality.²²⁹ Yet, Thomas himself does not hesitate to write: "quando [intellectus] iudicat rem ita se habere sicut est forma quam de re apprehendit, tunc primo cognoscit et dicit verum": "only when the intellect judges a thing to be such as is the form of it that the intellect apprehends does the intellect know and speak what is true."230 So Thomas does not hesitate to declare that truth has to do with the object's conformity to the abstracted form of it in the human mind. He means nothing radical by his statement—any more than does Cusa by his phrase "adaequatio rei ad intellectum."

To see the foregoing point more clearly, we need look only at *De Venatione Sapientia* 36. There Nicholas indicates expressly that when the intellect understands truly, it is adequated to the thing understood. And he explicitly relates the *adaequatio* doctrine to the doctrine of *abstrahere*:

[Intellectus] est etiam intelligendo verus, quando *est rei intellectae adaequatus*. Res enim intelligibilis tunc vere intelligitur, quando intelligibilitas eius est ita depurata ab omni extraneo, quod actu est vera intelligibilis species seu ratio rei. Et tunc intellectus in actu verus est, quia intellectus est idem cum intellecto.

Corruptibile non intelligitur nisi per incorruptibilem eius speciem. Abstrahit enim intellectus de sensibili intelligibilem speciem (italics added).²³¹

A final comparison may help. In *De Docta Ignorantia* I, 3 (9:4-5) Nicholas remarks: "... manifestum est infiniti ad finitum proportionem non esse "An interpreter might insist that Nicholas means what he says: viz., that there is no comparative relation of the infinite to the finite. And the interpreter might claim that this statement's meaning is to be construed differently from someone's saying "... manifestum est finiti ad infinitum proportionem non esse." But such an ex-

egete would be drawing a distinction that Nicholas himself does not draw. For Nicholas himself also writes, in *De Visione Dei* 23 (100:7): "Finiti ad infinitum nulla est proportio," just as at *De Docta Ignorantia* II, 2 (102:4-5) he writes: "Proportionem vero inter infinitum et finitum cadere non posse nemo dubitat." In all three passages he is making but one and the same central point. Similarly: the expressions "adaequatio rei ad intellectum," "intellectus rei intellectae adaequatus," and "aequatio rei et intellectus" are all used in order to make but one and the same essential point. ²³² Of course, we must remember that for Nicholas, as also for Thomas, the adequation is between the intellect and the intelligible object, i.e., the species intelligibilis. ²³³

With regard to the mind's knowledge of empirical objects, Nicholas nowhere claims that these objects *assimilate themselves* to the intellect. Rather, assimilation is always on the part of the mind: "Mind is so assimilative that in the sense of sight it assimilates itself to things visible, in the sense of hearing it assimilates itself to things audible, in the sense of taste to things tasteable, in the sense of smell to things that can be smelled, in the sense of touch to things touchable. In the senses [mind assimilates itself] to things perceptible, in the imagination to things imaginable, and in reason to things accessible by reasoning."²³⁴

Moreover, when Nicholas states at Compendium 11 (36:4-7) that "the intellect does not depend on anything else in order to understand intelligible things; and it does not need any instrument other than itself, since it is the initiator of its own acts," he does not mean this compound statement unqualifiedly. For although the intellect does not depend on anything else in order to understand intelligible things, it does depend on the senses to furnish species sensibiles in order therefrom to make species intelligibiles, as Nicholas indicates a few lines later. Similarly, when Nicholas states that "the intellect does not understand perceptual objects," he means this statement qualifiedly: the intellect does not understand the perceptual qua perceptual; in order for understanding to take place, an intelligible form must be made from the perceptual form. Along these same lines: it is also misleading to allege that since (according to Nicholas) the intellect understands species intelligibiles, the intellect is not rightly said either to understand the real world or to have knowledge of it. This allegation is misleading because according to Nicholas the mind—which is essentially intellect²³⁵—knows and understands the world through understanding species intelligibiles, since these are likenesses, of sorts, 236 and since "knowledge occurs by means of a likeness." 237

All of the foregoing points about *adaequatio* and *assimilatio* are worth belaboring. For misapprehension of Cusa's epistemology continues, in this respect, to be widespread. And much of it takes its start from going beyond Bormann's interpretation and mistakenly considering Nicholas to teach, regarding even empirical objects, that "der Gegenstand gleicht sich der Vernunft an."

6. We will also not properly grasp Nicholas's theory of knowledge, if we improperly construe his statements about self-knowledge. One such statement is the following: "Mind performs all [its operations] in order to know itself."238 Henke and others influenced by him interpret brazenly both this proposition and the related proposition "immutabiles concipit [mens] rerum quidditates, utens se ipsa pro instrumento sine spiritu aliquo organico...."239 Somehow from these and other passages Henke infers that (for Nicholas) "knowing is always, then, in last analysis, knowledge of oneself as the unfolding of rational oneness. According to this Cusan philosophy-of-oneness, oneness is already contained a priori in the I think [The doctrine of] the unfolding of the categories from out of the mind's oneness anticipates, in its starting point, Kant's [doctrine of the] transcendental deduction, even if [the Cusan doctrine] lacks systematic development."²⁴⁰ Yet, what Cusa really teaches is that although in its activities mind aims to know itself, it can succeed in knowing itself only if it succeeds in knowing the Word of God, its Cause; for "non ... potest se causatum cognoscere causa ignorata": 241 "what is caused cannot know itself if its Cause remains unknown." But since in this lifetime it cannot fully succeed in knowing the Divine Word, it cannot fully achieve a knowledge of itself. Such knowledge awaits the next life and is called theosis or deificatio or filiatio. Nicholas takes up this latter theme in his work De Filiatione Dei. When after death and resurrection the believer's intellect is exalted most highly, it will know itself most fully in God. This exalted state is sonship (filiatio), which "is nothing other than our being conducted from the shadowy traces of mere representations unto union with Infinite Reason, in which and through which our [intellectual] spirit lives and understands that it lives. [This living and understanding] occurs in such a way that (1) [our intellectual spirit] sees nothing as living outside itself, and (2) only all those things are alive which in the intellectual spirit are the intellectual spirit, and (3) the intellectual spirit knows that it has life of such great abundance that in it itself all other things live eternally in such a way that they do not maintain *its* life but, rather, it is the life of [all other] living things."²⁴²

Nicholas goes on to explain that

sonship is the removal of all otherness and all difference and is the resolution of all things into one thing—a resolution that is also the imparting of one thing unto all other things. And this imparting is *theosis*. Now, God is one thing in which all things are present as one; He is also the imparting of oneness unto all things, so that all things are that which they are; and in the [aforementioned] intellectual intuition *being something one* in which are all things and being all things in which there is something one coincide. Accordingly, we are rightly deified when we are exalted to the point that in a oneness [of being] we are (1) a oneness in which are all things and (2) a oneness [which is] in all things.²⁴³

Nicholas's notion of *filiatio* is indeed a difficult notion to grasp.²⁴⁴ But for present purposes we need only remember that sonship, or "deification," is neither a present human condition nor a universal human condition.

In the present world a human mind's knowledge of itself will always remain problematical, declares Nicholas. The best instance of this declaration is found in *De Venatione Sapientiae* 29 (87: 15-26):

Our intellect understands when it assimilates itself to all things. For it would not understand anything if it did not assimilate itself to what is intelligible, in order to read within itself that which it understands—i.e., to read it within its own word, or concept. Moreover, within itself the intellect is able to attain unto its own quiddity and essence only in the manner in which it understands other things: viz., by forming, if it can, an intelligible assimilation of itself. By comparison, sight does not see itself. For unless sight were made visible, how could it see [itself]? But from man's seeing other things, he rightly attains unto the fact that sight is present in him; nevertheless, he does not see his sight. Similarly, man, in knowing that he understands, understands that intellect is present in him. Nevertheless, he does not understand what intellect is.... For since the Divine Essence is not known, it follows that no thing's essence can be cognitively comprehended.

If we were to seek out any theme in Cusa's works that might rightly be considered to be a foreshadowing of a Kantian theme, it would be the preceding one: viz., that the human mind cannot in the present lifetime know what it is, cannot know truly its own essence. And yet, even this theme is not fundamentally Kantian—precisely because Cusa's declaration is based upon the mind's presumed inability to know its ultimate and divine Cause, rather than being based upon the

consideration that the mind, even in knowing *a posteriori*, imposes its own pure forms upon the object known, even if that object is the knowing self.

Henke and others misconstrue Cusa's historical relationship to Kant; and they do so because of three missteps. First of all, they misconceive the context of *De Filiatione Dei*, not recognizing that Nicholas is referring only to the resurrection state of the intellect of believers alone. Secondly, they repeatedly fail to realize that when Nicholas is speaking in *De Mente* 7 (103) of the immutable quiddities of things, he is speaking only of mathematical and logical entities. Thirdly, they misconstrue Nicholas's statement that the mind's quest of all knowledge is for the sake of self-knowledge; for they regard Nicholas's claim as signaling an unfolding of the categories from out of the mind's unicity and as constituting both an anticipation of Kant's transcendental deduction and a prefiguring of the role of the *a priori cogito* in German Idealism. These three missteps help explain why Henke does not hesitate to write:

In spite of things' being represented by the mind surmisingly, the mind thinks them in terms of their [respective] exemplar. Mind thinks them in such a way that it posits their [respective] norm—posits it from out of its own inescapable subjectivity. The language of "[the mind's] assimilating [itself] to beings" presupposes—even if it seems also to contradict—the subjective determining of cognition. For mind gave its own form to the very beginning [of the cognition] as well as to what followed therefrom. In a corresponding way mind embraces God as well as the world. Hence, of intellect that has become fully aware of itself Cusa can say, with his characteristic pathos: "Nihil igitur remanebit nisi ipse intellectus purus secundum ipsum, qui extra intelligibile nihil potest intelligere esse posse. Cum igitur hoc ita sit, non intelligit intellectus ille aliud intelligibile neque erit eius intelligere aliquid aliud ...[.] Non erit veritas aliud aliquid ab intellectu ... secundum omnem vim et naturam intellectualis vigoris, quae omnia secundum se ambit et omnia se facit, quando omnia in ipso ipse". So the intellect, in becoming realized, understands itself à la Parmenides as an identity of thought and being; and it no longer needs to assimilate itself to an object. 245

If Nicholas's writings at all dimly prefigure nineteenth-century German Idealism, then they do so not in the foregoing way but insofar as certain themes implicit in *De Filiatione Dei* can be extrapolated and generalized beyond their religious context, so that they become universal metaphysical principles. Two such generalized metaphysical principles are found expressed in *De Mente*: (1) "Nothing is known unless all things are known" (or again, "A part is not known unless the

whole is known, for the whole measures the part").²⁴⁶ (2) "If someone had precise knowledge of one thing: then, necessarily, he would have knowledge of all things" (or again, "If anyone attained unto a single instance of precision, he would have attained unto God, who is the Truth of all knowable things").²⁴⁷ A cognate doctrine of whole-and-part, along with the doctrine of precision vs. imprecision, lies at the heart of Idealism and is central to its holistic conception of truth, its dogma of internal relations, and its presupposition of *Absoluter Geist*.

- 7. Nicholas's theory of knowledge cannot be accurately apprehended unless its theory of signs is accurately delineated. This latter theory is presented, for the most part, in the *Compendium*.²⁴⁸ And there are three crucial points to keep in mind regarding it.
- a. *Natural signs differ from conventional signs*. Natural signs designate a reality in such a way that everyone who apprehends the sign recognizes the signified reality. For example, a moan is, ordinarily, a natural sign of distress; a laugh is, usually, a natural sign of gladness, ²⁴⁹ even as smoke is a natural sign of fire. By contrast, a conventional sign is one that has been instituted by a society or by a subgroup of society in such a way that it is understood by members of the group because they have been instructed as to what the sign designates. For example, a male's wearing a certain type ring on the fourth finger of the *left* hand is, in the United States, a sign that he is married; but for a male to wear the same type ring on the fourth finger of the *right* hand is, in Germany, a sign of marriage.

However—and here is where the confusion begins—Nicholas has a second notion of natural sign: any sensory image is said to be a natural sign of the object which it represents. Accordingly, in this second sense, a natural sign is a mental representation of the object's natural form. Natural signs confer information either about accidents or about substances. And they enter the mind through one or more of the senses. Now, although sensory images are the most basic natural signs of an object, there are two other levels of signs. The immediately superior level involves the imagination, for the images reproduced in the imagination are signs of the signs in the senses. Imagination is related to the five senses (and to the communal sense) in such a way that "there is in the imagination nothing that was not previously present in the senses." The third level of signs is the conceptual level, where an object is known by way of a conceptual

representation (species notionalis). 254 Although Nicholas does not say so, we might regard an empirical concept as a sign of a sign of a sign (i.e., as a sign of the memory image, which itself is a sign of the sensory image, which is a sign of the natural form). However, only sensory representations and representations in the imagination (memory images) are called *natural* signs.²⁵⁵ A representation, at whatever level, is understood by Nicholas to involve a likeness between the represented and the representing; however, the likeness is never understood to be more than an imprecise approximation of the real object. Concepts qua concepts do not represent particular objects but represent, instead, kinds of objects.²⁵⁶ We nonetheless have knowledge of particulars, and not just of their genera and species, because the configuration of mental representations that constitute our knowledge of one individual thing differs from the configuration that constitutes our knowledge of another, since no two individuals can be alike in every respect.²⁵⁷

b. In a more general sense, *all creatures are signs and disclosures of God*, who manifests Himself in and through His creation: "In creatures, which are signs of the Uncreated Word, the Former reveals Himself in various ways in the various signs; and there cannot be any [created thing] that is not a sign of the manifestation of the Begotten Word."²⁵⁸ Now, we have already seen that the human mind can recognize itself to be "the first and nearest sign of the Creator. In this sign the Creative Power shines forth more than in any other known animal. For an intellectual sign is the first and most perfect sign for [signifying] the Creator of all things, whereas a perceptible sign is the last [and farthest-removed sign for signifying the Creator of all things]."²⁵⁹

Although, like all creatures, nonrational animals are images and signs of the Creator, reflecting His triunity in and through their own respective triune natures, nevertheless animals do not have minds, or intellects. Nicholas is, however, prepared to concede that they have *ratio*, or reason, ²⁶⁰ because they have the power to discriminate one object from another and because they can make inferences. In granting this concession, Nicholas breaks with the medieval tradition, which denied that animals have *ratio* and which maintained that *homo solus animalis rationalis est*. Augustine, Anselm, and Aquinas deny that animals have a rational will, saying that they have only appetites. Augustine is willing to ascribe to animals an inner sense (*sensus interior*), but never *ratio*. But, then, with regard to the human being, Au-

gustine makes no systematic distinction between *ratio* and *intellectus*, as does Nicholas;²⁶¹ and so, *ratio* is a richer notion for him than it is for Nicholas. Aquinas distinguishes, in the case of the human being, between the two;²⁶² yet, in general, he does not emphasize the view that in the human being they are two different faculties, or operations.²⁶³

c. The Compendium's doctrine of natural signs differs from De Mente's doctrine of natural names. Just as Nicholas's discussion of signs has frequently been misunderstood, so also has his treatment of names. A reader might be inclined to suppose, prima facie, that natural names are the names of natural signs—or that, perhaps, natural signs are themselves natural names. Neither of these suppositions are correct. Nor is it true that

the 'natural word' is equivalent to the concept. To this extent one recognizes in the *nomen naturale* of Cusa the *verbum intimum* of Augustine ... or the *verbum naturale* of Anselm However, in Cusa the natural word is understood 'nominalistically'. Whereas Augustine—and in this regard Anselm does not contradict him—stresses the inner word's independence of language, Nicholas of Cusa sets forth the oneness of concept-formation with the imposition-ofnames. One and the same movement of reason (*motus rationis*) posits both the concept and the name. Therefore, Nicholas of Cusa can say: "... a thing is nothing [i.e., is not anything] unless it falls under a name (*rem nihil esse nisi ut sub vocabulo cadit*)²⁶⁴

The foregoing interpreter imputes to Nicholas views that are not Nicholas's. (1) For although according to Augustine, Anselm, and even Ockham a natural name is a concept, Nicholas does not regard it as such; indeed, we have already noted that for Nicholas a thing's natural name precisely corresponds to its exact essential form. (2) Moreover, Nicholas himself does not advance a nominalistic theory of names, or even a quasi-nominalistic theory—except with respect to names for God. (3) And, finally, when Nicholas says at *De Mente* 2 (65:9-10) "rem nihil esse nisi ut sub vocabulo cadit," he is not speaking on his own behalf—he is not endorsing the statement. Rather, he is beginning to sketch certain differences between the Aristotelians and the Platonists, as he understands these differences. He goes on to propound a view that differs somewhat from the views expressed in both of these schools of thought, although he sides more with the Aristotelians.

Let us look in more detail at Nicholas's position on natural names, as this position is constructible from *De Mente* 2 and elsewhere. These

names, he tells us, are determined by the named things' respective essential form. Indeed, they are "united to" that form. They are eternal, and they are the true general names for things. They shine forth imperfectly in the various names imposed at will by the various language-groups. Unlike imposed names, they are precise; and so, they are not known to us exactly, anymore than a thing's essential form is exactly known to us. Instead, they are known only to God, who alone knows precisely what each thing is. Ultimately all things derive from the Word of God, who is Infinite Form and who is the Ineffable but Precise Name "of all things insofar as these things are captured by a name through the operation of reason. In its own manner this Ineffable Name shines forth in all [imposed] names. For it is the infinite nameability of all names and is the infinite vocalizability of everything expressible by means of voice, so that in this way every [imposed] name is an image of the Precise Name."265 In the end, Nicholas believes, we must content ourselves with the assurance that natural names are known by God. In any event, they are not precisely knowable by us and are not precise concepts in our minds. So Nicholas's usage of "natural name" is different from that of Augustine and Anselm, who think of a natural name as an empirical concept that is common to different language-groups. For example, Germans speak of ein Hund, French of un chien, Italians of un cane, the English of a dog, and so on. Though they all make use of different imposed names, their underlying concept, according to Augustine and Anselm, is the same. This concept is a natural word, or a natural name. It is knowable, and its knowability is the basis of communication. But Nicholas, we have seen, considers a natural name to be incompletely graspable by us. For although it shines forth in and through a thing's perceivable characteristics, these characteristics do not suffice to give us exact knowledge of the thing's essence and, hence, of the natural name united to that essence. Indeed, "if the precise name of one thing were known, then the names of all things would be known, because there is no preciseness except with God. Hence, if anyone attained unto a single instance of precision, he would have attained unto God, who is the Truth of all knowable things."266

8. In addition, Cusan epistemology cannot be accurately characterized apart from the recognition that all human and angelic knowledge is supposed by Nicholas to aim ultimately at obtaining an ever more suitable symbolical knowledge of God, as well as at attaining a

real knowledge of one's own respective essence:

[The situation is] as if someone were to see ... how it is that being is participated-in, variously, by all beings—and were thereafter to behold (in the way we are now discussing, viz., simply and beyond all participation and variation) absolute being itself. Assuredly, such a man would see (beyond [all] determinate necessary connection) all the things that he previously saw in a variety—would see them most simply, without variety, in terms of absolute necessity, without number and magnitude, and without otherness. Now, in this most lofty manner mind uses itself insofar as it is the image of God. And God, who is all things, shines forth in mind when mind, as a living image of God, turns to its own Exemplar and assimilates itself thereto with all its effort. In this way the mind beholds all things as something one and beholds itself as an assimilation of that one. By means of this assimilation it makes concepts of that one which is all things. (In this way it makes theological speculations.) In the one thing which is all things it very tranquilly finds rest as in the goal of all its concepts and as in the most delightful true being of its life. ²⁶⁷

A number of important points are elicitable from this passage, in conjunction with views expressed by Nicholas elsewhere. God is the ultimate goal of all the human mind's concepts. The human mind, in viewing itself as the image of God, forms a concept of God as Exemplar of both itself and all other things. In conceiving (always symbolically and only symbolically) of this Exemplar, the human mind conceives of it as the Source of all things—as Absolute Necessity in which there is no otherness. Insofar as all things are viewed as present in God ontologically prior to their creation, they are viewed as identical with God, for "in God all things are God," 268 just as insofar as an effect is antecedently present in its cause, it is the cause. 269 However, created things qua created things never lose their finitude, never become transformed into God in such a way that they are no longer their own finite selves.²⁷⁰ In other words: although created things themselves never become essentially merged into their Ground-ofbeing, viz., God, they do serve as a means for contemplating God as the Ground of all being, in whom there is no *alteritas*. Accordingly, Nicholas writes in De Li Non Aliud 10 (39:5-11): "When I look at things, beholding their essences: since things exist in accordance with their essences, then when I behold these essences through the understanding prior to [the things' existence], I maintain that they are different from one another. But when I view them above the understanding and prior to other, I do not see different essences but see no other than the simple Constituting Ground of the essences that I was contemplating in these things. And I call this Ground *Not-other* or the Essence of essences, since it is whatever is observed in all the essences."

The foregoing earthly conceptual vision of God as Not-other and as the Ground-of-being will be superseded, in the case of believers, by elevation to sonship (*filiatio*) in the next life. In that exalted state there will be an intellectual intuition (*intellectualis intuitio*) of the unity of all things;²⁷¹ and the mind will see itself as it is and will see all other things as they are reflected within itself.²⁷² However, it will never behold God as He is in Himself and will never have knowledge of God that is other than symbolical. For God is known only to Himself,²⁷³ since there is no comparative relation between the finite and the Infinite.

In this lifetime the human mind is supposed to strive to make itself ever more conformed to the Divine Mind.²⁷⁴ Since the finite cannot really be conformed to the Infinite, "conformity" here has only metaphorical significance. We are to understand the notions *more conformable* and *less conformable* in the light of the teachings of Scripture, wherein God is depicted as Goodness and Wisdom. Accordingly, we become more conformed to God through loving God, who is Goodness and Wisdom, and through striving progressively after moral and intellectual perfectibility. To this end God has implanted in human nature an innate desire for knowledge²⁷⁵ and has also instilled an innate recognition of the beautiful, the just, and the good.²⁷⁶

9. Finally, if we are properly to assess Nicholas's theory of knowledge, we must respect the different character of his different works and not regard them all as of equal weight when it comes to our identifying his position regarding cognition. For example, works such as De Coniecturis, De Filiatione Dei, De Li Non Aliud, and De Apice Theoriae are not places to look for Nicholas's systematic position on the nature of human knowledge generally. These works are highly speculative, highly metaphysical. Although they impinge upon epistemological areas, they do not represent Nicholas's attempt to theorize about human knowledge of the world and of the self. In particular, De Coniecturis is a work in which Nicholas deliberately aims at novelty. As Josef Koch points out: whereas "in De Docta Ignorantia Nicholas quotes from many authors, in *De Coniecturis* there is not a single definite quotation."²⁷⁷ Already in the Prologue to Book One of De Docta Ignorantia Nicholas indicated that he regarded his own views, therein set out, as bold. In *De Coniecturis* this boldness, this venturesomeness increases to the point that the entire work is something of an "intellectual cadenza" in which he speculatively improvises regarding various parallels between God, the angels, the human soul, and the human body. Like De Coniecturis, De Filiatione Dei, too, deals tangentially with various epistemological issues. Unlike De Coniecturis, however, it does deal fundamentally with one very restricted epistemological topic: viz., with the nature of cognitive intuition (intuitio cognitiva) in the future state of deificatio. But what is said in De Filiatione about knowledge on the part of believers who attain this state in the next life dare not be understood as constituting Nicholas's theory of cognition generally. 278 Similarly, De Li Non Aliud is another highly speculative work that approaches traditional metaphysical topics creatively and imaginatively. There Nicholas does not so much debate issues as he does set out his overall position and mark it off from various other positions. And in doing so, he draws upon the writings of Pseudo-Dionysius and others.

In works such as the foregoing Nicholas makes several assertions that bear upon a theory of cognition. Yet, there is neither any articulation of such a theory nor any systematic development of parts of one. Taken in isolation, Nicholas's scattered, unsystematic statements on knowledge—situated, as they are, amid a speculative context—are likely to be misleading. The proper place to look for his theory of knowledge is in those of his works where epistemological issues are more central and are addressed directly—works such as De Docta Ignorantia, De Quaerendo Deum, De Mente, De Venatione Sapientiae, De Beryllo, the Compendium. Clear statements and clearly sketched positions in these works must—where they constitute a consistent pattern—take precedence over sporadic or unclearly made utterances in works such as De Coniecturis and De Li Non Aliud. Whenever an interpreter does not adhere to this exegetical rule, he is prone to misinterpreting Nicholas's speculative utterances and to viewing them as downright inconsistent with the consistent pattern of material found in the more epistemologically oriented works. A good illustration of what is likely to happen—and, indeed, of what has already happened—may be gathered from considering a passage that occurs toward the end of De Li Non Aliud:

Abbot: ... And [you have led me] to see that the mental spirit is an image of this [Divine] Spirit. For, indeed, this [mental] spirit—which of its own power goes forth unto all things—examines all things and creates the concepts and likenesses of all things. I say "creates" inasmuch as [this spirit] makes the

conceptual likenesses of things from no other thing—even as the Spirit which is God makes the quiddities of things not from another but from itself, i.e., from Not-other. And so, just as [the Divine Spirit] is not *other* than any creatable thing, so neither is the mind *other* than anything which is understandable by it. And in the case of a mind which is more free of a body, I clearly see a spirit (1) shining forth more perfectly as creator and (2) creating more precise concepts. ²⁸⁰

It is tempting to construe this passage in a "radical" way: viz., as Nicholas's teaching that the human mind creates all its concepts *a priori* and does not abstract any of them from sensory images but is only stimulated by sensory images to "unfold" them from itself. Such a construal will then have to be viewed as being at odds with all the many places in *De Docta Ignorantia*, *De Mente*, *De Venatione Sapientiae*, where Nicholas promotes the theory of abstraction. The construal might even lead an interpreter to misconstrue *De Mente* 7 (99:13-14), where the Orator says: "I would like to hear how it is that mind produces from itself, by means of assimilation, forms of things." Now, in truth, *De Mente* 7 subscribes to the theory of abstraction. And since both *De Mente* (written before *De Li Non Aliud*) and *De Venatione Sapientiae* (written after *De Li Non Aliud*) endorse the theory of abstraction, it is implausible to believe that Nicholas switched his position during the interim when he was writing *Non Aliud*.

So when in De Li Non Aliud Nicholas states that the human mind "examines all things and creates the concepts and likenesses of all things" and creates them "from no other thing," he is not advancing a special view about a priori forms and about the mind's transcendentally productive powers. Instead, he means that the mind makes concepts from out of that which is mental, viz., from species sensibiles. "For since," as he says in the Compendium, "no thing is replicable as it is in itself, and since to have a knowledge of things conduces to the good of an animal's being, it is necessary that objects, which cannot in and of themselves enter into another's knowledge, enter by means of our designations for them. Therefore, between the perceptible object and the senses there has to be a medium through which the object can replicate a form of itself, or a sign of itself."285 This perceptual form is a mental form; but it must be rendered intelligible: "The intellect does not understand perceptual objects, because they are perceptual, not intelligible. Therefore, perceptual objects must be made intelligible objects before they are understood—even as nothing is perceived unless it is made perceptual."286 So the mind makes concepts from that which is already mental, viz., from the perceptual. But it makes, or creates, these in differing ways—depending upon whether the concepts are empirical or mathematical. Similarly, when Nicholas says in *De Li Non Aliud* 24 that a mind which is more free of a body creates more precise concepts, he means this in the sense of *De Mente* 7 (104-106), not in some radical sense.

A comparison may help. In *De Li Non Aliud* 24 (112:9-10) Nicholas asserts that "the Spirit which is God makes the quiddities of things not from another but from itself, i.e., from Not-other ("nec spiritus qui deus, rerum quidditates facit ex alio, sed ex se aut non-alio"). Now, a radical interpretation of this statement would construe it as indicating that in the dialogue Non Aliud Nicholas rejects the doctrine of creatio ex nihilo, substituting for it a doctrine of creatio ex se (i.e., creatio ex essentia dei). Yet, this interpretation would be altogether implausible. For both before writing Non Aliud and after writing Non Aliud Nicholas endorses the doctrine of creatio ex nihilo. Moreover, as a cardinal in the Roman Catholic church he would never have veered from so fundamental a tenet of the Christian faith. Accordingly, the radical interpretation is mistaken. Nicholas's use of "deus facit ex se" is his way of saying "deus facit ex nihilo," "deus facit virtute sua sola."

A second comparison is in order. In De Docta Ignorantia II, 4 (116:2-4) Nicholas speaks of the world's having emanated from God: "patet quomodo per simplicem emanationem maximi contracti a maximo absoluto totum universum prodiit in esse." This idea is repeated elsewhere—e.g., in *De Possest* 65:11-14: "Cum autem omnia bonum appetant et nihil appetibilius ipso esse, quod de suo thesauro utique optimo emanare facit entitas absoluta, ideo deum quem entitatem nominamus solum bonum dicimus" Now, it would surely be wrong to infer that because he talks of both the world and being as emanating from God, the world was not created ex nihilo by God but, rather, was created from out of God's substance and is God in His contracted state of emanated being, so to speak.²⁸⁹ Nicholas expresses himself in many different ways—sometimes more loosely than would ordinarily be desirable. Interpreters are easily misled if they focus too intently and narrowly on some particular loose expression or modus loquendi and ignore the broader context of his collected works. Their pulling out from here and there an apparently anomalous quotation and calling it inconsistent with what is said elsewhere in the corpus will usually be evidence for the fact that they have not penetrated beyond the more common surface meaning of a given expression—penetrated to the deeper, restricted use of the expression within Cusan philosophy. Such superficial readings misdirected John Wenck; and comparable misreadings have misguided many subsequent interpreters, many of whom are sympathetic to Cusa, as Wenck was not. We must always bear in mind that Nicholas wrote many of his works cursorily, as he himself confesses. ²⁹⁰ If these cursorily written works are also read cursorily, their teachings will inevitably be misapprehended. And if no difference of weight is assigned to the different works by a reader who is investigating a given topic, then from Nicholas's works there will be elicitable, on that given topic, only a string of inconsistent passages.

Only in the light of the preceding nine clarifications will Nicholas's theory of knowledge be able to be seen as anything other than a tangle of intertwined contradictory themes. Over already too long a period of time his epistemology has been badly mangled by his interpreters and critics, beginning with John Wenck, who viewed it as an incoherent muddle that undermines the very possibility of knowledge, whether of the world or of God.²⁹¹ In the intervening time that separates us from Wenck, other interpretations, as clumsy and fumbling as were Wenck's, have arisen and have introduced additional exegetical distortions. We have been told that Nicholas's theory fosters nominalism; that it anticipates Kant's transcendental idealism or even nineteenth-century German Idealism; that according to the Cusan theory mind unfolds all concepts from itself and uses these to measure sensedata; that mind creates time; that mind knows only its own images and mental contents, not extramental objects themselves; that the intellect is not subject to causal influences from what is ontologically inferior to it; that Cusa's doctrine of truth as adaequatio is belied by his further doctrine of the mind as forma formans; that because a thing's quiddity is said not to be knowable precisely, critical realism is abandoned and all putative empirical knowledge is, fundamentally, poetic knowledge;²⁹² that because all knowledge aims at self-knowledge, the human mind cannot escape epistemological subjectivism, cannot escape "immanent idealism," so that any so-called empirical object is an almost pure fluidity that assimilates itself to the mind's categories and, in sum, that all of the foregoing propositions are at odds with the further Cusan statements "Cognitio vero fit per similitudinem" 293 and "Nihil ... [est] in ratione quod prius non fuit in sensu." 294

However, we have seen for ourselves that the foregoing interpretive

claims are the result of various overinterpretations of Nicholas's texts—that Nicholas is both historically and intellectually closer to the epistemology of Albert Magnus and Thomas Aquinas than to that of Immanuel Kant and Georg Hegel. Nicholas's thought is historically fascinating because of the fundamental real ways in which it veers from Thomas's, not because of the fictively imagined ways in which it anticipates Kant's. In veering substantially from Thomas, Nicholas has no recourse to formal arguments for the existence of God, he dispenses with an analogical conception of God's being, he describes the mind as self-moving motion,²⁹⁵ he ascribes a power of "rational inference" to the higher orders of nonhuman animals, and he programmatically distinguishes ratio from intellectus in the human being. His epistemology is affiliated with Thomas's insofar as it advances the view that the mind at birth is a tabula rasa, that there is in the intellect nothing (except its vis iudiciaria) which was not previously in the senses, that empirical concepts are abstracted from sensory representations, that both sensory representations and concepts are in some respect likenesses of the natural forms of the objects they represent, that mathematical concepts are abstractions that become perfected in an idealized way by the mind. Nicholas is a speculative philosopher, not an analytic philosopher, as was Thomas. Accordingly, he does not proceed as does Thomas to differentiate systematically the active intellect from the passive intellect, the inner senses from the outer senses, the rational soul from the sensitive soul. And yet, he does make inchoate use of all of these distinctions. Moreover, he goes beyond Thomas in richly interesting ways—e.g., not only in his denial that the exact essence of anything is humanly knowable in the present lifetime but also in his (all too concise) characterization of (1) the earthly self's knowledge of itself, (2) the eschatological self's attainment of theosis, (3) the pervasive role of intuitive insight (intellectualis intuitio), (4) the mystical vision of God, which takes place beyond even all intuitive insight, and (5) the internal cognitive relationship between whole and part.

To be sure, Nicholas's philosophy is eclectic and syncretistic. It is an intersection of cross currents within the Renaissance—an intersection whereat the Platoniclike tradition represented by Plotinus, Proclus, Pseudo-Dionysius, Eriugena, and Eckhart meets with the Aristotelianlike tradition represented by Boethius, Albertus, and Thomas. Amid the syncretism of Cusa's theory, one historical figure needs to be given more prominence: Leon Battista Alberti, by whose *De Pic*-

tura, whose *Elementa Picturae*, and whose *De' ludi matematici*, Nicholas, apparently, was influenced in *De Visione Dei* and *De Staticis Experimentis*.

B. Practical considerations. Alberti was born in Genoa, Italy on February 14, 1404, a birthdate that places him in Nicholas's cohort. He attended elementary school in Venice and then, from 1415 to 1421, the humanist gymnasium of Gasparino Barzizza in Padua. Between 1421 and 1428 he studied at the University of Bologna, from which he received a doctorate in canon law. After several preliminary positions, including serving as secretary to Cardinal Albergati in Bologna, he became, in 1432, secretary to Bishop Biagio Molin, director of the Apostolic Chancery in Rome. Subsequently, he was appointed as one of perhaps a hundred papal abbreviators, ²⁹⁶ a position that he held until 1464, when a retrenchment took place. As a humanist, Alberti's interests were typically broad: literature, painting, architecture, grammar, sociological relations, moral concepts, mathematics, poetry, sculpture. Among his writings are Della famiglia (1433-1441), De Statua (1434), De Pictura (1435), Elementa Picturae (1435), De' ludi matematici (1450), Grammatica della lingua toscana (ca. 1450), De Re Aedificatoria (1452). Works falsely ascribed to him include Della prospettiva and Trattato sui pondi, leve e tirari. His De Motibus Ponderis and his De Litteris et Ceteris Principiis Grammaticae have been lost. He died in Rome on April 25, 1472.

Circumstantial evidence warrants the inference that Nicholas of Cusa had made Alberti's personal acquaintance. Nicholas studied canon law at Padua from 1417 to 1423; but Alberti, who left Padua for Bologna in 1421, was only in the *Gymnasium* during this overlapping period. It is more likely that the two actually met in Rome during Nicholas's long sojourn there while in exile from Brixen (September 1458 through July 1464, with an intervening return to Brixen during the first trimester of 1460). They may also have met earlier at the Council of Florence-Ferrara (where Alberti arrived in the entourage of Pope Eugenius IV) or in 1450 when Nicholas was presented with his Cardinal's hat and spent parts of that jubilee year in Rome and in Fabriano. Both Alberti and Nicholas were intimates of Eugenius IV, as well as of his successor Nicholas V; and both had as friends Paolo Toscanelli and Giovanni Andrea de Bussi. It is unlikely that in this circle of associates Alberti and Cusa would never have met.²⁹⁷

In De Staticis Experimentis Nicholas alludes to several writers

whose ideas he finds helpful: Vitruvius, Hipparchus, Augustine. From Vitruvius he draws his emphasis upon the differences between regional bodies of water and their properties, as well as an interest in various kinds of water clocks. In connection with his thoughts about fluids, he turns his attention to the diverse weights of urine and of blood; and he suggests that these variations might well serve a physician as diagnostic clues to one's state of health.²⁹⁸ From Hipparchus (or those writing about him) he draws his discussion of the movements of heavenly bodies and of how to measure them.²⁹⁹ From Augustine he takes the case of a clairvoyant. 300 From Boethius, whom he mentions in De Mente, he draws an interest in musical theory. 301 And from Alberti, who is nowhere mentioned, he may have borrowed the strategy for measuring the depth of the ocean³⁰² and may have been motivated to introduce his consideration of the Archimedean principle. 303 In addition, both Alberti and Nicholas describe the same strategy for measuring humidity: viz., by weighing at different times a piece of wool or a sponge, which absorbs moisture from the air. 304 This strategy goes back at least as far as the twelfth-century mathematician Ibrahim ben Jahiah.305

"The new intellectual task as Nicholas of Cusa saw it in 'De staticis experimentis' ... was to take the measure of the empirical world: to weigh, to clock, to determine sizes, distances, weights, durations, and speeds." Here in a practical way Nicholas shows mind at work: taking, not setting, the bounds and the measures of the encountered mundane objects. Nicholas's interest here is definitely empirical. He sketches techniques—all based on assessing weights—for determining the force of a magnet, the proper medical dosage of a herbal remedy, the speed of a moving ship, the strength of a strong man, the time and hour of the day. These determinations are not technical, in the strict sense, and do not require much knowledge of physics or of mathematics. Rather, they involve the kinds of measurements and theoretical understanding of which a layman—a nonprofessional—would be capable.

Nicholas's fictional Layman is subject to making the same errors as Nicholas's more learned contemporary colleagues. For, in portraying the Layman, Nicholas does not call into question the "common knowledge" of his day. Accordingly, section 180 of *De Staticis* seems to suggest that objects of differing weights, when released from a high tower, fall freely at differing speeds because of their differing weights. Nonetheless, Nicholas goes on to comment insightfully upon both air

resistance and specific density. Pierre Duhem points to a further theoretical difficulty—one found in the following brief description by Nicholas of a technique for measuring naval speed:

Orator: ... But tell [me]: couldn't also the speed of a ship's movement be surmised in this way?

Layman: In what way?

Orator: Namely, by lobbing an apple into the water from the front [of the ship] and by reference to the flow of water from a water-clock until the apple has reached the stern—and by a comparison of the weights of water [from the water clock] on different occasions.

Layman: Yes, indeed, in that way—or in another way, viz., through the shooting of a crossbow and through the ship's approaching the arrow more quickly or more slowly with reference to the water of the water-clock.³⁰⁷

Duhem observes that Nicholas has not taken account of the fact that the speed with which the respective arrows would be moving would be proportional to the speed of the respective boats:

The arrow shot by an archer situated on the ship's bridge keeps, in the course of its flight, the speed that the ship's movement has communicated to it at the initiation of its flight. This speed is added at each instant to the speed that an archer at rest would have communicated to it, so that one and the same arrow, shot at the same arc, always has the same relative movement in relation to the ship, regardless of the speed that drives the ship.³⁰⁸

In *De Staticis Experimentis* Nicholas's statements attest to the fact that in his day empiricism and the experimental method were still not altogether free from alchemy and astrology. This cross-mixing resulted not so much from a lack of careful observation as from a lack of theoretical understanding as to why that which was observed occurred:

Elements are, in part, transformed one into another. For example, in the case of a plate-of-glass placed in the snow, we experience that air on the glass is condensed into water, which we find as a fluid on the glass. Similarly, we experience that a certain [kind of] water is turned into stones (just as water is turned into ice) and that a hardening, petrifying power is present in certain springs-[of-water], which harden into stone objects placed into them. Likewise, there is said to be found a certain kind of water from Hungary that turns iron into copper because of the power-of-glazing that is in that water. From a consideration of such powers it is evident that [the various] waters are not purely elemental things but are things composed of elements.³⁰⁹

The intermixing of the scientific and the unscientific pervades *De Staticis Experimentis*. Experience teaches, thinks Nicholas, that from the overflowing of the Nile or from its deficit something may reliably be inferred about the adjacent regions' fertility during that forthcoming

year. Yet, Nicholas seems willing to go beyond making this particular causal judgment to inferring that many other events, as well, are foretellable from the Nile's inundation or from its diminution. 310 Similarly, he does not exclude an influence by the stars and their movements—an influence on such things as whether or not a war will break out. 311 Likewise, he supposes that the monthly stages of the moon are ascertainable from examining the amount of marrow in fish or the amount of pith in reeds, even as the moon's location is ascertainable by reference to the ocean's tidal flow.³¹² When it comes to astrology and to clairvoyance, he does not fully know how to account for the successful predictions of the astrologers; he has no fully satisfactory alternative empirical explanation for how the making of successful predictions was possible. And so he is willing to concede that certain individuals possess a special power of discernment, a limited clairvoyance, though probably not a secret method of reading the stars. Into the mouth of the Layman he even puts the words: "I know that I have often foretold many things, according as my spirit brought [them] to mind; and yet, I did not at all know the basis for [my prediction]."313 But the Layman, representing Nicholas's point of view, immediately adds: "In the end, it seemed to me not to be permitted to a serious man to speak without a basis, and I thenceforth kept silent."

Nicholas, like Roger Bacon almost two centuries before him and like Leon Alberti, his own contemporary, pushed his thought in the direction of Modernity when he emphasized observational and experiential knowledge—when he encouraged both experimentation and the mathematical description of observed outcomes. Yet, the most that can be said for him is that he gave the development of scientific method a boost; for, certainly, he did not seek to disentangle the empirical approach from the metaphysical web of which—in his own day—it was a subordinate part. This fact is vividly evident not only from De Staticis but also from Book Two of De Docta Ignorantia. For there Nicholas not only comments most astutely on the imprecision of all measurement and on the relativity of motion but also remarks, most metaphysically, that God is the earth's center and circumference, just as He is also the center and the circumference of the world. Or again: "from the motion of a comet," he says quasi-empirically, "we learn that the elements of air and of fire are moved; furthermore, [we observe] that the moon [is moved] less from east to west than is Mercury or Venus or the sun, and so on progressively. Therefore, the earth is moved even less than are all [these] others"314 But he does not hesitate to append his further *a priori* speculation: "Although God is the center and circumference of all stellar regions and although natures of different nobility proceed from Him and inhabit each region (lest so many places in the heavens and on the stars be empty and lest only the earth—presumably among the lesser things—be inhabited), nevertheless with regard to the intellectual natures a nobler and more perfect nature cannot, it seems, be given (even if there are inhabitants of another kind on other stars) than the intellectual nature which dwells both here on earth and in its own region. For man does not desire a different nature but only to be perfected in his own nature."³¹⁵

When we remember that even Descartes, writing some two hundred years after Cusanus, could not shake off the vestiges of medieval metaphysical principles (such principles as that there must be as much reality in the cause as in the effect or that the more perfect cannot result from or be dependent upon the less perfect), we become more appreciative of Nicholas's having made a proleptic breakthrough into the dimension of Modernity. Yet, just as his cosmology did not anticipate the Copernican Revolution in astronomy but only loosenedup, in a preparatory way, the old Ptolemaic world-view to which he still subscribed, so his empirical strategies did not anticipate the scientific method but only supplemented, in a preparatory way, medieval speculative metaphysics. Correspondingly, his epistemology did not anticipate Kant's "Copernican Revolution" but only introduced, in a preliminary and creative way, themes which, once they were systematically developed by others, led to such a revolution.

Nicholas did not confuse a knowledge of the world with a knowledge of the world's Ground-of-being: he did not confound *scientia* and *sapientia*. What he did do was to show that *scientia* and *sapientia* proceed hand-in-hand. For, after all, as Augustine in imitation of Cicero had taught him, wisdom is the knowledge both of things human and of things divine. When discoursing about the knowledge of things human, Nicholas stressed the attainment of a knowledge that is available, in principle, to all men. For any man can weigh, can measure, can observe. In emphasizing the ability of the common man to wrest from nature its *modi operandi*, Nicholas took the first step down the pathway that was to lead to Descartes' exaltation of the natural light of reason and to Descartes' open display of respect for the rationality of the common man—respect evidenced by his decision to write in the vernacular in addition to writing in Latin.

Just as Nicholas took as his ideal of a wise man not the academician but the ordinary man of common sense, so he viewed the "scientist" of his day as a man of ordinary intelligence who had learned certain strategies for interrogating nature. This Cusan attitude, as it came to be shared by others and as it came to be more pronounced, served as a matrix for Descartes' emphasis on method in his Discourse. Though Descartes may be the Father of Modern Philosophy, that does not prevent Cusa from even earlier having been the First Modern Philosopher, in the sense that his themes, when radicalized, are the very hallmarks of Modern Philosophy. His view that the intellect cannot know its own quiddity came to be radically transformed into a distinction between the phenomenal and the noumenal self. His view that "the part cannot be known unless the whole is known" became the doctrine that the part neither exists nor has identity except through its relation to the whole, so that there is no substance except Infinite Substance. His doctrine of learned ignorance got extended so as to apply not only to the Divine essence but also to the Divine existence. His idea that the Infinite discloses itself in and through the finite got radicalized as "ohne Welt ist Gott nicht Gott." His doctrine that "all things are present in all things" yielded its place to the doctrine that each monad mirrors the world from its own point of view. His assertion that the mind creates numbers and geometrical figures from out of its own resources became superseded by the bold proclaiming of a productive imagination. His claim that there is no plurality apart from mind became metamorphosed into the claim that esse est percipi aut percipere. And so on.

Nicholas himself did not take the preceding radical steps. He remained a medievo-Renaissance figure—one who opened the door to Modernity without ever crossing the threshold. He was held back by the pull of the Neoplatonic tradition. Its strangely fascinating fusion of the *rational*, the *transcendent*, and the *mystical* ineluctably captivated the ready imagination of this speculative German philosopher-theologian. That powerful fascination kept him from anticipatorily making Descartes' mistake: the mistake of commencing with radical methodological doubt and of presuming that enough clarity and distinctness would remain to dispel the tentative skepticism. Somehow Descartes never seemed quite honest in alleging that the idea of God, as Supreme Perfection and Supreme Cause, is the most clear and distinct of all our ideas—an allegation diametrically at odds with the Neoplatonic teaching that God's nature is incomprehensible and inef-

fable, so that it is apprehensible only in learned ignorance and metaphor. Nicholas of Cusa sought to combine with the Neoplatonic speculative tradition aspects of his heritage from Thomas, Albertus Magnus, and Aristotle. With this aim in mind, he looked with favor upon empirical studies, and he collected manuscripts on astronomy, medicine, physics, alchemy, geography, and history.³¹⁶

When we compare with each other the dialogues *De Sapientia* and *De Staticis Experimentis*, the question naturally arises as to whether these two works, so different in content, have anything at all in common besides their being Cusan dialogues whose central discussant is the Layman. But, upon reflection, we see that the question itself is ill-formed—that the better question is whether, in common, i.e., conjointly, the two dialogues have anything at all to teach us. The judicious answer can be only the following: they teach us that a man of wisdom must be also a man of experience.

With this associating of *homo sapientiae* and *homo experientiae* Nicholas of Cusa manifests his true Renaissance spirit.

ABBREVIATIONS

- Ap. Apologia Doctae Ignorantiae [Vol. II (edited by Raymond Klibansky) of Nicolai de Cusa Opera Omnia (Leipzig/ Hamburg: F. Meiner Verlag, 1932)].
- CA Cribratio Alkorani [Vol. VIII (edited by Ludwig Hagemann) of Nicolai de Cusa Opera Omnia (Hamburg: F. Meiner Verlag, 1986)].
- DI De Docta Ignorantia [Latin-German edition: Schriften des Nikolaus von Kues in deutscher Übersetzung, published by F. Meiner Verlag. Book I (Vol. 264a), edited and translated by Paul Wilpert; 3rd edition with minor improvements by Hans G. Senger, 1979. Book II (Vol. 264b), edited and translated by Paul Wilpert; 2nd edition with minor improvements by Hans G. Senger, 1977. Book III (Vol. 264c); Latin text edited by Raymond Klibansky; introduction and translation by Hans G. Senger, 1977].
- DM Idiota de Mente [Contained in Vol. V (edited by Renate Steiger and Ludwig Baur) of Nicolai de Cusa Opera Omnia (Hamburg: F. Meiner Verlag, 1983). Replaces Baur's edition of 1937.]
- DP De Possest [Latin text as contained in J. Hopkins, A Concise Introduction to the Philosophy of Nicholas of Cusa (Minneapolis: Banning, 3rd ed. 1986)].
- DVD De Visione Dei [Latin text as contained in J. Hopkins, Nicholas of Cusa's Dialectical Mysticism: Text, Translation, and Interpretive Study of De Visione Dei (Minneapolis: Banning, 2nd ed. 1988)].
- MFCG Mitteilungen und Forschungsbeiträge der Cusanus-Gesellschaft, edited by Klaus Kremer and Klaus Reinhardt. A continuing series. Volumes I-XVII published in Mainz, Germany by Matthias-Grünewald Verlag. Volumes XVIII and higher published in Trier by Paulinus-Verlag.
- NA De Li Non Aliud [Latin text as contained in J. Hopkins, Nicholas of Cusa on God as Not-other: A Translation and an Appraisal of De Li Non Aliud (Minneapolis: Banning, 3rd ed. 1987)].
- PL Patrologia Latina, edited by J.-P. Migne. Series published in Paris.
- SCG Thomas Aquinas, Summa contra Gentiles [in Vol. II (1980) of Index Thomisticus. Sancti Thomae Aquinatis Opera Omnia. Stuttgart-Bad-Cannstatt: Frommann-Holzboog Verlag].
- ST Thomas Aquinas, Summa Theologiae [in Vol. II (1980) of Index Thomisticus, ibid.].
- VS De Venatione Sapientiae [Vol. XII (edited by Raymond Klibansky and Hans G. Senger) of Nicolai de Cusa Opera Omnia (Hamburg: F. Meiner Verlag, 1982)].

PRAENOTANDA

- 1. (a) In the English translations brackets are used to indicate words supplied by the translator to complete the meaning of a Latin phrase, clause, or sentence. (b) When a clarifying Latin word is inserted into the translation, brackets (rather than parentheses) are used if the case ending or the verb-form has been modified. (c) In the Latin text brackets indicate that a word or phrase found in the mss. should be deleted.
- 2. All references to Nicholas of Cusa's works are to the Latin texts in the following editions (unless explicitly indicated otherwise):
 - A. Heidelberg Academy edition of Nicolai de Cusa Opera Omnia (Felix Meiner Verlag: Hamburg): De Concordantia Catholica; Sermones; De Coniecturis; De Deo Abscondito; De Quaerendo Deum; De Filiatione Dei; De Dato Patris Luminum; Coniectura de Ultimis Diebus; De Genesi; Apologia Doctae Ignorantiae; De Pace Fidei; De Beryllo (1988 edition); Cribratio Alkorani; De Principio; De Deo Unitrino Principio; De Theologicis Complementis; De Venatione Sapientiae; De Apice Theoriae
 - B. Texts authorized by the Heidelberg Academy and published in the Latin-German editions of Felix Meiner Verlag's series *Philosophische Bibliothek*: De Docta Ignorantia.
 - C. Editions by J. Hopkins: *Idiotae de Sapientia, de Mente, de Staticis Experimentis* (1996); *De Visione Dei* (1988); *De Possest* (1986); *De Li Non Aliud* (1987); *Compendium* (1996). Margin numbers correspond to the margin numbers in the Heidelberg Academy editions; line numbers and some paragraph-breaks differ.
 - D. Codex Cusanus Latinus 219: De Ludo Globi.
 - E. Paris edition of the Opera Omnia Cusani (1514): De Aequalitate.

The references given for some of these treatises indicate book and chapter, for others margin number and line, and for still others page and line. Readers should have no difficulty determining which is which when they consult the particular Latin text. E.g., 'DI II, 6 (125:19-20)' indicates De Docta Ignorantia, Book II, Chapter 6, margin number 125, lines 19-20 of the edition in the series *Philosophische Bibliothek* (Hamburg: Felix Meiner Verlag).

- 3. The folio numbers in the inside margins of the present edition of the Latin text of the *Idiotae* and the *Compendium* correspond to the folios in Codex Cusanus Latinus 218 (*Idiotae*) or 219 (*Compendium*).
- 4. References to the Bible are given in terms of the Douay version. References to chapters and verses of the Psalms include, in parentheses, the King James' locations.
- Italics are used sparingly, so that, as a rule, foreign expressions are italicized only when they are short. All translations are mine unless otherwise specifically indicated.
- 6. The Appendix serves as a supplement to the respective bibliographies found in

the present book and in four other books: (J. Hopkins) A Concise Introduction to the Philosophy of Nicholas of Cusa (1986³); Nicholas of Cusa on Learned Ignorance (1985²); Nicholas of Cusa's Dialectical Mysticism (1988²); Nicholas of Cusa's De Pace Fidei and Cribratio Alkorani (1994²).

- 7. Citations of Nicholas's sermons are given in terms of the sermon numbers assigned by Rudolf Haubst in fascicle 0 [=zero], Vol. XVI of *Nicolai de Cusa Opera Omnia* (Hamburg: F. Meiner Verlag, 1991). Not all of the sermons cited have as yet been published in the *Opera Omnia* series.
- 8. In the notes to the Latin texts no mention is made of trivial marginalia by later hands (such as 'nota quod' on folio 113^r, Codex Cusanus 218).
- 9. The present edition of the Latin texts follows, principally but not uncritically, Codices Cusani 218 and 219. At places, it differs significantly from the Heidelberg Academy editions. Several examples from *De Mente* will illustrate this fact:

Heidelberg Acad. Text (1983)	Present text
DM 7 (100:13): spiritui	(100:16-17): spiritus
DM 12 (144:15): inhabitante	(144:19): inhabitantem
DM 13 (148:6): habens	(148:7): habentem
DM 13 (149:5): imaginis	(149:6): imago

The punctuation of the present edition will also, at times, reflect an understanding that differs from the understanding implicit in the punctuation found in the Heidelberg Academy texts.

10. Codex Monacensis Latinus 14213 (Staatsbibliothek, Munich, Germany) and Codex Magdeburgensis Latinus 166 (presently in the Deutsche Staatsbibliothek, Berlin) are described in *Nicolai de Cusa Opera Omnia*, Vol. IV (Hamburg: Meiner, 1959).

NOTES TO THE INTRODUCTION

- 1. Plato, Republic 6 (486A).
- 2. At *Metaphysics* I.2 (982^b28-31) Aristotle also indirectly alludes to the view that wisdom is the possession only of God.
- 3. Aristotle, *Nicomachean Ethics* II.6 (1106^b36 1107^a2): Ἔστιν ἄρα ἡ ἀρετὴ ἔξις προαιρετική, ἐν μεσότητι οὖσα τῷ πρὸς ἡμᾶς, ὡρισμένη λόγῳ καὶ ὡς ἄν ὁ Φρόνιμος ὁρίσειεν [Greek text from Loeb Library series].
 - 4. Aristotle, Nicomachean Ethics VI.7.
 - 5. Aristotle, Nicomachean Ethics VI.7. Cf. Metaphysics I.1 (981b27-29).
- 6. Cicero, *De Officiis* I.43 [Latin text taken from the edition by Thomas A. Thacher (New York: Appleton, 1867), p. 54]. See also Cicero, *Tusculanae Disputationes* IV.26.57 [Latin text edited and translated by J.E. King (New York: G. P. Putnam's Sons, 1927), p. 392]. Note also Seneca's *Ad Lucilium Epistulae Morales* XIV.1.5: "Sapientiam quidam ita finierunt ut dicerent divinorum et humanorum scientiam ..." [Latin text taken from L. D. Reynold's edition (Oxford: Clarendon Press, 1965), Vol. II, p. 326].
 - 7. Cicero, De Officiis, op. cit., II. 2.
- 8. Augustine, *De Trinitate* 14.1.3 (*PL* 42:1037). Note also *De Trinitate* 15.3 (end), where wisdom is said to consist in the contemplation of eternal things (*PL* 42:1061).
- 9. Augustine, *De Trinitate* 14.1.2 (*PL* 42:1037). Augustine takes this point about Pythagoras from Cicero's *Tusculanae Disputationes*, *op. cit.*, V.3.8. See also Augustine's *De Civitate Dei* 8.2 (*PL* 41:225).
- 10. Augustine, *Contra Academicos* I.8.23 (*PL* 32:917): "... sapientia mihi videtur esse rerum humanarum divinarumque, quae ad beatam vitam pertineant, non scientia solum, sed etiam diligens inquisitio."
 - 11. Cf. Proverbs 3:13.
- 12. Augustine, *De Trinitate* 7.3.6 (*PL* 42:939). Cf. *De Civitate Dei* 8.1 (*PL* 41:224-225): since Wisdom is identical to God, the true philosopher is a lover of God.
 - 13. Augustine, De Trinitate 15.6.9 (PL 42:1063).
 - 14. Augustine, De Diversis Quaestionibus LXXXIII, #16 (PL 40:15).
 - 15. Augustine, De Trinitate 15.3.5 (PL 42:1061).
- 16. Augustine, *De Trinitate* 12.14.22 (*PL* 42:1010). Aquinas explains this Scriptural passage by stating that wisdom is not *pietas* essentially but is called *pietas* because it is highly inclined to the worship of God. *Commentum in Quatuor Libros Sententiarum* III.35.2.1.3.1.ad 2 [*Sancti Thomae Aquinatis ... Opera Omnia*, Vol. VII:1 (New York: Musurgia Publishers, 1948), p. 408A]: "... sapientia non dicitur pietas, quae est latria, per essentiam, sed quasi per causam, quia proxime ad latriam inclinat."
- 17. Augustine, *De Trinitate* 14.19.26 (*PL* 42:1056). Cf. *De Trinitate* 15.6.10 (*PL* 42:1064): "... cum de sapientia quae homini ex Deo est loqueremur" Note Proverbs 2:6.

Whether, for Augustine, wisdom is an innate idea [as is claimed by Eugene F. Rice in his estimable book *The Renaissance Idea of Wisdom* (Cambridge, Massachu-

setts: Harvard University Press, 1958), pp. 6-7] is debatable. Augustine speaks of God as Wisdom that illumines needy minds (*Confessiones* 7.6; cf. *De Civitate Dei* 8.7). And he also states that unless the human mind is illumined by the light of truth, it cannot attain wisdom [*In Joannis Evangelium Tractatus* 35.3 (*PL* 35:1658)]. But such statements as these do not imply that wisdom is an innate idea. Likewise, Augustine's allusions to our idea of the good—when he uses phrases such as "*notio impressa*" and "*infixa notitia*"—do not necessarily imply that the notion of good is an innate idea. [See *De Trinitate* 8.3.4 (*PL* 42:949) and 8.4.7 (*PL* 42:952).] For he might well mean that the human mind has a divinely created power of rational judgment by which to discriminate good things from evil things.

- 18. I Corinthians 8:1. Proverbs 11:2.
- 19. I Corinthians 3:19.
- 20. Psalms 110:10 (111:10).
- 21. Augustine, *De Trinitate* 7.3.5 (*PL* 42:938): "... cum de sapientia Scriptura loquitur, de Filio loquitur, quem sequimur vivendo sapienter: quamvis et Pater sit sapientia, sicut lumen est Deus."
 - 22. I Corinthians 1:24.
 - 23. Aquinas, SCG I.94.2.
 - 24. Aquinas, ST I.1.6c.
 - 25. Aquinas, ST II-II.45.1c. Cf. ST I.14.1.ad 2.
 - 26. Cf. ST II-II.45.1.ad 2 with ST II-II.45.6.ad 2.
 - 27. Ecclesiasticus 1:1.
- 28. Aquinas, *ST* II-II.23.2.ad 1. Cf. *SCG* I.38.1, where God is said to be His goodness. Just as He is *His* goodness, so in being Wisdom, He is also *His* Wisdom. Regarding the importance of the word "His" in this context, see William E. Mann, "Divine Simplicity," *Religious Studies*, 18 (1982), 451-471.
 - 29. Augustine, Ad Orosium 8.9 (PL 42:674).
 - 30. I Corinthians 1:24. Aquinas, SCG IV.12.
 - 31. Aquinas, SCG I.54.7. SCG I.75.5. SCG I.76.8.
 - 32. Aquinas, ST II-II.47.2.ad 1. See also ST II-II.45.3c.
 - 33. Cf. Aquinas, SCG III.37.8-9 with SCG III.63.7.
- 34. Augustine, *Soliloquia* 1.12.21 (*PL* 32:881): man's highest good is *sapientia*, is *sapere*. *De Civitate Dei* 19.4.1 (*PL* 41:627) makes clear that the highest good is attained only in the next life. Cf. I Corinthians 15:19.
 - 35. Cf. Aquinas, ST I.43.5.ad 2 with SCG III.52.5.
 - 36. De Sapientia I (10:8-9).
 - 37. De Sapientia I (14:4-8).
 - 38. De Sapientia I (11:1-3).
- 39. De Pace Fidei 6 (16). See also De Sapientia I (9:3-4). Note the prologue of VS: "Sollicitamur appetitu naturae nostrae indito ad non solum scientiam, sed sapientiam seu sapidam scientiam habendum" (1:18-19). Eugene F. Rice forgets this emphasis in Cusanus when he writes: "Cusanus teaches that one becomes wise not by any natural light but by an illuminated participation in the divine light" [E. Rice, "Nicholas of Cusa's Idea of Wisdom," Traditio, 13 (1957), p. 364]. Rice makes a related mistake concerning Augustine: "Augustine had refused to recognize a non-Christian wisdom. He established a Christian sapientia, while opposed to it, to be used perhaps but not enjoyed, was classical scientia" (Rice, ibid., p. 365). Rice's over-

statement does not take account of Augustine's immense appreciation of the non-Christian wisdom of Plato and the Platonists, whose philosophy, he believed, approximates Christian wisdom. See *De Civitate Dei* 8.8 & 9 (*PL* 41:232-234). In this same section Augustine also acknowledges Pythagoras and the Pythagoreans, as well as unnamed thinkers among the Egyptians, Indians, Persians, Chaldeans, Scythians, Gauls, Lybians, and Spaniards. See also *De Civitate Dei* 8.10 (*PL* 41:234-235), where Augustine refuses to place all non-Christian philosophers in the category of philosophers against whom the Apostle Paul warned when he wrote to the Colossians: "Beware lest any man deceive you through philosophy and vain deceit" (Colossians 2:8).

- 40. De Sapientia I (12:18-21 and 16:1-5 and 11:5-6). VS 1 (4:19).
- 41. De Sapientia I (18).
- 42. *De Sapientia* I (10:21 11:1). Note especially Klaus Kremer's informative article "Weisheit als Voraussetzung und Erfüllung der Sehnsucht des menschlichen Geistes," *MFCG* 20 (1992), 105-141.
- 43. *De Sapientia* I (13:12-13). Nicholas teaches that each human being is endowed with an innate religious propensity, which can, however, be acted against. See *De Mente* 15 (159:7). Cf. Aquinas, *ST* I.93.4c: man possesses a natural aptitude for knowing and loving God.
 - 44. De Sapientia I (3:12-14). Proverbs 1:20. Ecclesiasticus 24:7.
 - 45. De Sapientia I (4).
 - 46. De Sapientia I (4:17).
 - 47. Cusa, DI, Prologue.
- 48. See also *DM* 4 (77:27-29) and 15 (158:15-16). In *VS* 1 Nicholas teaches that the intellect is naturally endowed with the power of logical inference (4:15-16).
 - 49. Cusa, DI I, 1 (2:11-15).
- 50. In addition to *De Docta Ignorantia* I, 3 see passages such as *DVD* 13 (53) and *Ap.* 21 & 22 & 27 & 28.
 - 51. De Sapientia I (9:3-19).
 - 52. De Sapientia I (9:3-6).
 - 53. De Sapientia I (9:14).
 - 54. De Sapientia I (14:4).
 - 55. De Sapientia I (12:5).
 - 56. *De Sapientia* I (10:10-12).
 - 57. De Sapientia II (29:22-24).
 - 58. De Sapientia I (7:15-16).
- 59. De Sapientia II (32:12-29). See also p. 114 of Nicholas's letter to the abbot and monks of Tegernsee in 1453 [in Edmond Vansteenberghe's Autour de la Docte Ignorance: Une controverse sur la Théolgie mystique au XV^e siècle [Beiträge zur Geschichte der Philosophie des Mittelalters, Vol. 14 (Münster: Aschendorff, 1915)]. Note also Cusa, DI I, 4 (12:4-7): "Therefore, because the absolutely Maximum is absolutely and actually all things which can be (and is so free of all opposition that the Minimum coincides with it), it is beyond both all affirmation and all negation."
 - 60. See the references in n. 50 above and in n. 79 below.
 - 61. Cusa, De Coniecturis II, 17 (171:3).
- 62. There is, however, some truth in the more restricted interpretation advanced by Kieran Conley: "The ... docta ignorantia of Nicholas of Cusa set the stage for the avowal of P. Charron, at the height of humanism's ascendancy, that wisdom is

realized only in intellectual skepticism." New Catholic Encyclopedia, Vol. 14, p. 968B.

- 63. De Sapientia I (21).
- 64. De Sapientia I (17:4-14). See, below, n. 25 of Notes to Idiota de Sapientia I.
 - 65. DM 5 (85:8-9).
- 66. DM 1 (57:3-5): "Layman: I think that no one who has not formed at least some kind of conception of mind either is or has been a complete human being."
 - 67. DM 8 (108:7).
 - 68. DM 4 (74:10-11).
- 69. DM 5 (80:9). DM 11 (140:3-4). Michael Stadler ["Zum Begriff der mensuratio bei Cusanus. Ein Beitrag zur Ortung der cusanischen Erkenntnislehre," pp. 118-131 (Vol. I) in Albert Zimmermann, editor, Mensura. Mass, Zahl, Zahlensymbolik im Mittelalter (New York: de Gruyter, 1983)] misleadingly denies that, for Cusanus, mind is a substance—a thinking substance—some of whose thoughts may well be accidents: "Wie auch bei einer Reihe anderer [cusanischen] Beispiele wird der Geist als 'lebend' (vivus) ausgesagt. Dies deutet darauf hin, dass Cusanus den Geist nicht mehr als Substanz, dem seine Erkenntnis akzidentiell zukommt, denkt, sondern Geist ist aufgefasst als die Erkenntnisbewegung selbst, der Geist ist Akt. Es ist der Gedanke der Subjektivität, der hier bereits deutlich erkennbar wird. Der Geist wird als Bewegung des Erkennens selbst verstanden, sein Sein ist Leben und sein Leben ist Denken" (p. 123). But contrary to this claim, Cusa does make a distinction between the mind and its acts of thinking, which are accidental inasmuch as they are not always present. What Nicholas says, in DM 11 (140), is that the powers of the mind (perceiving, imagining, reasoning, understanding) are substantial parts, not accidental parts, of the mind.

Stadler is also mistaken when, on p. 128, he ascribes to Nicholas the view that the world is actually infinite. For a corrective see Tyrone Lai, "Nicholas of Cusa and the Finite Universe," *Journal of the History of Philosophy*, 11 (April 1973), 161-167.

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70. DM 15 (157:2). DM 7 (98:3-5).
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- 71. DM 7 (106:13).
- 72. DM 15 (157:19-22).
- 73. DM 2 (58:10-13).
- 74. DM 5 (85:8-9).
- 75. DM 5 (87:16-17).
- 76. See Nicholas's mirror illustration in De Filiatione Dei 3 (65-68).
- 77. DM 2 (58:19-20) and 2 (59:5-11).
- 78. DM 2 (59:5-11) and 2 (64:1-9).
- 79. *DM* 6 (92:2-5): "Moreover, we cannot approach more closely to the quiddity of the first originated thing otherwise [than by considering number]. For the precise quiddity of each thing is unattainable in any other way than in a symbol, or in a figure." This statement does not mean that empirical knowledge is "poetic" knowledge, for empirical knowledge does not aim at exactitude. (See, in the present introduction, the place marked by n. 292.) See also the references in n. 50 above. Cusa regards the respective quiddities of things as unchangeable and as indestructible (except by an act of God's will). Accordingly, "otherness does not belong to anything's essence. For otherness pertains to destruction, because it is division, from which comes perishing. Therefore, it is of the essence of no thing" [*DM* 6 (96:14-16)]. See also *DM* 6 (96:1-3).Cf. what is said in *DM* 7 (103) about mathematicals. Note also

DVD 22 (96:20-21) and De Deo Abscondito 4. Cf. De Genesi 4 (174:1-2): "It is evident that neither in part nor in whole can any essence be attained unto by man."

- 80. DM 6 (92:3-5).
- 81. DM 1 (57:16-17).
- 82. DM 1 (57:9-10).
- 83. DM 5 (83:6-7). DM 12 (142:15). Cf. DM 4 (79). See, below, n. 40 of Notes to *Idiota de Mente*. Just as Nicholas sometimes differentiates mind from soul and sometimes uses "mens" and "anima" interchangeably, so also he sometimes differentiates intellect from reason and sometimes uses "intellectus" and "ratio" interchangeably.
 - 84. DM 11 (141:4-6).
 - 85. DM 5 (81:1-4).
- 86. DM 4 (77:6-32). Cf. DM 15 (158:15). Although in De Mente Nicholas teaches that there are no concepts innate to the human mind, he appears to revise this view later. For in Compendium 6 (17:17-22) he states that man has "innate [intellectual] forms of the imperceptible virtues of justice and of equality, in order that he may know what is just, what is right, what is praiseworthy, what is beautiful, what is delightful and good (and may know the opposites of these), and may choose good things and become good, virtuous, prudent, chaste, courageous, and just." See, below, n. 40 of Notes to the Compendium. Cf. Aquinas, ST I.79.12c, a passage which speaks of practical principles bestowed on human beings by nature.
 - 87. DM 4 (77). DM 5 (81).
- 88. *DM* 5 (85:5-12). Nicholas's theory of mental activity has often been badly misconstrued. It will be examined later on in the present introduction.
 - 89. DM 1 (57:6-7). Cf. Aquinas, De Veritate 10.1.reply.
- 90. DM 6 (94:11-12). DM 6 (93:1-5). DI II, 3 (108). A failure to grasp this point about God's understanding results in the claim "dass [für Cusanus] die Dinge als strukturierte nur insoweit von Gott geschaffen sind, als sie vom Menschen in seinem Erkenntnisakt geschaffen sind." Michael Stadler, Rekonstruktion einer Philosophie der Ungegenständlichkeit. Zur Struktur des Cusanischen Denkens (Munich: Fink Verlag, 1983), p. 49.
- 91. DI II, 3 (108) and II, 2 (104:5-9). No two things can differ in number alone, teaches Nicholas. See DI II, 1 (94:3-4). Cf. Aquinas, SCG I.42.3.
 - 92. DM 6 (93:5-6).
 - 93. DM 6 (94:14-16). Cf. DM 12 (143:10-12).
 - 94. DM 6 (95:11-13). Cf. DM 6 (88:19-20).
 - 95. DM 6 (95:3-11).
- 96. DM 7 (98:12-14). Cf. DP 46:3-5. In De Coniecturis I, 2 (7:4-5) Nicholas writes: "Nec est aliud numerus quam ratio explicata": "Number is nothing other than reason unfolded."
 - 97. Aristotle, Metaphysics I.6 (987b15 ff.).
 - 98. DM 6 (96:17-20).
 - 99. DM 7 (98:3-5).
 - 100. DM 7 (104:3-4).
- 101. "Das Mathematische z.B. gewinnen wir [dem Cusanus nach] durch Abstraktion vom Sinnenfälligen. Auf das Verfahren des Mathematikers, an sinnenfälligen Figuren das Nichtsinnenfällige sichtbar zu machen, braucht hier nicht eingegan-

gen zu werden" Karl Bormann, "Die Koordinierung der Erkenntnisstufen (descensus und ascensus) bei Nikolaus von Kues," *MFCG* 11 (1975), p. 67.

- 102. "Mit der Lehre von der schöpferischen Tätigkeit der mens humana ist die *assimilatio* und *abstractio*-Theorie durchaus vereinbar und bei Cusanus tatsächlich vereint. Man darf nicht annehmen, Nikolaus habe in den Schriften nach De docta ignorantia die Abstraktionslehre aufgegeben …" K. Bormann, "Die Koordinierung …," *op. cit.*, p. 67.
- 103. "Empfand sich [bei Cusanus] die Seele gegenüber dem Abzubildenden als leere unbeschriebene Wachstafel, die ihre Inhalte durch die Sinneserfahrung verursacht erhielt, so ist es für den Kreis umgekehrt; sein Mass und Urbild entstammt allein dem Geist. Daher ist auch der Satz, dass nichts in der Vernunft sei, was nicht vorher in den Sinnen war, auf das Mathematische nicht anwendbar, wenn auch stets Anschauung dabei mit eingeht." Norbert Henke, *Der Abbildbegriff in der Erkenntnislehre des Nikolaus von Kues* (Münster: Aschendorff, 1969), p. 63. Note *De Coniecturis* I, 2 (7:4-5): "Nec est aliud numerus quam ratio explicata." Note also *DM* 9 (116:12-13): "[Mens] facit numerum"
- 104. Codex Cusanus 219, f. 140° (=Paris edition, Vol. I, f. 154°). "For if the movement of the heavens ceased and if time, which is the measure of movement, ceased, the world would not cease to be. But if the world ceased to be, time would also cease."
- 105. De Ludo Globi II (Codex Cusanus 219, f. 156^v = Paris edition, Vol. I, fol. 165^r): "Sic tempus, cum sit mensura motus, mensurantis animae est instrumentum."
- 106. *De Ludo Globi* II (Codex Cusanus 219, f. 156° = Paris edition, Vol. I, f. 165°): "*Albertus*: Quantum mihi placet intellexisse tempus, quod est mensura motus, sublata rationali anima, non posse aut esse aut cognosci, cum sit ratio seu numerus motus" Cf. Aristotle, *Physics*, IV.14 (223ª 21ff.). See Aquinas, *Commentum in Quatuor Libros Sententiarum*, I.19.2.1c [Vol. VI, p. 162 of *Sancti Thomae Aquinatis* ... *Opera Omnia* (New York: Musurgia Publishers, 1948)].
- 107. De Ludo Globi II (Codex Cusanus 219, f. 156° = Paris edition, Vol. I, f. 165°).
- 108. Norbert Henke, *Der Abbildbegriff, op. cit.*, p. 60: "Der mentale Zeitbegriff ermöglicht also das empirische Nacheinander."
- 109. Henke, *Der Abbildbegriff, op. cit.*, p. 59: "Er vertritt also ähnlich wie Kant die Apriorität der Zeit als ein Ordnungsschema des Geistes. Auch Kant spricht davon, dass 'wenn wir unser Subjekt .. aufheben .., Raum und Zeit verschwinden würden ..'. Die Zeit ist also ein Ordnungsbegriff des Subjekts. Sie ist demnach nicht per abstractionem gewonnen, weil jede Abstraktion sie bereits voraussetzt. Wir tragen sie daher notwendig an die Erfahrung heran. Dennoch ist damit nicht das empirische Nacheinander von Geschehnissen geleugnet. Der Zeitbegriff verknüpft vielmehr die empirische Realität und die Idealität seiner Begrifflichkeit."
- 110. Henke, *Der Abbildbegriff, op. cit.*, pp. 60-61: "Jedoch ist die mens, die das Zeitliche nach dem durch sie bedingten Mass der Zeit misst, selbst nicht zeitlich. Um das Zeitliche messen und beurteilen zu können, muss sie selbst nichts Zeitliches sein, sondern muss ihm vorgeordnet sein."
- 111. Pauline M. Watts, *Nicolaus Cusanus: A Fifteenth-Century Vision of Man* (Leiden: Brill, 1982), p. 205. Note also Watts' claim, on her p. 215: "[Language] is the medium through which human thought, *having created time and space*, also man-

ages to transcend them and to assure its own mental creations of a perpetual existence" (my italics).

- 112. Aquinas, SCG II.84.4.
- 113. DM 15 (158:19-20): "Only the Uncreated [Divine] Mind measures, delimits, and bounds our mind"
- 114. Sermo 19 (15:1-2). De Ludo Globi I (Codex Cusanus 219, f. 140° = Paris edition, Vol. I, f. 154°). Cf. VS 9 (26:1-9).
- 115. See, above, n. 106. Cf. Albert of Saxony's discussion of whether time exists apart from the soul: Book IV, Question 16 of his *Acutissim[a]e Quaestiones super libros de Physica*. *Cf. Albertus Magnus*, Physica IV.3.3 [Commentary on Aristotle's *Physics*], Venice edition, 1516.
- 116. II Peter 3:8. Note Nicholas's approving citation from Pseudo-Dionysius's *De Divinis Nominibus*: "[God] is the duration and the time of all things, and He is before the days and before duration and before time—although we can very suitably call Him time and day and moment and duration and Him who is unchangeable and immovable by any motion. And although He is always moved, He remains in Himself as the Creator of duration and of time and of the days." *NA* 14 (69:4-9). Nicholas, too, is willing to call God *moved* as well as *unmoved*—as his illustration of the spinning top attests in *De Possest* 18-21.

Furthermore, when Nicholas asserts in *DM* 15 (157:14-16) that "mind seems to enfold by its intellective operation all movement of succession," he is not implying that succession does not exist apart from the human mind. Rather, he means that any succession of events is, in principle, knowable and measurable by the human mind. Finally, when he asserts that the mind is both "an intellectual life that moves itself" and "the form of moving" (*DM* 15), he is not denying either that the human mind is capable of being causally influenced by the senses or that angelic intelligences are also forms of moving. The meaning of Nicholas's statements—here as elsewhere—is heavily context-dependent.

- 117. DM 15 (157:8-10).
- 118. DM 6 (93). Cf. the reference to God in DM 9 (117: 5-9): "Thus, the measure or end-point of each thing is due to mind. Stones and pieces of wood have a certain measurement—and have end-points—outside our mind; but these [measurements and end-points] are due to the Uncreated Mind, from which all the end-points of things derive."
 - 119. De Genesi 1 (152:1-3). Wisdom 11:21. DI II, 13 (176:1-2).

The philosophical puzzle concerning how an Eternal Being has knowledge of temporal events remains alive even today, as evidenced by the following articles: Norman Kretzmann, "Omniscience and Immutability," *Journal of Philosophy* 63 (1966), 409-421. Hector-Neri Castañeda, "Omniscience and Indexical Reference," *Journal of Philosophy*, 64 (1967), 203-210. Norman Kretzmann and Eleonore Stump, "Eternity," *Journal of Philosophy*, 78 (1981), 429-458.

120. De Aequalitate (Paris edition, Vol. II, f. 16^v). Cf. Aquinas, SCG II.80.13. See also the twelfth-century text Liber de Causis II.22 [p. 21 in The Book of Causes, translated by Dennis J. Brand (Milwaukee: Marquette University Press, 2nd ed. 1984)]. Note also Werner Beierwaltes, Denken des Einen. Studien zur neuplatonischen Philosophie und ihrer Wirkungsgeschichte (Frankfurt am Main: Klostermann, 1985), pp. 376-377. See also Sermo 172 (Haubst number), where Nicholas writes: "Nam licet

mens nostra non sit ad locum et tempus contracta, non est tamen penitus a quantitate loci et temporis per infinitum absoluta, sed est quasi in horizonte ubi incipit contractio et desinit absolutio."

VS 32 (95:9-13): "Quam pulchre [summa sapientia] copulam universi et microcosmum, hominem, in supremo sensibilis naturae et infimo intelligibilis locavit, connectens in ipso ut in medio inferiora temporalia et superiora perpetua! Ipsum in horizonte temporis et perpetui collocavit, uti ordo perfectionis deposcebat."

121. *De Aequalitate* (Paris edition, Vol. II, f. 16°). See Norbert Fischer, "Die Zeitbetrachtung des Nikolaus von Kues in *De aequalitate* ('Intemporale unitrinum tempus')," *Trierer Theologische Zeitschrift*, 99 (July-September 1990), 170-192.

Nicholas's language is often misleading. For example, in *De Ludo Globi* I (Codex Cusanus 219, f. 142° = Paris edition, Vol. I, f. 155°) he calls the human soul immutable. And in *DM* 7 (103:3) and 8 (111:7) he alludes to the immutability of the human mind. However, he does not mean that the soul or mind is absolutely unchangeable, either now or in the future state. Indeed, only God is absolutely immutable. Similarly, when he speaks of the soul as transcending time (*De Ludo Globi* II), he does not mean that the soul is altogether atemporal or will ever become so. He means, among other things, that "time will not exhaust the mind's power" [*DM* 15 (157:9-10)], that the human mind's activity is perpetual. It is perpetual in the sense that it has no end, even though it has a beginning. Cf. *De Ludo Globi* I (Codex Cusanus 219, f. 143° = Paris edition, Vol. I, f. 156°), where the activity of the mind is called perpetual, with *VS* 39 (117:3-4), where *posse fieri* is termed perpetual because "habeat initium et annihilari non possit." Note also. Aquinas's allusion to the the soul's perpetual act of existing (*De Anima* 14.Reply 5).

122. In *Compendium* 4 (10:3-9) Nicholas does declare: "The imagination can imagine nothing which is not either moved or at rest and which is not quantitative, i.e., is not either large or small. Nevertheless, [the imagined object] is without such a boundary as is found in perceptible objects. For nothing can be so small that the imagination cannot imagine half of it or so large that the imagination could not imagine it as twice as large." Likewise, in *De Ludo Globi* II he writes: "*Cardinalis:* Nos aeternitatem non concipimus sine duratione. Durationem nequaquam imaginari possumus sine successione. Hinc successio, quae est temporalis duratio, se offert quando aeternitatem concipere nitimur" [Codex Cusanus 219, f. 155^r = Paris edition, Vol. I, f. 164^r (Paris edition has "*capimus*" in place of "*concipimus*")].

123. Aristotle, *Physics* IV.14 (223°21ff.). See also St. Thomas's commentary on Aristotle's *Physics (De Physico Auditu)*, Vol. 18 (1949) of *Sancti Thomae Aquinatis* ... *Opera Omnia* (New York: Musurgia Publishers), pp. 375-376 (Book IV, Lectio 23).

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124. Aquinas, SCG II.80.13.
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125. De Aequalitate (Paris edition, Vol. II, f. 16^v).

126. DM 11 (141).

127. DM 7 (100:4-5).

128. CA II, 3 (94:6). Cf. DP 17:9-11. See the references, in Nicholas's texts, to assimilare and assimilatio—references listed by Karl Bormann on p. 62 of his "Die Koordinierung der Erkenntnisstufen (descensus und ascensus) bei Nikolaus von Kues," MFCG 11 (1975), 62-85 (includes discussion).

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129. DM 9 (125).
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130. DM 5 (82:1-10). DM 7 (100:10-14). Henke rightly calls attention to the fact

that Nicholas does not hold a copy-theory of perception but holds only a representation-theory in a broader sense. See pp. 40 and 71 of *Der Abbildbegriff, op. cit.* Yet, Henke regards even this modified theory of representation as at odds with (his interpretation of) the Cusan view that mind unfolds from itself the concepts of all things.

- 131. *DVD* 8 (32:6): "The visible forms of all things are mirrored in the eye." See also the illustration of the mirrors in *De Filiatione Dei* 3. In *DM* 5 (87:16-17) Nicholas calls the mind a living mirror, as he also does in *De Ludo Globi* II (Codex Cusanus 219, f. 161^v = Paris edition, Vol. I, f. 168^r). And in *DM* 11 (141:7-9) he states that all things are present (though confusedly) in the senses as in a sphere. In *VS* 17 (50:1-3) he adds: "Unde, cum cognitio sit assimilatio, reperit omnia in se ipso ut in speculo vivo vita intellectuali, qui in se ipsum respiciens cuncta in se ipso assimilata videt."
- 132. Conception is called conception, says Nicholas, because it *imitates* [DM 8 (109:18-21)].
- 133. *DM* 11 (141:9-11). See also *DM* 3 (72:16-17): "for knowledge comes about on the basis of [conceptual] likeness." *Compendium* 10 (32:6): "knowledge occurs by means of a likeness." See, below, n. 5 of Notes to the *Compendium*.
 - 134. DM 4 (77-78).
- 135. Nicholas discusses the mechanism of perception in *DM* 7 (100-102), *DM* 8 (112-115), *De Quaerendo Deum* 1 (20-25) and 2 (33-36). These accounts overlap but are not fully identical.
- 136. Compendium 13 (39:21): "Perceiving is a certain undergoing." Cf. Aquinas, SCG II.60.6 and Aristotle, De Anima III.4 (429*13-15). Note also Compendium 4 (9:6-7): "There is in the imagination nothing that was not previously present in the senses." Nicholas adds: "And so, a man blind from birth does not have an image of color and cannot imagine color."
- 137. DM 2 (64:12-13): "In our reason there is nothing that was not previously in our senses."
- 138. DVD 24 (107:14-15): "There cannot be in the intellect anything which is such that it was not first in the senses." Cf. VS 29 (86:7-12): "Nihil enim apprehendit intellectus, quod in se ipso non repperit. Essentiae autem et quiditates rerum non sunt in ipso ipsae, sed tantum notiones rerum, quae sunt rerum assimilationes et similitudines. Est enim virtus intellectus posse se omnibus rebus intelligibilibus assimilare. Sic sunt in ipso species seu assimilationes rerum."
- Cf. Sermon *Spiritus autem, Paracletus Quem Mittet Pater* (Paris ed., Vol. II, f. 104^r): "... ideo ad cognitionem dei non potest homo pervenire ex omnibus viribus, quum nihil sit in humano intellectu quod medio sensuum ad eum non perveniat."
- 139. Frederick Copleston, *Aquinas* (Toronto: Penguin Books, 1957), p. 29. Copleston goes on to say (p. 30): "And Aquinas could quite well have endorsed Kant's famous statement that 'though all our knowledge begins with experience, it by no means follows that all arises out of experience' ..., provided that the statement is taken in itself and apart from Kant's theory of the *a priori*."

Werner Beierwaltes (in a discussion session) calls attention to the fact that, in the Neoplatonic tradition, Proclus himself taught that "die *phantasia* ist nicht nur rezeptiv, sondern durch die Wirkung des *nous poietikos* aktive Vermittlung der Begriffe." *MFCG* 14 (1980), 36.

- 140. Anthony Kenny, Aquinas (Oxford: Oxford University Press, 1980), p. 76.
- 141. Compendium 10 (32:6). DM 3 (72:16-17).

- 142. DM 5 (82:6-8).
- 143. DM 7 (100:9-10).
- 144. Cf. Nicholas's account, in *De Genesi* 4 (165), of the hearing of a vocalized statement. He concludes: "It is evident that these things occur in this progressive order with regard to the calling forth of silence unto a vocal word—although the difference of priority and posteriority is not really noticed by a hearer."
- 145. DM 7 (100:11-14). Cf. Aquinas, SCG I.53.2. Nicholas holds that the mind knows material objects by way of images and concepts; he does not maintain that the mind knows only its images and concepts, never the objects themselves. See p. 292 of my Miscellany on Nicholas of Cusa (Minneapolis: Banning Press, 1994), where I impugn the judgment that in the Compendium Nicholas "tritt ... in offenen Gegensatz zu einer Erkenntnislehre für welche die extramentalen Seienden selbst Gegenstand der Erkenntnis werden können Nach Nikolaus ... wird nicht das Ding selbst erkannt, sondern nur dessen Bild oder Zeichen; das Ding selbst bleibt unerkannt."
 - 146. DM 8 (109:22-23).
 - 147. DM 7 (104:1-3).
- 148. Even Aquinas, who patently teaches the abstraction theory, also consistently subscribes to the notion of assimilation. See *SCG* I.65.9.
 - 149. DI II, 3 (109:15).
 - 150. Compendium 6 (18:17-19).
- 151. See, above, n. 102. *DM* 7 (100:11-12) does not deny the role of abstraction when it speaks of the mind's being "stimulated by encountering the forms conveyed, in a replicated way, from the objects unto the spirit [of the arteries] ..." (my italics). For in *DM* 7 Nicholas clearly indicates that the mind makes configurations of these perceptible objects in order to have concepts and that these empirical concepts are *elicited* (*eliciti*) from sensory images.

See also Nicholas's example of abstracting a common set of properties from different images of his own face [Sermo 174 (Haubst number)]. Note also De Ludo Globi I (Codex Cusanus 219, f. 142° = Paris edition, Vol. I, f. 155°): "[Cardinalis:] Movet enim se ipsam anima, id est discernit, abstrahit, dividit, et colligit." See Sermo 246 (Haubst number): "... nam intelligentia separat intelligibiles formas et abstrahit a materia, ut in se faciat intellectas, sicut in nostro intellectu experimur. Universale enim est in intellectu; materia individuat et contrahit formam."

Two points are especially important to notice. First of all, Nicholas uses three different formulas: (a) "Nihil enim est in phantastica quod prius non fuit in sensu" (Compendium 4); (b) "nihil ... [est] in ratione quod prius non fuit in sensu" (DM 2); (c) "Nihil tale potest esse in intellectu quod prius non fuit in sensu" (DVD 24). Thus, Nicholas applies his empiricism to all levels: phantastica, ratio, and intellectus. Secondly, De Coniecturis itself must be viewed as containing implicitly a doctrine of abstraction even though it does not explicitly mention the mind's abstracting intelligible forms from sensory images. De Coniecturis must be thus viewed because (a) everything that it does explicitly state is compatible with the theory of abstracting, (b) there is an explanation for why nothing about abstracting is there said explicitly—viz., that the work is one aimed at metaphysical themes, not one aimed at epistemological themes, (c) the doctrine of abstracting is plainly found both in the works that precede De Coniecturis and in the works that succeed it, and (d) in De Coniecturis Nicholas makes statements that contextually imply the abstraction theory. With

regard to the last point we may consider De Coniecturis II, 14 (145:12-21), where Nicholas speaks of the imagination as creating likenesses or images of perceptible objects (creat similitudines aut imagines sensibilium). And earlier in the same chapter, at 141, he indicated that sensations are caused in us (causantur; incitantur) by the impediment that objects pose to the perceiver. Accordingly, in forming likenesses or images of perceptible objects the imagination does not create these images either ex nihilo or ex se. Rather, it creates them in conformity with the sensations that it is caused to have; and it stores them in the memory, as Nicholas further states. Now, in this same section Nicholas indicates that ratio and intellectus have operations that are similar to the imagination's: all three powers, he says, create, arrange, and preserve. So reason, too, creates, along with the intellect. And among the things "created" must be presumed to be concepts. But, once again, these concepts are not created ex nihilo or ex se (id est, ex ratione ipsa seu intellectu ipso) but are drawn from sensory images. Nicholas does use the words "Intellectus, ex se intelligibile faciens quod in intellectum progreditur, est sui ipsius fecunditas" [De Coniecturis II, 16 (161:7-8)]. But this statement does not mean that the intellect produces intelligible objects solely out of itself. Rather, it means that "the intellect, of its own power making intelligible that which proceeds into the intellect, is its own fecundity." In this same extended passage (viz., 161) Nicholas speaks of species sensibiles, of conceptus, and of the fact that "intellectus non nisi ratione mediante phantasmata apprehendit." The intellect's descending to species sensibiles is said to be tantamount to species sensibiles' ascending to the intellect, so that they become less contracted and more simple, until they become absorbed into the intellect. But this absorption and simplification can only be the intellect's making the species sensibiles to be conceptus, which are more abstract. And although Nicholas does not say so outright, it is compatible with his view to add: they are more abstract because they have been abstracted from the species sensibiles. And this is the view that he presents here and there in his other works. We have no convincing reason to believe, as do Josef Koch and Klaus Kremer, that Nicholas abandoned the abstraction theory at the time of writing De Coniecturis and that its appearances in his subsequent treatises and dialogues are only blosse Relikte, mere relics, of his earlier view {K. Kremer, "Erkennen bei Nikolaus von Kues. Apriorismus-Assimilation-Abstraktion," MFCG 13 (1978), p. 57. Cf. J. Koch, Die Ars coniecturalis des Nikolaus von Kues [Heft 16 of Arbeitsgemeinschaft für Forschung des Landes Nordrhein-Westfalen (Cologne: Westdeutscher Verlag, 1956), pp. 32-33]}. However, Kremer (p. 56, n. 219) is right about Bormann's having misinterpreted the meaning of "abstractus" in De Coniecturis, where it is used to refer to abstract entities, not to the process of abstracting.

152. DM 5 (81:6-11).

153. Henke, Der Abbildbegriff, op cit., p. 54. Michael Stadler, ("Zum Begriff der mensuratio bei Cusanus," op. cit., pp. 126-127) purports to find a different contradiction: "Ganz im sinne der bisher skizzierten Deutung bringt der menschliche Geist die Dinge hervor. Der Geist ist erstes Abbild Gottes, ihm folgen die Dinge, deren Urbild er ist: ... ut mens sit imago Dei et omnium Dei imaginum post ipsum exemplar. Unde, quantum omnes res post simplicem mentem de mente participant tantum et de Dei imagine, ut mens sit per se Dei imago et omnia post mentem non nisi per mentem. Der göttliche Geist schafft die Dinge vermittels der mens, die als Urbild der Dinge

diese hervorbringt. Diese sind nicht, wenn nicht durch den Geist. Im krassen Gegensatz dazu scheint jedoch eine Bestimmung zu stehen, die nur wenige Sätze [in De mente 3] vorher sich findet. Dort heisst es: Conceptio divinae mentis est rerum productio. Conceptio nostrae mentis est rerum notio. Si mens divina est absoluta entitas, tunc eius conceptio est entium creatio. Et nostrae mentis conceptio est entium assimilatio. Der göttliche Geist begreift, indem er schafft und Produkt seines Schaffens sind die res creatae. Der menschliche Geist dagegen verähnlicht sich in seinem Erkennen; Produkt seiner Tätigkeit sind notiones bzw. similitudines rerum." [For an English translation, see the place (in the present introduction) that corresponds to the placing of note 222.]

154. Henke, *Der Abbildbegriff, op. cit.*, p. 38: "Wenn nun aber die mens aus sich heraus—und dazu noch als 'viva vita' charakterisiert—sich den Wesenheiten angleicht, so lässt sich das Angleichen eben nicht mehr als passive Rezeptivität deuten. Vielmehr ist das 'per se' des Geistes als ein spontanes Vermögen zu verstehen. Wie könnte sich auch der Geist allen Wesenheiten überhaupt angleichen, wenn er nicht schon alles irgendwie in sich enthielte? Diese assimilatio ist also ermöglicht durch apriorische Inhalte einer produktiven mens."

155. Henke, *Der Abbildbegriff, op. cit.*, p. 38: "Da sie [d.h. mens] in sich selbst schon die Begriffe von allen Dingen enthält, ist sie bereits als solche das Prinzip aller Wesenserkenntnis."

Also echoing this same misunderstanding is Eusebio Colomer: "Ohne eine passive Kopie der Wirklichkeit zu sein, ist die menschliche Erkenntnis ja eine schöpferische Tätigkeit, durch welche der Geist die in seinem Wesen eingefalteten Begriffe entfaltet

"Der menschliche Geist ist wie ein Samenkorn, das die Keime aller Dinge enthält. Damit dieser Keim erblühen kann, muss man ihn in die Erde der Erfahrungswelt säen

"Damit kommt Nikolaus der kantischen Theorie von der Spontaneität des Subjekts sehr nahe. Gewiss begreift er im Unterschied zu Kant das Erkennen als Aneignung der Wirklichkeit. Aber bei dieser Aneignung handelt es sich mehr um eine Angleichung der Wirklichkeit an unsere Erkenntnis, als unserer Erkenntnis an die Wirklichkeit" ["Die Erkenntnismetaphysik des Nikolaus von Kues im Hinblick auf die Möglichkeit der Gotteserkenntnis," *MFCG* 11 (1975), pp. 219-220]

156. See the broader context—the theme of deification—within which this passage occurs. I have translated this work in my *Miscellany on Nicholas of Cusa* (1994). Note especially *De Filiatione Dei* 6 (87:3-10): "And while [the intellect] is occupied in the schools of this world, it seeks to actualize its potency, and it assimilates itself to particular forms. For when it actually assimilates itself to the thing understood, it exercises an understanding of this and that thing—[doing so] of its own power, whereby it intellectually contains in its potency the universality of things. This assimilative power, which in the foregoing way is actualized in connection with particular [forms], is transferred to complete actuality and to perfect [universal] knowledge that belongs to mastery—transferred when in the intellectual heaven [the intellectual nature] knows itself to be a likeness of all things."

- 157. These concepts are deposited in the intellect itself. DM 15 (156:15-20).
- 158. Only the mathematical and the logical are such as to have what Nicholas calls a "determinate necessary connection."

159. DM 7 (104:4-8).

160. DM 7 (104:14-16): "For such a mind would see that because it could conform itself to ... [all shapes], the concepts of them all would be present in the power of its own living pliability, i.e., would be present in the mind itself." Note also DM 4 (78:8-11): "Layman: From the foregoing [observation] we learn that mind is that power which, when stimulated, can assimilate itself to every form and can make concepts of all things, even though, [initially], it lacks all conceptual form" (emphasis added). DM 4 (75), especially 75:12-13: "... our mind has the power by which it can assimilate itself to all unfoldings" (emphasis added)—i.e., assimilate itself to all other finite things. DM 5 (81:6-11): "Hence, because the mind is a 'divine seed' that conceptually enfolds within its own power the exemplars of all things, it is at once placed by God ... in a suitable earthen body, where it can bear fruit and can unfold from itself, conceptually, an all-encompassing unity of things" (emphasis added); that is, mind has the power to make (in conjunction with experience) concepts of whatsoever (finite) thing. DM 7 (title): "Mind produces from itself, by means of assimilation, the forms of things ..." (emphasis added).

161. Eusebio Colomer writes: "Der menschliche Geist ist wie ein Samenkorn, das die Keime aller Dinge enthält. Damit dieser Keim erblühen kann, muss man ihn in die Erde der Erfahrungswelt säen" (see n. 155 above). Colomer is partly right and partly wrong. Nicholas does say, at DM 5 (81:7-8): "the mind is a 'divine seed' that conceptually enfolds within its own power the exemplars of all things" So Colomer, speaking for Nicholas, rightly calls the human mind ein Samenkorn—a seed. But although, metaphorically speaking, the mind itself is a seed, which can grow, it does not contain the germinal seeds of all things. Empirical concepts, or even mathematical concepts, are not in the mind as implanted seeds—a claim that would mean that germinal ideas are actually and inherently present in the mind and need only be nurtured from experience in order to develop, or grow. But Nicholas sets forth no such doctrine. Instead, he maintains that concepts are inherently present in the mind's power—are present, that is, only in the sense that the mind has the power to abstract and to construct them; they are not actually present, not even as seeds.

162. Cf. DM 5 (86:5) with DM 5 (87:16-17). Elsewhere, too, Nicholas has recourse to the metaphor of mirroring. See DVD 8 (32) and De Filiatione Dei 3. Nicholas may have been influenced by Leon Battista Alberti's interest in mirrors and in perspective. Cf. n. 297 below.

163. DM 5 (85:15-20).

164. DM 5 (85:11-12).

165. De Filiatione Dei 6 (85:6-10). See also De Coniecturis II, 16 (159:1-4). One is shocked by Pauline Watts' assertion that, for Cusa, "the human mind is in no way the passive recipient of the *stimuli* of the external world" (*Nicolaus Cusanus: A Fifteenth-Century Vision of Man, op. cit.*, pp. 227-228).

166. De Coniecturis II, 16 (161:8-14).

167. De Coniecturis II, 16 (166:6-10).

168. *De Coniecturis* II, 16 (159:13-14). The intellect becomes the senses in that it conforms itself to them [*DM* 7 (100:1-5)].

169. E.g., De Beryllo 71:1-8 (Chap. 39).

170. Compendium 11 (36:10-12). Nicholas does not distinguish between sensation and perception.

- 171. Compendium 11 (35:5-6).
- 172. *De Quaerendo Deum* 3 (38:13-15). Note also the phrase at *De Beryllo* 66:1-2 (Chap. 37): "... virtus naturae cognoscitivae in humanis sensibus, qui de lumine rationis eis coniuncto participant"
 - 173. De Quaerendo Deum 1 (24:3-4). Compendium 6 (17:10).
 - 174. See n. 145 above.
- 175. One could wish that Nicholas had drawn some clear and systematic distinction between *intellectus agens* and *intellectus possibilis*, as did Aquinas before him. But the fact is that he did not. He does mention both. See, for example, VS 26 (79:14: *intellectus agens*) and Sermo 243 [Haubst number (*intellectus possibilis* and *intellectus agens*)].
 - 176. Translated from Norbert Henke, Der Abbildbegriff, op. cit., pp. 118-119.
- 177. Translated from Norbert Henke, *Der Abbildbegriff, op. cit.*, p. 115 Cf. Henke's p. 92.

Note also Pauline Watts, *Nicolaus Cusanus*, *op. cit.*, p. 136: "Moreover, such categories as *genera* and *species* do not exist independently of the mind that created them. They are *entia rationis*, the likenesses of the sensible things that man perceives, and as concepts they are the abstract organizations of these perceptions. Here [in *De mente*] Cusanus moves closer to contemporary nominalist thinking and anticipates his own later position in the *De beryllo*."

Philosophical nominalism denies that in the real world there are natures and universals and that such are referred to by universal linguistic predicates such as "dog," "beauty," "whiteness". Theological nominalism consists of a configuration of doctrines: (a) the doctrine of philosophical nominalism, together with its denial of exemplarism (the view that in the mind of God there are Forms, or Patterns, or Models of created things) and of natural-law ethics, plus (b) the denial both of natural theology (the view that both the existence and the attributes of God can be ascertained on the basis of inferences drawn from the natural world) and of analogia entis (which is replaced by the doctrine that nulla proportio inter finitum et infinitum est). Thus, every theological nominalist is also a philosophical nominalist, but the converse does not necessarily hold fully. Nicholas subscribed to a moderate-realist theory of universals, and so he is not a nominalist—either philosophically or theologically. However, his doctrine of nulla proportio does coincide with one aspect of theological nominalism.

178. "eius": scilicet, animae rationalis.

179. *De Ludo Globi* II (Codex Cusanus 219, f. 156^r = Paris edition, Vol. I, f. 165^r), as translated: "Hence even the ten categories are enfolded in the rational soul's conceptual power (so too are the five predicables and any logical things or other things necessary for a complete concept), whether they have being outside the mind or not, since without them neither discrimination nor concepts can be fully possessed by the soul."

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180. DM 11 (136:1-7).
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- 181. DM 11 (137).
- 182. *Propria* are unique and permanent properties that belong to a species without belonging to it essentially. For example, *being capable of laughter* uniquely characterizes any human being, although it is not an essential property of human beings.
 - 183. DVD 8 (30:20-21).
 - 184. DM 11 (136:6-7).

185. See, for example, Cusa, NA 12 (46). NA 13 (50). De Beryllo 48-53 (Chaps. 29-31).

DI I, 18 (52:23-27): "... some beings—viz., simple finite substances—participate more immediately in Maximum Being, which exists in itself. And other beings-viz., accidents—participate in [Maximum] Being not through themselves but through the medium of substances." [Because of their participation in God (or, more strictly speaking, in God's likeness), finite substances exist independently of the human mind's apprehension of them as substances.] DI I, 18 (53:15-16): "Wherefore, Aristotle was right in dividing all the things in the world into substance and accident." VS 33 (99:2-13): "St. Thomas, in his commentary on Dionysius's book The Divine Names, maintains that three things must be noticed with regard to the substances of existing things: First, [there is] the particular (e.g., Plato); it includes—in itself and actually—individuating and last principles. Second, there is the species or the genus (e.g., man or animal), in which the last principles are included actually but particulars potentially. For example, 'man' is predicated of him 'who has humanity'—apart from any distinguishing because of individuating principles. The essence (e.g., humanity) is third; by the word 'humanity' only the principles of the species are signified. For no individuating principle belongs to the concept of humanity; for 'humanity' signifies exclusively that in virtue of which a man is a man, and no individuating principle is of such a kind."

186. *DVD* 8 (32:13-18): "The reason our eye turns toward an object is that our sight sees from an angle of a certain magnitude. But the angle of Your eye, O God, is not of a certain magnitude but is infinite. Moreover, the angle of Your eye is a circle—or better, an infinite sphere—because Your sight is an eye of sphericity and of infinite perfection. Therefore, Your sight sees—roundabout and above and below—all things at once." Cf. *De Theologicis Complementis* 12:28-34 [*Opera Omnia*, Vol. X.2a].

187. Pauline Watts, *Nicolaus Cusanus*, *op. cit.*, p. 214. Cf. Fritz Nagel, *Nicolaus Cusanus und die Entstehung der exakten Wissenschaften* (Münster: Aschendorff, 1984), p. 24: Die Karte des Kosmographen "ist daher ihrer Struktur nach ein Produkt seines Geistes und keine Abbildung der Welt Die Prinzipien der Karte sind daher nicht die Prinzipien der Welt, sondern die Prinzipien des Kosmographen. Wenn der Kosmograph nun mit Hilfe seiner Karte die Welt bereist, so begegnet er bei seiner Orientierung in der Welt stets nur den Prinzipien, die er selbst in seine Karte eingearbeitet hat Durch immer neue Kartenentwürfe kann er sich den Prinzipien der Welt vielleicht schrittweise nähern, doch bleibt er in all seinem Tun jeweils immer nur auf sich selbst bezogen und sein Erkennen vollzieht sich nur in der Weise der Bezogenheit."

- 188. Pauline Watts, Nicolaus Cusanus, op. cit., p. 215.
- 189. Pauline Watts, Nicolaus Cusanus, op. cit., p. 161.
- 190. Norbert Henke, Der Abbildbegriff, op. cit., p. 71. Cf. his p. 68.
- 191. Pauline Watts, Nicolaus Cusanus, op. cit., p. 136.
- 192. One who rightly understands Nicholas's illustration is Norbert Herold, Menschliche Perspektive und Wahrheit. Zur Deutung der Subjektivität in den philosophischen Schriften des Nikolaus von Kues (Münster: Aschendorff, 1975), pp. 75-76.
 - 193. Compendium 4 (9:7-8). Note also De Coniecturis II, 16 (157:20): "Caecus

enim sensibilem colorem non attingit."

- 194. DM 7 (103:5-16).
- 195. DM 7 (104:6-8).
- 196. DM 7 (102:21-23).
- 197. Norbert Henke, Der Abbildbegriff, op. cit., pp. 63-65.
- 198. Norbert Henke, Der Abbildbegriff, op. cit., pp. 38-39.

199. Cf. Stephan Otto, "Nikolaus von Kues (1401-1464)," pp. 245-261 in Otfried Höffe, editor, *Klassiker der Philosophie* [Munich: Beck Verlag, 1981 (Vol. I)]: "Es ist darum kein blosser geistesgeschichtlicher Vergleich von Denkformen mehr, sondern durchaus das Ergebnis einer Strukturanalyse, wenn man vom 'Transzendentalismus' des Nikolaus von Kues spricht. Denn die Rede des Kusaners von der absoluten transzendentalen Hypothesis genügt dem, was Kant in der Transzendentalen Dialektik der *Kritik der reinen Vernunft* von der 'durchgängigen Bestimmtheit in unserer Vernunft' sagt …" (p. 261).

200. Norbert Henke, *Der Abbildbegriff, op. cit.*, pp. 64-65: "Die eigentliche Aufhebung des Abbildgedankens und der mit ihm verbundenen Subjekt-Objekt-Dualität geschieht durch die mentale Koinzidenz von Einheit und Andersheit, von Allgemeinem und Besonderem. Die Einheit des Subjekts ist eine solche Einheit von Einheit und Andersheit. Sie zeigt sich in der Ausfaltung von Vielem aus der mentalen Einheit, die dieses Viele schon enthalten musste, um es überhaupt entfalten zu können. Aber indem auch die mens aus ihrer Einheit das urbildliche Sein für jedes Seiende ausfaltet, deutet sie zugleich das Seiende als Abbild, als blosse Erscheinung. Sie ist demnach die hypothesis der Sinneserfahrung. Denn während die sinnliche Wahrnehmung verworren, schattenhaft, bloss abbildlich und unverklärt durch Andersheit ist und daher im Bereich des Konkret-Sinnlichen nichts ist, nach dem sich das Erkennen ausrichten könnte, steht gerade die Wirklichkeit der Dinge im Geist unter dem Zeichen der Notwendigkeit. Denn hier wird der Kreis gedacht, so wie er es erfordert. Der gedachte Kreis ist die Norm des Kreises auf dem Boden, der sein Urbild nie ganz erreicht.

"Ist auf diese Weise einmal prinzipiell die Unexaktheit der sinnlichen Wahrnehmung erkannt, dann vermag auch nicht mehr das konkrete Einzelding die Form zu vermitteln. Das sinnliche Seiende verliert das sichere, evidente Gegebensein, das abgebildet werden könnte. Es wird fliessend, so dass es nicht mehr das Erkennen bestimmt."

201. In DM 7 (102-106) Nicholas proceeds as follows: In section 102 he discusses empirical concepts, focussing on concepts of material objects. These are made by the mind's eliciting them (i.e., abstracting them) from species sensibiles. Men make use of such concepts in developing the mechanical arts and in making both empirical and logical surmises (physicae et logicae coniecturae). Empirical concepts are uncertain (notiones incertae) and imprecise (and, hence, are surmises) because they are derived merely from perceptual images, says Nicholas. In sections 103 and 104 he contrasts with these empirical concepts mathematical concepts—in particular, concepts of geometrical figures. Such concepts as the concept of a circle are made by the mind from perceptual data but not from perceptual data alone. For perceptual data yield only concepts that are uncertain and subject to revision; indeed, the mind can never know precisely what the essence of any empirical object is. So from perceptual and imaginative images of imperfect circles the mind constructs, from out of its own resources, the concept of an ideal, perfect circle—an ideal that cannot be in-

stantiated in the empirical world. This concept of a perfect circle is not subject to uncertainty; moreover, it is exact; and it has a determinate necessity. For, necessarily, the circle is what the mind conceives it to be: viz., a figure whose parts are connected in such a way that all lines from the center to the circumference are equal. Such concepts and definitions, then, are the basis of the mathematical branches of knowledge. Nicholas re-emphasizes that the mind is stimulated by phantasms, or perceptual images, to make these concepts. In sections 105-106 he points out that there is an even more precise concept than is a mathematical concept. For mathematical concepts are concepts of differing mathematical objects (circles, triangles, squares, etc.) and of objects that have parts (circumference, diameter, sind, hypotenuse, etc.). "This otherness," he says, "cannot at all befit truth considered in itself, i.e., in its own infinite and absolute precision." So the human mind can ascend reflectively and speculatively to a concept that is neither of a material object nor of a mathematical object" but is, rather, of an "object" that is altogether simple and unimpartible to matter. The object of this concept has no otherness and is what it is by absolute necessity, not just by a determinate necessity. Indeed, this is the concept of God, the concept of Him in whom "all things are something one, and something one is all things." Such concepts belong to the domain of theological speculation, a higher domain than that either of the mathematical sciences or of the mechanical arts. In his other writings Nicholas makes for us several of these concepts: God as Not-other (non-aliud), God as Possibility itself (posse ipsum), as Actualized-possibility (possest), as the One (unum ipsum), as Absolute Form (absoluta forma), as the Same (idem). According to Nicholas we may arrive at various concepts of God just by considering the simplicity of the human mind, which is a living image of God, its Exemplar: "In this most lofty manner mind uses itself insofar as it is the image of God. And God, who is all things, shines forth in mind when mind, as a living image of God, turns to its own Exemplar and assimilates itself thereto with all its effort. In this way the mind beholds all things as something one and beholds itself as an assimilation of that one. By means of this assimilation it makes concepts of that one thing which is all things" [DM 79 (106:11-16)]. So when the human mind sees itself as a likeness of God, who is without otherness, then it sees all things as present within its own simplicity.

202. De Beryllo 6 (Chap. 5). De Beryllo 24:1 (Chap. 18). De Beryllo 65-71 (Chaps. 37-39).

203. De Beryllo 6:1-8 (Chap. 5): "... notabis dictum Protagorae hominem esse rerum mensuram. Nam cum sensu mensurat sensibilia, cum intellectu intelligibilia, et quae sunt supra intelligibilia in excessu attingit Nam dum scit animam cognoscitivam esse finem cognoscibilium, scit ex potentia sensitiva sensibilia sic esse debere, sicut sentiri possunt; ita de intelligibilibus, ut intelligi possunt, excedentia autem ita, ut excedant. Unde in se homo reperit quasi in ratione mensurante omnia creata."

204. DM 1 (57:5-6). Cf. De Theologicis Complementis 11:32-45 with 13: 14-18 [Opera Omnia, Vol. X.2a].

205. Norbert Henke, *Der Abbildbegriff, op. cit.*, pp. 127-128: "Eine solche Wesensbestimmung des Geistes weist den Abbildgedanken mit seinem Program der Imitation von Vielheitlichem als bloss äusserliche Bestimmung zurück. Eine ausdrückliche Widerlegung der spezifischen Abbildtheorie liefert aber erst der homo-mensura-Satz. Nicht die Dinge sind das Mass des Erkennens, sondern umgekehrt misst und ordnet der Geist mit dem ihm eigenen apriorischen Mass die Welt."

Note also Martha M. Oberrauch, Aspekte der Operationalität. Untersuchungen zur Struktur des Cusanischen Denkens (Frankfurt am Main: Fischer, 1993): "Die Wissbarkeit des Dinges beruht in der cusanischen Philosophie nicht auf einer Angleichung des Denkens an die Intelligibilitätsstrukturen des Seienden wie bei Thomas von Aquin, wobei die Wissbarkeit des Seienden die ontologische Voraussetzung für alles Wissen bildet Nikolaus von Kues kehrt das Verhältnis von Denken und Sein um und öffnet dadurch den Weg für eine Philosophie der Subjektivität neuzeitlicher Prägung. Wissen im Sinne des Kusaners ist subjektiv, denn kein Erkennen erreicht den objektiven Grund der Erkennbarkeit eines Dinges. Die Theorie des Kusaners weist transzendental-philosophische Züge auf, weil Wissbarkeit überhaupt die Voraussetzung von jedem Wissen ist. Hieraus ergibt sich eine modal strukturierte Erkenntnistheorie, in welcher der denkende Geist sich die Welt an seine Erkenntnismöglichkeiten anmisst. Erkenntnis im Zeichen bedeutet bei Nikolaus von Kues die Erschaffung von Erkenntnisstrukturen, mittels der zum einen die Vernunft die endlichen Dinge auf sich selbst ausrichtet, zum andern zur Erkenntnis ihrer eigenen Verfasstheit gelangt" (p. 1 of the introduction, my italics).

By contrast, Clyde L. Miller offers a more modest and more judicious overall assessment: "Causally affected by the things we encounter in perceptual experience, we become likened or assimilated to the material things we discover and investigate, [and] yet we fashion the conceptual and judgmental tools whereby we take them in and deal with them as known But perceptible things also measure our assimilating[,] since we refer to them to assess the adequacy of our concepts for dealing with them. Without such an independent measure, our knowledge is left without extramental referents and we have no standard against which we can revise or improve our initial understanding.

"Nonetheless, human concepts and judgments are matters of the mind's own fashioning. If we are likened to the things in the material world, we still deal with them on our own terms however perspectival and approximate we recognize these terms might be. In making concepts and in comparing and differentiating the deliverances of perception we are able to assess our cognitive tools and conceptual measures in light of both our purposes as knowers and over against their extramental referents" ["Nicholas of Cusa and Philosophic Knowledge," *Proceedings of the American Catholic Philosophical Association*, 54 (1980), pp. 159-160].

Josef Stallmach, too, expresses an important point when he writes (but without fully endorsing, as he should): "Wenn also der Geist als *Geist* durch *schöpferische Spontaneität* gekennzeichnet ist, so der endliche Geist als *endlicher* gerade durch den *assimilativen und konformativen Charakter* eben dieser schöpferischen Tätigkeit. Sein Begreifen ist *entium assimilatio* so wie das göttliche *entium creatio* ist. Der menschliche Geist hat seine eigene Welt, sein eigenes Universum, aber dieses ist eine *universitas assimilationis rerum*. Kurz: in der begrifflichen Erkenntnis der realen Dinge liegt die Sache für Cusanus offenbar anders als bei den Mathematica" ["Die cusanische Erkenntnisauffassung zwischen Realismus und Idealismus," *MFCG* 6 (1967), p. 52].

206. Eusebio Colomer, "Die Erkenntnismetaphysik des Nikolaus von Kues im Hinblick auf die Möglichkeit der Gotteserkenntnis," *MFCG* 11 (1975), p. 220, as translated: "The activity of measuring brings with it the subjection of the object-measured to the oneness of the measure. And that means that the world presents itself to us as something upon which man imposes his own measure. From this viewpoint

knowledge, according to Nicholas of Cusa, appears as the self-unfolding of mind—not in the sense of a material innateness of ideas but in the sense of a dynamic and formal *a priori* structure wherein (as J. Koch suggests) the concept of *unfolding* (*complicatio*) in some way corresponds to Kant's transcendental *a priori*."

Josef Koch, then, is among the many who see still other connections to Kant: "Die in *De coni*. entwickelte Erkenntnistheorie zeigt aber eine erstaunliche Verwandtschaft mit dem Gang der Kritik von den ungeordneten Eindrücken der Sinnlichkeit über den Verstand und die Vernunft bis zu dem unerkennbaren Gott. Der cusanische Begriff der Einfaltung wird bei Kant zum A priori. Die Unterscheidung des Verstandes als des Vermögens der Begriffe von der Vernunft als dem Vermögen der Ideen findet sich bei beiden. Gewandelt hat sich freilich der Begriff der Idee. Der Gedanke des Cusanus, dass der Verstand die Sinneseindrücke ordnet und zu sich selbst als der höheren Einheit führt und dass die Vernunft die Einheit für den Verstand ist, wird bei Kant zur Theorie des Erkennens als einer synthetischen Funktion. Endlich fassen beide das Widerspruchsprinzip als ein reines Verstandesgesetz auf. Allerdings ist Kant von dem Gedanken der *coincidentia oppositorum* weit entfernt ..." {*Die Ars coniecturalis des Nikolaus von Kues* [Heft 16 of Arbeitsgemeinschaft für Forschung des Landes Nordrhein-Westfalen (Cologne: Westdeutscher Verlag, 1956)], p. 48}.

Theo van Velthoven in his Gottesschau und menschliche Kreativität. Studien zur Erkenntnislehre des Nikolaus von Kues (Leiden: Brill, 1977), pp. 109-110, marshals a list of writers who emphasize the affinity between Cusa and Kant: "Bei de Gandillac finden wir die Bemerkung, dass Nikolaus von Kues 'der kantischen Revolution die Wege bereitet'. Wenn zwischen beiden Denkern eine solche Beziehung hergestellt wird, so wird eine Interpretation nahegelegt, nach der Cusanus der Meinung wäre, dass im Geist gewisse, mit dessen Natur gegebene Formen oder Kategorien anwesend wären. Diese Kategorien würden den Verstand dazu befähigen, die Gegebenheiten der sinnlichen Wahrnehmung zu ordnen und sich anzueignen. Deshalb würde 'das Bewusstsein des Menschen sich als bildsam genug offenbaren, um jede Erfahrung an seine formalen Regulierungen anzupassen'. Hildegund Menzel-Rogner spricht in ihrer Einleitung zur Ausgabe des Dialogs De mente von 'angeborenen Kriterien', welche der Geist besitzt, und von 'Kategorien unseres Verstandes, in denen wir befangen sind'. Am deutlichsten huldigt Ernst Hoffmann dieser Interpretation, sodass er die Grundzüge der Kritik der reinen Vernunft schon im Denken des Cusanus angedeutet sieht. Letzterer hätte schon der von Kant enworfenen Synthese, nach der der Inhalt der Erkenntnis aus der sinnlichen Wahrnehmung und Ihre Form aus der Vernunft stammt, vorgegriffen'. Dann liegt die Ausdeutung der begrifflichen Einfaltung nahe. Diese wird in diesem Kontext als die Gesamtheit von Begriffen a priori gedacht, welche der Verstand als die Bedingung der Möglichkeit der Erkenntnis in sich trägt. 'Der cusanische Begriff der Einfaltung wird bei Kant zum A priori', so Josef Koch."

207. *DI* I, 8 (23). *DI* II, 3 (108:4-6). Cf. *De Filiatione Dei* 4 (72). *De Ludo Globi* II (Codex Cusanus 219, f. 150^r = Paris edition, Vol. I, f. 161^r). *De Sapientia* I (5: 17-18). *DM* 6 (93).

208. Regarding Nicholas's conception of mathematics, see especially *De Beryllo* 55-56 (Chap. 33). In particular, see 56:11-18, translated as: "Hence, although numbers and [geometrical] figures and all such intelligible objects, which are entities of our reason and which lack a nature, are present more truly in their source (viz., the human intellect), nevertheless it does not follow that on that account all perceptible objects

(of whose essence it is to be perceptible) are present more truly with respect to the intellect than with respect to the senses.

"And so, Plato seems mistakenly to have thought—when he saw mathematical objects (which are abstracted from perceptible things) to be present more truly *in mind*—that they therefore had still other, truer being above the intellect."

209. Eusebio Colomer, "Die Erkenntnismetaphysik des Nikolaus von Kues," *op. cit.*, p. 219. Cusa states that there are ten categories—viz., the one's listed by Aristotle. Moreover, at *Compendium* 5 (12) he indicates that quantity and quality are natural signs—i.e., are sensory images or sensory representations—of perceived objects.

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210. DM 4 (78:8-11).

211. DM 2 (64:12-13).

212. DM 3 (70: 2-3). DM 7 (98:12-14). DM 9 (116:12-13).

213. See also DM 15 (157:8-12).

214. DM 9 (123:5-7).
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215. DM 9 (117:5-9). See also De Ludo Globi I: "[Cardinalis:] Anima vis est illa quae se omnibus rebus potest conformare" (Codex Cusanus 219, f. 142° = Paris edition, Vol. I, f. 155°) and "Sic dum [rationalis anima] se facit similitudinem omnium cognoscibilium, a se movetur" (loc. cit.). Henke himself quotes these passages on his p. 113. In addition, he cites DM 9 (124:4-10). Not to be overlooked is DM 9 (125:1-3), where the passive voice is used as a substitute for the reflexive: "Philoso-phus: Intelligo simile in circino nullius determinatae quantitatis in eo quod circinus, et tamen extenditur et contrahitur, ut assimiletur determinatis." Mind is not here said to determine things in their being or being known but, rather, is said to assimilate it-self (liken itself, conform itself) to things that are already determinate.

In VS 27 (82:13-20) Nicholas indicates not that the mind sets the boundaries of objects but that it sets boundaries in conceiving of what it is going to make: "Mens enim humana, quae est imago mentis absolutae, humaniter libera[,] omnibus rebus in suo conceptu terminos ponit, quia mens mensurans notionaliter cuncta. Sic ponit terminum lineis, quas facit longas vel breves, et tot ponit punctales terminos in ipsis, sicut vult. Et quidquid facere proponit, intra se prius determinat et est omnium operum suorum terminus. Neque cuncta quae facit ipsam terminant, quin plura facere possit, et est suo modo interminus terminus." Cf. Sermo 4 (15:4-7) [Opera Omnia, Vol. 16].

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216. DI I, 20 (61:20-21). 217. DI I, 23 (72:1-5).
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218. Cf. DP 13:11-12. See also De Coniecturis I, 1 (5:15-16): "ratio ...infinita ..., quae sola est omnibus rationis mensura." De Coniecturis I.1 (6:8-11): "Sola enim ratio [infinita] multitudinis, magnitudinis ac compositionis mensura est, ita ut ipsa sublata nihil horum subsistat, sicut entitate infinita negata omnium rerum entitates pariter constat esse negatas." De Coniecturis I.5 (17:11-15): "Ipsa absoluta unitas ... [est] mensura una omnium mensurarum ..." De Coniecturis I. 10 (52:7-13): "Ratio vero praecisio quidem sensus exstitit; unit enim ratio sua praecisione sensibiles numeros, atque ipsa sensibilia rationali praecisione mensurantur. Sed haec non est vera simpliciter, sed rationaliter vera mensura. Rationalium vero praecisio intellectus est, qui est vera mensura. Summa autem praecisio intellectus est veritas ipsa, quae deus est." 219. DM 9 (125:5-14). See also VS 29 (86:10-11) and 29 (87:14-16) and 29

(88:1-3).

220. DM 6 (95:11-12).

221. Cusa, *Compendium* 10 (34:20-21). Thomas (*De Veritate* I.1) ascribes the formula to the ninth- and tenth-century Jewish physician-philosopher Isaac Israeli. But no trace of it is found in Isaac's *De Definitionibus*. See J. T. Muckle's edition of *Liber de Definicionis* in *Archives d'Histoire Doctrinale et Littéraire du Moyen Âge*, 12 (1937-38), 299-340. Note also Muckle's article "Isaac Israeli's Definition of Truth," *ibid.*, 8 (1933), 5-8.

222. Michael Stadler, "Zum Begriff der mensuratio bei Cusanus," op. cit., pp. 126-127 (of Vol. I): "Ist damit nicht die cusanische Erkenntnislehre aufzufassen als eine adaequatio intellectus ad rem? Oder wird hier ein Widerspruch, eine Inkonsistenz dieser Philosophie sichtbar, die gerade in der Erkenntnislehre auftritt? Die Schwierigkeiten einer Ortung der cusanischen Erkenntnislehre sind immer wieder thematisiert worden. Diese Schwierigkeiten zeigen sich brennpunktartig im 3. Kapitel der Schrift 'De mente'. Dort nämlich, so scheint es, vertritt Cusanus zwei sich widersprechende Erkenntniskonzepte. Ganz im Sinne der bisher skizzierten Deutung bringt der menschliche Geist die Dinge hervor. Der Geist ist erstes Abbild Gottes, ihm folgen die Dinge, deren Urbild er ist: ... ut mens sit imago Dei et omnium Dei imaginum post ipsum exemplar. Unde, quantum omnes res post simplicem mentem de mente participant tantum et de Dei imagine, ut mens sit per se Dei imago et omnia post mentem non nisi per mentem. Der göttliche Geist schafft die Dinge vermittels der mens, die als Urbild der Dinge diese hervorbringt. Diese sind nicht, wenn nicht durch den Geist. Im krassen Gegensatz dazu scheint jedoch eine Bestimmung zu stehen, die nur wenige Sätze vorher sich findet. Dort heisst es: Conceptio divinae mentis est rerum productio. Conceptio nostrae mentis est rerum notio. Si mens divina est absoluta entitas, tunc eius conceptio est entium creatio. Et nostrae mentis conceptio est entium assimilatio Damit zeigt sich offensichtlich ein Widerspruch: Einmal sind es die Gegenstände, die dem Geist als seine Abbilder nachgeordnet sind, zum anderen scheinen sie als res creatae dem menschlichen Denken vorgeordnet zu sein."

223. This view about resemblance is, of course, even older than Augustine's *De Trinitate*, where it appears in a central way.

224. DM 3 (73: 4-7).

225. DM 4 (76:2-10).

226. In *De Ludo Globi* I Nicholas, citing Aristotle, distinguishes the vegetative, the sensitive, the imaginative, and the intellective powers; in the human soul, he says, the first three powers are present in the fourth power (Codex Cusanus 219, f. 144^{r et} = Paris edition, Vol. I, f. 156^v). Nicholas also supposes there to be a vegetative soul in plants and a sensitive soul in animals (*ibid*.). In *De Coniecturis* he teaches that in the hierarchy of being, lower beings have a kind of intelligible spirit hidden in them. "For example, in things vegetable the subtle intellectual spirit (*subtilitas intellectualis*), through which [a plant] sends forth supporting branches in order to continue suspending its fruit when the fruit becomes heavy, is of a vegetable nature. Now, in animals the subtle intellectual spirit, by means of which they forage and preserve for future need that which they have sought out, is of an animal nature" [*De Coniecturis* II, 10 (124:6-10)]. Nicholas's view of nature is hierarchical and teleological. ["Ita quae a natura sunt, procedunt ab elementis ad intentum naturae" (*Compendium* 9 (25:8-9)]. Therefore, he does not find it strange to consider plants and animals to bear a like-

ness to the human mind, as do even minerals insofar as they are considered to be products of, and displayers of, the Creative Intelligence. See, below, n. 65 of Notes to the *Compendium*.

We must remember, too, that although in the present context Nicholas is referring principally to the human mind, the generic designation "mind" also includes both the angelic intellects and intelligence as it works in nature. The human mind is the closest image of God in comparison with things that are ontologically inferior to it. However, human intellects are of a lesser grade of perfection than are angelic intellects. Angelic beings are also images of God.

227. Karl Bormann, "Zur Frage nach der Seinserkenntnis in dem wahrscheinlich letzten philosophisch-theologischen Werk des Nikolaus von Kues, dem 'Compendium,' "Archiv für Geschichte der Philosophie, 50 (1968), pp. 184-185: "Damit die Lehre, Wahrheit sei Angleichung, verstanden und mit der Spontaneität des menschlichen Geistes vereinigt werden kann, ist die aequatio im Bereich des Verstandes zu unterscheiden von der im Bereich der Sinne. 'Die Vernunft (intellectus) ist bei der Erkenntnis des geistig Erkennbaren von nichts abhängig ..., da sie der Ursprung ihrer Tätigkeiten ist'. Sie kann sich also nicht dem Gegenstand angleichen, sondern der Gegenstand gleicht sich der Vernunft an: veritas ... est adaequatio rei ad intellectum. Anders ist es im Bereich der Sinne: Der Gegenstand sendet Zeichen seiner selbst aus, die durch das Medium der Luft zum Sinnesorgan gelangen und im sinnlichen Wahrnehmungsvermögen verzeichnet werden. Die similitudines, species oder signa sind keineswegs wie bei Thomas v. Aquin der Gegenstand in einer anderen Seinsweise und können daher nicht die Objektivität der sinnlichen Wahrnehmung verbürgen, sondern sie sind ganz entfernte Abschattungen des Gegenstandes."

228. Compendium 10 (34:20-22). Cf. De Aequalitate (Paris edition of Nicolai Cusae Cardinalis Opera, Vol. II, f. 19^v, line 18).

229. Aquinas, SCG I.61.7.

230. Aquinas, ST I.16.2c.

231. VS 36 (106:15 - 107:2). The doctrine of abstracting also appears in the Compendium—e.g., at 6 (16:16-24): "Hinc homo haurit ex sensibilibus signis species suae naturae convenientes. Qui cum sit rationalis naturae, species illi suae naturae convenientes haurit, ut per illas bene possit ratiocinari et reperire conveniens alimentum tam corporale corpori quam spirituale spiritui seu intellectui (sicut sunt differentes species decem praedicamentorum, quinque universalium, quattuor virtutum cardinalium, et talium multorum, quae homini ratione vigenti conveniunt)." See also Compendium 6 (18:17) through 7 (19:10).

232. Cf. Compendium 10 (32:1-13).

Regarding *proportio* and *disproportio* we ought not to agree with Michael Stadler's claim regarding Cusa: "Dass zwischen Infinitem und Finitem keine Proportion besteht, kann nur dann behauptet werden, wenn zwischen ihnen keine Differenz gedacht ist, die in ihrer Konsequenz Ursache und Verursachtes als unterschiedene Seiende vorstellt. 'nulla proportio ...' sagt einen Modus absoluter Identität von Finitem und Infinitem aus" [Rekonstruktion einer Philosophie der Ungegenständlichkeit. Zur Struktur des Cusanischen Denkens (Munich: Fink Verlag, 1983), pp. 93-94.

233. Cf. VS 29 (86:3-19)—but especially 86:14-17—with *Compendium* 11 (36:10-12). See *DP* 17:9-11.

234. DM 7 (100:1-5). See also VS 29 (87:15-17): "Intellectus vero noster intel-

ligit, quando se assimilat omnibus. Nihil enim intelligeret, nisi se intelligibili assimilaret, ut intra se legat, quod intelligit, scilicet in suo verbo seu conceptu." Cf. VS 29 (88:1-3) "Et adverte, quomodo dixi supra notiones rerum sequi res. Virtus igitur intellectiva ad rerum notiones se extendit et ideo sequitur rerum essentias."

235. DM 5 (83:6-7): "intellectu seu mente". DM 12 (142:15): "Ego mentem intellectum esse affirmo"

236. DM 8 (110:3): "... a conception is called conception because of an imitating." In De Beryllo 24: 8-9 (Chap. 18) Nicholas affirms that "the intellect, by way of the [sensitive] soul, imparts itself to the nature—and by way of the nature, to the body."

237. Compendium 10 (32:6). In VS 29 (86:7-12) Nicholas does say the following: "Nihil enim apprehendit intellectus, quod in se ipso non repperit. Essentiae autem et quiditates rerum non sunt in ipso ipsae, sed tantum notiones rerum, quae sunt rerum assimilationes et similitudines. Est enim virtus intellectus posse se omnibus rebus intelligibilibus assimilare. Sic sunt in ipso species seu assimilationes rerum. Ob hoc dicitur locus specierum": "The intellect apprehends nothing that it has not found to be present within itself. Now, the beings and the quiddities of things are not themselves present in the intellect, but only the concepts of things are present. (These concepts are assimilations and likenesses of the things.) For it is of the power of the intellect to be able to assimilate itself to all intelligible things. Thus, in the intellect there are representational-forms or assimilations of the things. Wherefore, the intellect is said to be a locus of representational-forms." This passage, however, does not purport that the intellect knows only assimilationes. For although it is acquainted only with assimilationes, these are signs and, as such, are intentional, in the sense that they point cognitively to the objects themselves and yield veridical information about them. Since this information is always subject to closer and closer approximation, Nicholas calls it coniecturalis, i.e., surmising information.

238. DM 9 (123:7).

239. DM 7 (103:5-7). Quoted by Henke on p. 119 of his Abbildbegriff. As was said earlier, Henke does not take sufficient account of the fact that this passage refers only to mathematical and logical concepts.

240. Norbert Henke, *Der Abbildbegriff, op. cit.*, pp. 119:121: "Erkennen ist daher letztlich immer Selbsterkenntnis als explicatio der vernunfthaften Einheit. In dieser Einheitsphilosophie des Cusanus ist die apriorische Einheit im Ich-Denke, wie sie der Deutsche Idealismus später lehren wird, schon angelegt

"... Die Ausfaltung der Kategorien aus der Einheit des Geistes nimmt die transzendentale Deduktion Kants im Ansatz vorweg, wenn ihr auch die systematische Ausführung noch fehlt." Henke goes on to speak even more radically: "Mit diesem geistphilosophischen Ansatz verlässt Cusanus die überlieferte Konzeption, dass das Sein das zuerst Gegebene sei" (p. 123). And he adds: "Allein der Geist entfaltet sowohl Seiendes als auch Erkanntes ..." (p. 124).

Cf. Ekkehard Meffert, *Nikolaus von Kues. Sein Lebensgang. Seine Lehre vom Geist* (Stuttgart: Verlag Freies Geistesleben, 1982), p. 63: "Es ist gerade dieses Werk [d.h. De mente], welches den Beginn einer mitteleuropäischen Ich-Philosophie darstellt und unmittelbar auf den deutschen Idealismus und die 'Philosophie der Freiheit' hinzuführen scheint."

Martha M. Oberrauch, Aspekte der Operationalität, op. cit., writes: Die Auflösung

der Kategorie der Substanz durch das Denken von Geist als Bewegung und von messenden Operationen hat eine Aufwertung der Kategorie der Relation zur Folge. Dies bedeutet eine neue Denkperspektive, die sowohl auf die Philosophie des Deutschen Idealismus als auch die Methode mathematischer Analysis und naturwissenschaftlichen Experimentierens vorausweist" (pp. 2-3 of her introduction, my italics).

241. *DP* 38:13-14. Cf. *De Ludo Globi* II (Codex Cusanus 219, f. 151^v = Paris edition, Vol. I, f. 161^v): "Omnis igitur motus vivus rationalis est ut suae vitae causam videat, et tali sapientia immortaliter pascatur. Quod si ad hoc non pervenerit, non vivit, quando suae vitae causam ignorat."

242. De Filiatione Dei 3 (68:9-16).

243. De Filiatione Dei 3 (70:1-7).

244. Regarding his teaching on sonship Nicholas himself reminds: "Do not regard the foregoing expressions as precise, for ineffable matters are not attained by expressions. Hence, you must be elevated, by means of profound meditation, above all contrarieties, figures, places, times, images, and contradictions, above [all] alterities, disjunctions, conjunctions, affirmations, and negations. Thereupon, you, a son of Life, will be transformed into Life by means of being elevated beyond all comparative relations, all parallelisms, and all rational inferences—elevated unto pure intellectual life" [De Filiatione Dei 3 (71:1-7)].

See Rudolf Haubst, "Nikolaus von Kues ueber die Gotteskindschaft," pp. 29-46 in Paul Wilpert *et al.*, contributors, *Nicolò da Cusa* (Relazioni tenute al Convegno Interuniversitario di Bressanone nel 1960). Florence: Sansoni, 1962.

245. Norbert Henke, Der Abbildbegriff, op. cit., p. 114: "Trotz ihrer konjekturalen Abbildlichkeit denkt also die mens die Dinge von ihrem Urbild her; und zwar so, dass sie aus ihrer nicht übersteigbaren Subjektivität heraus die Norm der Dinge setzt. Die Sprechweise vom Angleichen an das Seiende setzt also, wenn sie ihr auch zu widersprechen scheint, die subjektive Bedingung des Erkennens voraus, weil die mens dem Ursprung als auch dem aus ihm Entsprungenen die Form seines Geistes gegeben hat. So umfasst die mens sowohl Gott als auch die Welt. Daher kann Cusanus von der zu sich selbst gekommen Vernunft in dem ihm eigenen Pathos sagen: 'Nihil igitur remanebit nisi ipse intellectus purus secundum ipsum, qui extra intelligibile nihil potest intelligere esse posse. Cum igitur hoc ita sit, non intelligit intellectus ille aliud intelligibile neque erit eius intelligere aliquid aliud ...[.] Non erit veritas aliud aliquid ab intellectu ... secundum omnem vim et naturam intellectualis vigoris, quae omnia secundum se ambit et omnia se facit, quando omnia in ipso ipse'. Die Vernunft in ihrer Verwirklichung versteht sich also wie schon bei Parmenides als Identität von Denken und Sein und braucht sich nicht mehr einem Gegenstand anzuähnlichen." The Latin passage is from *De Filiatione Dei* 3 (69:14-22).

246. DM 10 (127:1-4).

247. DM 3 (69:12-18).

248. A clear summary of the *Compendium* is given by Michael-Angelo Schramm, "Zur Lehre vom Zeichen innerhalb des Compendiums des Nikolaus von Kues," *Zeitschrift für philosophische Forschung*, 33 (October-December 1979), 616-620.

249. Compendium 2 (5: 5-10).

250. Compendium 4 (10:12-14).

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251. Compendium 5 (13).
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- 252. Compendium 4 (10:11).
- 253. Compendium 4 (9:6-7).
- 254. Compendium 5 (15:1-4).
- 255. Compendium 6 (18:17-19). Intellectual representations (intellectuales species) are called conceptual, not natural, signs (signa notionalia).
 - 256. Compendium 5 (15). See also Compendium 5 (13).
 - 257. Compendium 5 (15: 12-14).
- 258. Compendium 7 (21:3-5). CA II, 5 (99-100). DP 48:1-3. The human mind is also a sign of the Divine Mind insofar as love and understanding coincide in the human mind: "Iterum considera, quo modo assimilare et assimilari in mente coincidunt sicut intelligere et diligere ipsius. Nam mens sine desiderio non intelligit et sine intellectu non desiderat. Mens igitur est principium intellectus et affectus. Mens est vis simplex nobilissima, in qua coincidunt intelligere et diligere" [Sermo 172 (Haubst number)].

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259. Compendium 8 (23:16-20). CA II, 3 (94).
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- 260. DM 5 (83).
- 261. Regarding Nicholas's distinction between *ratio* and *intellectus*, see Hermann Schnarr, *Modi essendi. Interpretationen zu den Schriften De docta ignorantia*, *De coniecturis und De venatione sapientiae von Nikolaus von Kues* (Münster: Aschendorff, 1973), pp. 45-48.
 - 262. Aquinas, SCG I.57.8.
- 263. At the end of *De Veritate* 26.9 (3rd reply). Thomas does make a distinction between the operation of *intellectus* and the operation of *ratio*, in the human being. However, he nowhere capitalizes upon this distinction. See his substantive discussion in *De Veritate* 15.1.
- 264. Jochem Hennigfeld, Geschichte der Sprachphilosophie. Antike und Mittelalter (New York: de Gruyter, 1994), p. 297: "Das 'natürliche Wort' ist also mit dem 'Begriff' gleichzusetzen. Insofern wird man im nomen naturale des Cusanus das verbum intimum Augustins ... oder das verbum naturale Anselms ... wiedererkennen. Aber das natürliche Wort wird jetzt 'nominalistisch' verstanden. Während Augustinus—worin Anselm ihm nicht widerspricht—die Sprachunabhängigkeit des inneren Wortes betont, stellt Nikolaus von Kues die Einheit von Begriffsbildung und Namensetzung heraus. Dieselbe Bewegung des Verstandes (motus rationis) setzt sowohl den Begriff als auch den Namen. Deshalb kann Nikolaus von Kues sagen: '... eine Sache ist nichts [nämilich: nicht etwas], wenn sie nicht unter eine Bennenung fällt (rem nihil esse nisi ut sub vocabulo cadit)'" The Latin quotation is from DM 2 (65:9-10).

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265. DM 2 (68:1-7).
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266. DM 3 (69:14-18).

267. *DM* 7 (106:3-19).

268. DI I, 22 (69:3-4). De Coniecturis I. 4 (15:1). Cf. DI I, 24 (77).

269. Ap. 16. See Nicholas's further explanation, in Ap. 17-18, as to the sense in which "God is all things." See also my Nicholas of Cusa on Learned Ignorance: A Translation and an Appraisal of De Docta Ignorantia (Minneapolis: Banning Press, 1985, 2nd ed.), pp. 10-12. Note also Chap. 4 of my Nicholas of Cusa's Metaphysic of Contraction (Minneapolis: Banning Press, 1983).

270. Even in the next life personal identity will be retained, teaches Nicholas against the Averroists: "When an intellectual spirit—whose operation is supratemporal and, as it were, on the horizon of eternity—turns toward eternal things, it cannot convert these things into itself, since they are eternal and incorruptible. But since it itself is incorruptible, it is also not converted into these things in such a way that it ceases to be an intellectual substance. Instead, it is converted into these [in such a way] that it is absorbed into a likeness to the eternal things—[absorbed], however, according to degrees, so that the more fervently it is turned toward these things, the more fully it is perfected by them and the more deeply its being is hidden in the Eternal Being" [DI III, 9 (236:8-16)]. See also DM 12 (143-144).

271. De Filiatione Dei 3 (70). Cf. De Filiatione Dei 6 (88:8-10): "Moreover, [the intellect] does not [then] behold differences-of-things in a variety of numbers but beholds [these things] intellectually in the simple unit, which enfolds every number."

272. De Filiatione Dei 6 (85-86) and 3 (67:10).

273. DI I, 26 (88:19-20). CA II, 1 (88:16).

274. Sermo 173 (Haubst number): "Habet [anima intellectiva] tamen finitam virtutem. Sed cum sit imago viva infinitae virtutis, potest se illi virtuti facere similiorem, et Deo fit conformior. Intellectus autem fit Deo conformior per intelligere."

275. Compendium 2 (4:13). Sermo 217 (Haubst number): "Unde recte dicebat Aristoteles, quod omnes homines naturaliter scire desiderant. Desiderium est motus[,] rationalis naturae ad veritatem."

276. Compendium 6 (17). In his sermons Nicholas emphasizes the interrelationship between knowing and loving. These texts have been signaled by Johannes Peters in his "Grenze und Überstieg in der Philosophie des Nikolaus von Cues," pp. 91-215 in Hedwig Conrad-Martius et al., editors, Symposion. Jahrbuch für Philosophie (Munich: Alber, 1955 (Vol. 4)). See especially pp. 193-210. Note also Peters' orienting statement: "Wenn im folgenden versucht wird, die wesentliche Lage des kusanischen Denkens aus der Liebe zu bestimmen, so muss gleich zu Beginn darauf verwiesen werden, dass mit Liebe hier keine nur ontische Haltung verstanden ist. Liebe in dem hier gemeinten Sinne gehört nicht in die Psychologie, sie ist fernzuhalten von jeder Einstufung in Gefühlskategorien. Wir begreifen Liebe hier vielmehr als ontologische Verfasstheit der mens, d.h. als eine Weise, wie das Gedächtnis sich zum Seienden im ganzen verhält. Als soche ist die Liebe nicht etwas, das von der mens her sein oder nicht sein könnte, sondern diese ist von jener in den Anspruch genommen" (pp. 193-194).

277. Josef Koch, Die Ars coniecturalis, op. cit., p. 35.

278. Norbert Henke and those influenced by him tend thus to generalize from *De Filiatione Dei*. See Henke's *Abbildbegriff*, p. 54.

279. Cf. De Coniecturis II, 14 (145:18).

280. NA 24 (112:5 - 113:3).

281. Theo van Velthoven comes close to making this construal. See his *Gottess-chau*, *op. cit.*, pp. 90-121. Velthoven (p. 112) correctly distances himself from those such as Josef Koch, Maurice de Gandillac, Ernst Hoffmann, and Hildegund Menzel-Rogner, who view Nicholas's doctrine of the mind's enfolding of concepts as cognate in important respects with Kant's critical philosophy in the *Critique of Pure Reason*. But he does so for the wrong reason with respect to Cusa. For he misconceives Cusa's epistemology as maintaining "dass auf der Ebene der begrifflich artikulierten

Erkenntnis der Geist nichts anderes erkennen kann als jene Begriffe selbst, und dass die unabhängig vom Geist bestehende Wirklichkeit für ihn in Dunkelheit gehüllt ist. Im Erkenntnisprozess begegnet der Geist ausschliesslich seinem eigenen Werk. Aber dadurch erfährt er sich selbst als die begriffliche Einfaltung, die selbst nicht durch die Wirksamkeit des Geistes zustande gekommen ist, sondern die Bedingung der Möglichkeit dieser Wirksamkeit bildet. In sich selbst entdeckt der Geist aufgrund der in ihm wirksamen Widerspiegelung der göttlichen Wahrheit, welche die absolute Einfaltung von allem ist, die Wirklichkeit, so wie diese in ihm auf geistige Weise eingefaltet ist. Daher kann er die durch Entfaltung gebildeten Zeichen und Begriffe als Zeichen der in Begriffen unerreichbaren, aber auf einem tieferen Niveau notwendigerweise bestätigten Wirklichkeit begreifen" (p. 121).

Cf. Fritz Nagel, Nicolaus Cusanus und die Entstehung der exakten Wissenschaften (Münster: Aschendorff, 1984), pp. 23-24: "Wir haben den cusanischen Weltbegriff als einen Strukturbegriff kennengelernt und gesehen, in welcher Weise dadurch ein neuer Erkenntnisbegriff gefordert ist. Erkenntnis von Welt kann nämlich nicht mehr Prädikation von Eigenschaften von Objekten in der Welt bedeuten, sondern muss begriffliche Nachkonstruktion der Weltstruktur sein. Der unmittelbare Bezug des erkennenden Subjekts zur Welt ist damit abgeschnitten. Zwischen das Subjekt und die zu erkennende Weltstruktur tritt eine Begriffsstruktur, die zwar auf die Welt bezogen, nicht aber aus der Welt, sondern aus dem die Welt erkennenden Subjekt hervorgegangen ist. Sie ist sogar das ausschliessliche Produkt dieses Subjekts. Das Subjekt steht daher der Welt nicht mehr unmittelbar gegenüber, sondern begegnet ihr immer nur über den Entwurf seiner eigenen Begriffsstruktur. Im Erkennen von Welt geht es daher dem Subjekt in erster Linie um das Erkennen seiner eigenen Begrifflichkeit, über deren Angemessenheit oder Nichtangemessenheit es im jeweiligen Erkenntnisvollzug stets zu reflektieren hat. Spontaneität des Subjekts und Reflexion über diese Spontaneität sind daher die konstitutiven Elemente des cusanischen Erkenntnisbegriffs, die sowohl die Sicherheit als auch die Beschränkung der Erkenntnis begründen" (my italics).

282. E.g., consider VS 29 (88:1-6): "Et adverte, quomodo dixi supra notiones rerum sequi res. Virtus igitur intellectiva ad rerum notiones se extendit et ideo sequitur rerum essentias. Sed essentia illius virtutis prior est virtute sua et essentiis ignobilioribus sensitivis, quae post ipsam sunt. Non enim essentia animae intellectivae est sua virtus et potentia. Hoc quidem solum in deo verum esse potest"

283. "... mind makes these [sensory] assimilations in order to have concepts of perceptible objects From such concepts as those elicited in the foregoing way by assimilation, our mental power makes mechanical arts and both empirical and logical surmises." *DM* 7 (102:7-14).

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284. VS 36 (107:2).
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287. Ap. 28:18-19. DP 5. Cf. Nicholas's statement "to create is to bring forth from not-being to being" with Thomas's similar statement (ST I.45.1c).

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288. VS 39 (116:9).
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289. I have elsewhere spent much time refuting the view that, according to Nicholas, God's being is in a certain respect contracted. For present purposes, let it suffice to note several passages from *DI*, including *DI* II, 9 (150:8-13): "there can be

^{285.} Compendium 4 (8:16-22).

^{286.} Compendium 11 (36:10-12).

no created thing which is not diminished from contraction and does not fall infinitely short of the divine work. God alone is absolute; all other things are contracted. Nor is there an intermediary between the Absolute and the contracted, as those imagined who thought that the world-soul is mind existing subsequently to God but prior to the world's contraction." See also *DI* II, 9 (148:8). *DI* II, 8 (136:9-10). *DI* III, 1 (182:5-6).

Regarding use of the word "emanation," cf. Aquinas, ST I.45.1c: "Respondeo dicendum quod ... non solum oportet considerare emanationem alicuius entis particularis ab aliquo particulari agente, sed etiam emanationem totius entis a causa universali, quae est deus, et hanc quidem emanationem designamus nomine creationis"

290. DM 15 (160:1). De Filiatione Dei 6 (90:1). Cf. John Wenck's words at the end of his De Ignota Litteratura: "Et sic est finis scriptis cursorie Heydelberg."

291. John Wenck, *De Ignota Litteratura* 29. See my *Nicholas of Cusa's Debate with John Wenck: A Translation and an Appraisal of De Ignota Litteratura and Apologia Doctae Ignorantiae* (Minneapolis: Banning Press, 3rd ed. 1988).

292. Karsten Harries, "Problems of the Infinite: Cusanus and Descartes," American Catholic Philosophical Quarterly, 64 (Winter 1990), p. 104. However, see Harries' important article "The Infinite Sphere: Comments on the History of a Metaphor," Journal of the History of Philosophy, 13 (January 1975), 5-15. Moreover, Harries is one of the few scholars who recognize the influence, on Cusa, of Leon Battista Alberti's De Pictura.

293. Compendium 10 (32:6). Cf. De Filiatione Dei 6 (86:4-5).

294. DM 2 (64:12-13).

295. DM 15 (157:21-22).

296. Apostolic abbreviators were officials of the Apostolic Chancery. They were responsible for composing papal letters and for recording other papal documents. Their numbers varied, depending upon the pope's perceived administrative needs.

For a biography of Alberti, see Girolamo Mancini, Vita di Leon Battista Alberti (Florence: G. Carnesecchi e Figli, 2nd ed. 1911).

297. See Giovanni Santinello's extensive examination in his "Nicolò Cusano e Leon Battista Alberti: pensieri sul bello e sull'arte," pp. 147-183 in Paul Wilpert *et al.*, contributors, *Nicolò da Cusa* (Relazioni tenute al convegno interuniversitario di Bressanone nel 1960). Florence: Sansoni, 1962. On pp. 177-178 Santinello writes, in a summarizing way: "Abbiamo così potuto rilevare alcune concordanze di pensiero, pur nella diversità di certi accenti e soprattuto del punto di vista, fra il Cusano e l'Alberti a proposito di tre concetti fondamentali: il bello, l'arte, la prospettiva

"Ma tali concordanze si possono giustificare, almeno in parte, mediante la partecipazione di Alberti e Cusano ad una cultura contemporanea loro comune e a fonti culturali che abbiamo visto citate in entrambi, soprattuto Platone e i neoplatonici, Boezio per le nozioni matematiche e musicali, il pitagorismo e l'ermetismo. Anche Vitruvio, fonte massima dell'Alberti per il *De re aedificatoria*, era noto al Cusano. In mancanza di documenti espliciti non si potrà parlare di influenza reciproca dell'uno sull'altro, ma soltanto di corrispondenze ideali."

In a footnote Santinello adds: "Inoltre è significativo che l'igrometro di cui parla il Cusano nel *De staticis experimentis* ... sia fondato sullo stesso metodo dell'igrometro di cui parla l'Alberti nel *De re aedificatoria* É da tener presente che il Cusano compose il *De staticis experimentis* nel 1450, l'anno stesso in cui l'Alberti

stave componendo l'opera sull'architettura" (p. 178n).

298. De Staticis Experimentis 163-164. See, below, n. 6 of Notes to De Staticis Experimentis.

299. De Staticis Experimentis 185.

300. De Staticis Experimentis 191.

301. De Staticis Experimentis 192-193. See also DM 6 (91-92).

302. De Staticis Experimentis 181. Cf. Leon Battista Alberti, De' ludi matematici 8 [pp. 415-416 in Anicio Bonucci, editor, Opere Volgari di Leon Battista Alberti (Florence: Tipografia Galileiana, 1847 (Vol. IV)].

303. De Staticis Experimentis 170. Cf. Alberti, De' ludi matematici 20 (pp. 438-439 in Anicio Bonucci, editor, Opere Volgari, op. cit.). See Marshall Clagett's account of the influence of Archimedes' ideas on those individuals such as (and including) Cusa and Alberti: "Archimedes in the Late Middle Ages," reprinted in section XII, pp. 239-259 of Clagett's Studies in Medieval Physics and Mathematics (London: Variorum Reprints, 1979). See also Clagett's The Science of Mechanics in the Middle Ages (Madison: University of Wisconsin Press, 1959), pp. xxiv-xxv and 97-99. "In the early fifteenth century, Nicholas of Cusa can be connected at least remotely with the tradition of the Pseudo-Archimedean treatise [De ponderibus Archimenidis], although his treatment of the problem of specific gravity in his De staticis experimentis ... completely abandons the mathematical demonstrations characteristic of the thirteenth-century treatise; even so, his vaunted experiments are little more than 'thought' experiments' (p. 97).

304. *De Staticis Experimentis* 179. Leon Battista Alberti, *L'architettura (De Re Aedificatoria)* 10.3 [Latin text as edited and translated by Giovanni Orlandi (Milan: Edizioni il Polifilo, 1966), p. 891 (Vol. 2)].

305. Cited from Joan Kelly, Leon Battista Alberti: Universal Man of the Early Renaissance (Chicago: University of Chicago Press, 1969), p. 206. De Re Aedificatoria was written before 1452, when a copy of it was presented to Pope Nicholas V. It can be argued that much of it was written prior to 1450 the date of Cusa's De Staticis Experimentis.

306. Joan Kelly, Leon Battista Alberti, op. cit., pp. 204-205.

In a related vein, *nota bene*.: "Lynn Thorndike's suggestion that Blasius' *De ponderibus* might have influenced Nicholas of Cusa's *De staticis experimentis* is not at all confirmed by a comparison of the two works" [Ernest A. Moody and Marshall Clagett, introducers, editors, and translators, *The Medieval Science of Weights* (Madison: University of Wisconsin Press, 1952)], p. 236.

307. De Staticis Experimentis 182.

308. Pierre Duhem, Études sur Léonard de Vinci: ceux qu'il a lus et ceux qui l'ont lu (Paris: F. de Nobele, Vol. II, 1955), p. 241: "La flêche tirée par un archer qui se trouve sur le pont du navire garde, au cours de son mouvement, la vitesse que le mouvement du navire lui a communiquée au moment du départ; cette vitesse se compose à chaque instant avec celle que lui aurait communiquée un archer immobile, en sorte qu'une même flêche, tirée par un même arc, a toujours le même mouvement relatif par rapport au navire, quelle que soit la vitesse qui anime le navire."

309. De Staticis Experimentis 177:14-23. Note Gerda von Bredow's "Nikolaus von Kues und die Alchemie. Ein Versuch," MFCG 17 (1986), 177-187.

310. De Staticis Experimentis 189:1-2.

- 311. *De Staticis Experimentis* 188. Note Nicholas's not unfavorable allusion to the astrologers, in *DP* 23.
 - 312. De Staticis Experimentis 188.
 - 313. De Staticis Experimentis 191:6-7.
 - 314. DI II, 11 (159:10-14).
 - 315. DI II, 12 (169:4-13).
- 316. J. Marx, compiler. *Verzeichnis der Handschriften-Sammlung des Hospitals zu Cues bei Bernkastel a./Mosel*. Trier, 1905 (reprinted Frankfurt am Main: Minerva, 1966).