



## Nicholas of Cusa

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*Mind*, New Series, Vol. 34, No. 136. (Oct., 1925), pp. 436-454.

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*Mind* is currently published by Oxford University Press.

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### III.—NICHOLAS OF CUSA.

BY T. WHITTAKER.

FROM the birth of Nicholas of Cusa in the first year of the fifteenth century to the death of Giordano Bruno in the last year of the sixteenth, there extends the whole of the period commonly known as the Renaissance. Before Cusanus we are back in the later Middle Age; after Bruno we are in the distinctively modern world. And, unlike as were the fates of the Roman Cardinal and the condemned heretic, the two men were much alike not only in ideas but in spirit. The hopefulness of the early Renaissance, so conspicuous in Cusanus, was retained by Bruno in the time of the Catholic reaction. And there are more than mere germs of Bruno's pantheism in the work of the "divine Cusanus" whom he so enthusiastically celebrated.

The resemblances need not surprise us too much; for there is a continuous pantheistic tradition running from ancient to modern philosophy. Between Cusanus and Bruno there is undoubtedly direct affiliation of doctrine; but the general derivation is largely independent of contacts between one pantheistic thinker and another. There was a common source by which orthodox scholasticism had been permeated in such a way that a thinker predisposed to pantheistic ideas could draw them from the dialectical discussions in the ordinary text-books of philosophy. And the later thinkers often knew nothing of the earlier ones whom they most resembled. Neither Cusanus nor Bruno nor Spinoza can have read Erigena, whose great work *De Divisione Naturæ* was sentenced to destruction by Pope Honorius III. in 1225, and did not come to light again through a single copy till 1681. And there is no evidence that Spinoza had read either Cusanus or Bruno. Directly or indirectly the source is always Neo-Platonism. Cusanus, one of the first in Western Europe to study Greek after its revival, knew the ancient Neo-Platonic thought to some extent directly; but he probably did not know very much more of it than Erigena, one of the last who could read Greek before it ceased to be studied for

six centuries. The knowledge he chiefly shows is of the positions transmitted by "Dionysius the Areopagite" and by commentators like Chalcidius, the translator of Plato's *Timæus*. To Bruno the sources were far more abundantly accessible; and he had a knowledge of Greek, though he probably read the Greek authors chiefly in Latin translations. Spinoza's source for the Neo-Platonic modes of thinking discoverable in the minute structure of his philosophy is to be sought in scholastic text-books, Jewish and Christian, and in some heterodox Jewish philosophers. His distinctive positions cannot be explained, as was for a long time supposed, simply from Descartes.

For the logical character of the pantheism that took form in the newer minds, it does not seem to have mattered very much whether they derived the elements of Neo-Platonic thought from the original pagan or from Christianised sources. Within the limits of pure philosophy Cusanus, who knew chiefly the more or less Christianised Neo-Platonism of "Dionysius," scarcely yields in rigour and audacity to any one. In the opening chapters of his most celebrated work, *De Docta Ignorantia*, he is recognisable at once as a great and an original thinker. It is on the basis of the first two books of this work that I propose to write a brief exposition of his philosophical doctrines.

The opportunity has been furnished by a critical edition published in Italy in 1913.<sup>1</sup> This is the first new edition of the Latin text since 1565. The work itself, we know from an extant record, was finished on the 12th of February, 1440, eight years before Cusanus was made a Cardinal. His fame in his own and the succeeding age was first German and Italian, and then European;<sup>2</sup> and it was largely among reformers. No doubt his proof, before Valla, of the historical impossibility of the "Donation of Constantine," helped in this.<sup>3</sup>

The title of the work that will always preserve his memory, *De Docta Ignorantia*, must not mislead us. His "learned ignorance" is completely different from Pyrrhonic suspension of judgment. It is conceived and put forward as a kind of knowledge, and as knowledge of the highest things. It is such knowledge as is attainable of the Infinite, or Absolute,

<sup>1</sup> *Nicolai Cusani De Docta Ignorantia Libri Tres. Testo Latino con Note di Paolo Rotta. Bari: Laterza, 1913.*

<sup>2</sup> In the dedication prefixed to the fourth edition of his works (Basel, 1565), there are mentioned as interested in Cusanus "viri Germani, Galli, Itali, Hispani, Angli et Poloni" (Rotta's Preface, p. xxxv).

<sup>3</sup> Rotta, p. xxxvii, n. 1.

and its relation to the universe. Want of this "learned ignorance," Cusanus says, prevented the ancients from innovating in astronomy as much as they might have done.

A century before Copernicus, he had completely rejected the Aristotelian and Ptolemaic astronomy. The earth, he distinctly says, moves; and so does every other body in the universe. The other worlds, he also held before Bruno, are inhabited. He did not, however, in any way, so far as I can make out, anticipate the definite Copernican hypothesis regarding the solar system, on the multiplication of which Bruno built his general theory of the constitution of the universe. Both he and Bruno deduce from their metaphysical principle, which asserts the infinity of the Cause or Reality, the position that the universe is in some sense infinite; but the senses differ. In sweep of poetic vision, Bruno has an immense advantage. His absolutely infinite universe, imagined to any assignable extent, remains always picturable. Cusanus seems to have felt no need for anything but the most generalised intellectual statement, and gives no new picture of the order of the worlds. Yet he is not without a compensating advantage. He had thought with more accuracy about the presuppositions of mathematical science; and it is possible that, while the abstract formula of Cusanus still remains defensible, Bruno, in making a leap from his own metaphysic to a spatially infinite universe with absolutely innumerable worlds, like that of Anaximander or of Lucretius, had come upon a view apparently imaginable without limit but in the end unthinkable.

Cusanus, on the other hand, definitely refuses to infer, from the mathematical possibility of adding space to space and number to number for ever, the actual existence of infinite space or of an infinite number of things. His universe, though he sometimes calls it infinite, is therefore simply a universe without assignable limits; and he comes remarkably near, though he does not actually arrive at, the description of the whole, by modern physical relativists, as "finite but unbounded".

More detail on these questions will come later. The preliminary outline should have made it clear that the metaphysic of the Infinite or Absolute was not conceived by the thinkers whom it inspired as a barren formula compatible with any view of the visible world. For them, it gave coherence and direction to the revolution that new science was preparing; and the very difference, along with likeness, in the applications made by Cusanus and by Bruno, is evidence of its stimulating power.

Linking himself to ancient thinkers, Cusanus, in his dedication to Cardinal Giuliano Cesarini, lays stress on "wonder" as the beginning of philosophy. There is a natural desire, he says, in all things to exist in a better mode. Thus a sane and free intellect desires and thinks it embraces truth. Difficulty increases in the process of search, especially in mathematics. All knowledge is by a kind of analogy or "proportion"; and the infinite as infinite, since it escapes all proportion, is unknown. Proportion cannot exist without "number". This conception Pythagoras extended from mathematics to all knowledge. Trying to go beyond number to the infinite, Socrates, Solomon, and "a certain other man of divine spirit" (conjectured by the editor to be Hermes Trismegistus)<sup>1</sup> have found that this ultimate knowledge is concealed from sight. Yet the knowledge that we do not know is itself an attainment in which the intellect can find satisfaction; and this it is that we call "learned ignorance".

As with all who speak of the unknowable, we soon find that much concerning it is held to be known. Cusanus applies to it first his favourite term, "the maximum". The maximum is that than which there can be nothing greater. It is absolutely one because it is all, and all things are in it because it is the greatest. Because nothing is opposite to it, the minimum coincides with it; wherefore also it is in all. In Book i., the philosopher says in laying down his plan, it will be treated as incomprehensible by human reason (*i.e.*, as God); in Book ii., as universal unity of essence in the many things of the world, not having subsistence outside the plurality in which it is. Book iii. will be devoted to the mysteries of Christian theology, showing how the determinate and particular in Jesus is at the same time the universal and absolute.

It is in reference to this third head that Bruno becomes, as Roman Catholic writers admit, though the admission is not meant for praise, "more logical than Cusanus". With extreme candour he told the Inquisitors at Venice that he was unable to combine, consistently with his speculative philosophy, the finite and the infinite in the Incarnation. In truth, Book iii. is quite arbitrarily connected with the rest; and I do not propose to give any exposition of it. It is not, like the speculative theology of Origen or of John Scotus Erigena, an attempt to transform Christianity itself, but simply sets forth the dogmas of Christian orthodoxy with a slight colouring from the philosophical vocabulary

<sup>1</sup> Lib. i., cap. 1, p. 4 n.

elaborated in the first two books. Bruno does not ignore this side of the divine Cusanus, but remarks on it as something that infected his genius, which without it "would have been not merely equal to but far superior to that of Pythagoras."<sup>1</sup>

At the end of the chapter in which he sketches his plan, Cusanus puts excellently a point on which Plato and Berkeley also have incidentally dwelt; namely, that in philosophical discussion it is necessary to look beyond the words to the meanings, not quibbling over the exact literal or grammatical interpretation.<sup>2</sup>

Already in this chapter we find the position, common to Cusanus and Bruno, that in the Absolute all that is possible exists actually. Two or more things, he proceeds in the next, cannot be found of such similarity and equality that there shall not be other possible ones more similar up to infinity. Hence, measure and measured, however near equality, will always remain different. The finite intellect, therefore, cannot precisely understand the truth of things by similitude. For there is nothing precisely like the indivisible truth to measure that in which it consists; just as that which is not a circle cannot measure the circle, of which the being consists in something indivisible. But as a polygon inscribed in a circle becomes more and more similar to it as it has more angles, though it never becomes equal even by multiplication of angles to infinity, unless it is resolved into identity with the circle; so we approach the truth more in so far as we learn that in its most absolute necessity of identity with itself it is incomprehensible by us.

This leads to questions concerning the theory of knowledge, to which Cusanus in his various works was always returning. His general position is that we attain the maximum "not otherwise than in an incomprehensible manner". The whole development of his thought here is from Platonism. Like Plato and, after him, Proclus, he is seeking to formulate a mental act that is not step by step reasoning; a kind of "nameless" process.<sup>3</sup> He himself, in another work, refers to Plato's well-known phrase in the *Timæus*, where empty space or "not-being" is said to be apprehended by a sort of bastard reasoning (*λογισμῶ τιμι νόθῳ*). The indeterminate possibility called matter Cusanus describes as got hold of "per adulterinam quamdam rationem".<sup>4</sup> This is to apply the

<sup>1</sup> See Dr. J. L. McIntyre's *Giordano Bruno*, Part ii., ch. 1, p. 141.

<sup>2</sup> Lib. ii., cap. 2, p. 6: "Oportet autem attingere sensum volentem potius supra verborum vim intellectum afferre quam proprietatibus vocabulorum insistera."

<sup>3</sup> Lib. i., cap. 5 *init.* The maximum is "innominabiliter nominabile".

<sup>4</sup> Cited by Rotta in a note to lib. ii., cap. 8, p. 91.

phrase of Plato to the Aristotelian matter with which his own "matter," as it came to be called, was identified by the Neo-Platonists, though Aristotle himself knew that "the Platonic matter" was simply space.<sup>1</sup> The point, however, does not very closely concern Cusanus, who did not admit bare possibility in general, but, as we shall see, only particular possibilities. His own view about the mode of reaching the maximum resembles rather that of Proclus, who says that the One, at the other extreme from matter or bare possibility, is apprehended by "spurious intellect" or "bastard intuition" (*νόθω νόω*).<sup>2</sup> We must admire the candid concession all round of a defect in point of form. At the same time we must remember that the mind does not discover, but only tests truth, even in the regular sciences, by syllogism and the canons of induction. And the anomalous processes may be resolved; as for example Berkeley, in his *Theory of Vision*, resolved the appearance of direct intuition of space into a series of unformulated but effectual judgments. Perhaps something similar may be done for the paradoxes about the Infinite and Absolute which follow.

For we have now arrived at the famous principle of the coincidence of the maximum (than which there cannot be a greater) with the minimum (than which there cannot be a less). Cusanus tries to make this clearer by telling us to take the "most" great and the "most" small in quantity and eliminate intellectually the "great and small": then we shall find coincidence in the superlative. This superlative is beyond all opposition, above all affirmation and likewise negation. "And all that is conceived to be, no more is than it is not. And all that is conceived not to be, no more is not than it is." "God, who is least of all light, is most of all light."<sup>3</sup> This transcends our intellect, which cannot combine contradictories in their principle by the way of reason. We have to see in a way beyond all discourse of reason that to be absolutely greatest is to coincide with the absolutely least.

The reflection to be made on all these quasi-mathematical paradoxes is that they have their real basis in a psychological thought. The insight out of which they sprang is that mind

<sup>1</sup> *Phys.* iv. 2, 209, b 11. Zeller quite rightly quotes this in support of his own view: see *Die Philosophie der Griechen*, ii., 1, 4th ed., p. 735, n. 3.

<sup>2</sup> I have tried both renderings; the first in *The Neo-Platonists* (Supplement), the second in the article "Reason" in the *Encyclopædia of Religion and Ethics*.

<sup>3</sup> *Lib. i.*, cap. 4: "Deus est maxime lux, qui est minime lux." This is probably a reminiscence of Psalm cxxxviii. 12 (Vulgate), quoted more exactly by Erigena and by Bruno: *Sicut tenebrae ejus, ita et lumen ejus*.

at once contains infinite space as perceived or conceived and itself does not occupy the minutest portion of space. When this insight tries to give itself a geometrical or arithmetical form, it inevitably falls into paradoxes. Thus Hamilton set against one another the Infinite and the Absolute, the "unconditionally unlimited" and the "unconditionally limited," and made them out irreconcilable by treating them as spatial. If we take the Absolute and Infinite as metaphysical terms, as referring to something of the nature of mind, the contradiction disappears and the coincidence is obvious. Immaterial reality, as distinguished from appearance, is at once absolute and infinite, that is, complete in itself because it contains all, and boundless because there is nothing to limit it. If, however, we must externalise it in order to have some imaginative form before us, then, it seems to me, the result that follows from the arguments of Hamilton and Mansel is not the agnosticism derived from them by Spencer, but acceptance of the coincidence of opposites as stated by Cusanus and Bruno. It may be observed that the Eleatics, before the great psychological development of philosophy, had, on their own line of objective thinking, obscurely arrived at something like this. Parmenides showed that "that which is" must be self-complete or absolute, and Melissus showed that it must also be infinite or boundless. Between came the paradoxes of Zeno on space and motion.<sup>1</sup>

Without number, Cusanus proceeds, there could be no order in things, no determinate relations of the many. In number we arrive at unity as the minimum. Unity is not a number, but the principle of all number, and this coincides with the maximum, which is infinity. This unity which is infinity, Cusanus expressly says, is God.<sup>2</sup> God is one in such manner that he is in act all that it is possible to be. As unity is presupposed by number, so the pluralities of things descend from infinite unity, and could not be without it.

The maximum is above all nameable being. It is most true that, simply in itself, the maximum "is or is not," or "is and is not," or "neither is nor is not."<sup>3</sup>

Cusanus recurs frequently to ideas of a philosophical Trinity. The first of his developments may be stated in detail as an example of the procedure.

Unity is prior by nature to otherness (alterity) which is the same as mutability; and that which naturally precedes mutability is immutable, and therefore eternal. Unity therefore is eternal. Equality similarly is prior to inequality,

See "A Note on the Eleatics," *MIND*, October, 1924 (N.S., xxxiii., 428).

<sup>2</sup> *Lib. i.*, cap. 5.

<sup>3</sup> *Ibid.*, cap. 6.



while inequality and otherness are together by nature. Equality therefore is eternal. Unity is either connexion or the cause of connexion; duality either division or the cause of division. But division and otherness are together by nature; wherefore also connexion, like unity, is eternal, since it is prior to otherness. But there cannot be more than one eternal; whence it follows that unity, equality and connexion, since they are all eternal, are one. "Et haec est illa trina unitas, quam Pythagoras, omnium philosophorum primus, Italiae et Graeciae decus, docuit adorandam."<sup>1</sup>

A warning given at the end of these speculations is that, to arrive at reality, at the true maximum, we must go beyond all mathematical figures.<sup>2</sup> After that, we plunge into mathematical symbolism. The use of it is defended on the ground that mathematical abstractions come nearer than any other images that we can use to representing stable reality; and images are indispensable. For Cusanus, Pythagoras, with his doctrine of numbers, is the first of philosophers; next come Plato and the Platonists, among whom he counts Augustine. Even Aristotle, he says, "who wished to appear singular by confuting those before him,"<sup>3</sup> has to recur to mathematical forms for his scientific explanation of forms in nature. This is of course in the characteristic tone of the revolt from Scholasticism.

Cusanus, however, does not relax the scholastic effort after exact thinking. "Everything mathematical," he declares, "is finite, and cannot even be imagined otherwise."<sup>4</sup> Yet mathematical science leads beyond the finite. Every figure, without deviation from the rules of its construction, can be made by continuous modifications to come nearer and nearer to coincidence with figures of which the rules of construction are different. For example, the larger you make the circumference of a circle, the nearer an arc of it is to a straight line; the arc, therefore, of a circle than which there can be no greater will be actually a straight line. If supposed infinite, then, the curve and the straight line coincide. Considered as having reached the end of their modifications, he proceeds to show in detail, the line, the triangle, the circle and the sphere, are all at the same time infinite and one. That in which the notions of all the figures end is not, however, mathematically imaginable, but is simply "infinity". Thus, in dealing with mathematical "signs" in a "transcendent" manner, we find ourselves on the way to the highest reality, which is not in itself a possible object of mathematical science.

<sup>1</sup> Lib. i., cap. 7.

<sup>3</sup> *Ibid.*, cap. 11, p. 25.

<sup>2</sup> *Ibid.*, cap. 10.

<sup>4</sup> *Ibid.*, cap. 12, p. 26.

One method of getting at results is to set lines or surfaces in imaginary motion. Take a radius of a circle and set it in motion with the centre as fixed point; you will get as the result a three-sided figure. If you carry it back to its first position, you will get the complete circle. Continue the radius from the centre to the opposite point in the circumference; you will have marked off a semicircle. Set the semicircle in revolution round the diameter, and you will have a sphere. Now an infinite line is in act all that a finite line is in potency; and so it is at once triangle, circle and sphere. All these, as coinciding with the infinite line, are infinite. But this only means that *if* there were an infinite line it would be all these.

The position, Cusanus allows, is finally impossible as applied to quantities; but, ascending by it to things that are not quantitative, you see that what in quantities is impossible is in the whole necessary. Quantity, we may put it, is an abstraction which, when you try to complete it, leads beyond itself by revealing its incompleteness. This may sound rather Hegelian; but Cusanus is one of the thinkers in whom we are permitted to find anticipations of Hegel.

In the maximum considered as metaphysical reality, all that is possible is also actual. "Absolute possibility itself is not other in the maximum than the maximum itself in act, as an infinite line is in act a sphere; it is otherwise in the non-maximum, for there potency is not act, as a finite line is not a triangle."<sup>1</sup> We see that for Cusanus, as for Bruno later, in spite of the vigorous effort to get clear of the authority of Aristotle, his antithesis of the possible and the actual (*δυνάμει* and *ἐνεργεία*) remains a "form of thought". The real inspiration of the thinking, it is true, does not come from Aristotle but from "Dionysius," the bearer of the systematised Neo-Platonism of Athens into Christian theology. God, who is the maximum, Cusanus proceeds, is not this to the exclusion of that; for, as he is all things, so also he is nothing of all things. He is known above all mind and intelligence; and this is the "learned ignorance". Returning to his previous formulations, Cusanus declares the minimum not opposed to the maximum; "but all that is measurable falls between the maximum and the minimum".<sup>2</sup>

In this region of the measurable, nothing is equal to anything else: "no two finite lines can be precisely equal";<sup>3</sup> but all participate, though unequally, in the maximum. The infinite line is the *ratio* of all finite lines; a position expressly derived from the Platonic commentators, and meaning, if we

<sup>1</sup> Lib. i., cap. 16, p. 32.

<sup>2</sup> *Ibid.*, p. 35.

<sup>3</sup> *Ibid.*, cap. 17, p. 38.

may go back to Plotinus for its origin, that the law or formula of the production of a line is independent of any particular dimensions. Of the maximum beyond intellect, this infinity which is in each finite thing and yet in none so far as it is a particular thing, must be for us a symbol. The quest of the ultimate maximum issues in mystery. The way to seek knowledge of it is to remove in thought all participation of particular beings. When all these are removed from the intellect, nothing appears to remain. "And therefore the great Dionysius says that understanding of God rather approaches to nothing than to something."

What is meant by greater and less participation is illustrated by straight and curved lines. The straight line participates more in the "infinite line," which is the line as line; for the curve as such can be neither a maximum nor a minimum. "The most and the least curved is not other than a straight line."<sup>1</sup> Thus the circumference of a circle participates more in rectitude in proportion as it is larger. The problem therefore in dealing with curves is to resolve the curvature in relation to rectitude.

The resolution of the triangle into a line by modification of its sides and angles to infinity is applied as symbolism to the reconciliation of trinity and unity. Out of this reconciliation there emerges the truth that the opposition of plurality in general and of unity, of "distinction and indistinction," ceases to have a meaning in the infinite.<sup>2</sup> Counting is inapplicable to deity; a thought with which Cusanus is so possessed that he attributes it to Augustine; quoting him as saying, *Dum incipis numerare trinitatem, exis veritatem.*<sup>3</sup> Trinity and unity are the same in the infinite and eternal because it embraces contradictories. The maximum, "though infinitely above all trinity,"<sup>4</sup> is to be called triune, as in mathematics the triangle, being the polygon with the smallest number of sides, can be taken at once as the minimum and the adequate representation of polygonal figures in general; these serving for symbols of all the multitudinous operations of nature and of the mind, comprehended in the absolute maximum.

Applying next the notion of the circle—circumference and

<sup>1</sup> Lib. i., cap. 18, p. 40.

<sup>2</sup> *Ibid.*, cap. 19, p. 44: "Nam ubi distinctio est indistinctio, trinitas est unitas; et e converso ubi indistinctio est distinctio, unitas est trinitas".

<sup>3</sup> I accept it on the authority of the editor (p. 43 n.) that Augustine has used no such expression as that with which he is here credited. Cusanus, though erudite, is loose in his quotations.

<sup>4</sup> Lib. i., cap. 20, p. 47: "licet sit supra omnem trinitatem per infinitum".

centre, with diameter as medium—to the unity of the maximum and the minimum, Cusanus, passing over from symbolism, shows how the maximum is identical with nothing that exists nor yet different from anything. Its all-containing unity comprises being and not-being, “all things that are and are not”.<sup>1</sup> The unity of the motions in it from potency to act and from act to potency, the alternate composition of individuals out of principles and resolution of individuals into principles, “consists in a certain circular perpetuity”.

The providence of God includes all things, even contradictories. It comprehends in its unity both the things that happen and those that do not happen but can happen. “All things in God are God, who is absolute necessity.”<sup>2</sup> So far the doctrine is entirely pantheistic; but there is an approximation to ordinary theism when Cusanus adds that there are many things which God could have providentially determined but did not and will not, while he did providentially determine many things that he had the power to withhold. This is a concession that disappears from the more consistent pantheism of Bruno, who declares that in the infinite universe every possibility is realised. In God, will, power and act are the same.

For the comparison of “the existence of God in act” to an infinite sphere, Cusanus finds a precedent in Parmenides. His editor points out an inexactitude in the reference;<sup>3</sup> yet that both Cusanus and Bruno found an affinity in their own thought to that of the Eleatics is a fact to be accounted for in the history of philosophy. Cusanus at any rate quite rightly takes the sphere to signify for Parmenides the all-inclusive perfection of all that is. Considered in relation to the sphere, all motion, he says, is rest; rest being the end of motion. When he remarks parenthetically that “the sphere arises after infinite circulations,” there may perhaps be a glance at the theory of cosmic evolution in Empedocles; but the revival of the Ionian side of Greek thought, which Empedocles tried to combine with the doctrine of his Eleatic master, was reserved for Bruno.

In the rest of Book i., Cusanus undeviatingly follows out the logic of his system. No affirmative name, he says, is applicable to God, not even that of creator, except in relation to creatures, for he is not any one thing more than he is all others. “If you call him truth, falsehood comes in the way;

<sup>1</sup> Lib. i., cap. 21, p. 49: “reperitur omnia quae sunt et non sunt ambire, ita quod non esse in ipso est maximum esse, sicut minimum est maximum”.

<sup>2</sup> *Ibid.*, cap. 22, p. 51.

<sup>3</sup> *Ibid.*, cap. 23, p. 53n.

if you call him virtue, vice comes in the way; if you call him substance, accident comes in the way, and so with the rest."<sup>1</sup> Even the name of unity, though it seems nearest, is infinitely distant from the reality. The argument is confirmed by citations from Hermes Trismegistus and from Dionysius. In Augustine (less clearly) support is found for the view that the names of the Trinity and of its Persons, being affirmative names, are only relative to distinctions in the human mind. There is no exception even in the most sacred names among the Hebrews and Chaldeans, unless it be the ineffable tetragrammaton (JHVH);<sup>2</sup> but that is an exception because it affirms no property. In short, it is "the exception that proves the rule."<sup>3</sup>

The names assigned to God in the pagan religions are interpreted as names relative to the variety of natural powers in the world. With evident sympathy, Cusanus remarks on the bisexual character attributed to deity in the Hermetic books, and quotes a Roman poet "Valerius," who cannot be identified, for the ascription of double sex to Jupiter.<sup>4</sup> The varied powers being so many, none can be excluded if we attempt to express what is ultimately inexpressible. Yet there is also a negation which excludes all. The idolatry into which the simple folk among the pagans fell was the result of attending to the manifestations of divinity as "explicit" in the world (explicationem divinitatis), instead of adoring the pure unity of God himself, like the Jews and some others. When they ought to have used the varied manifestations as images, they took them for truth. This view Bruno modified only by arguing that there was no error.<sup>5</sup> The Greeks and Egyptians knew what they were doing. It was the Jews and their successors of Christendom and Islam who could not distinguish between the image and the natural or divine power signified by it.

In the last chapter of Book i., we arrive at the culmination of the doctrine in a formal statement of the "negative theology," for which there is an element of idolatry even in the worship of the Jews and Christians, though this vestige is admitted to be necessary. So long as religion affirms of God, as it must, the best we know of "creatures," addressing him

<sup>1</sup> Lib. i., cap. 24, p. 57.

<sup>2</sup> Cusanus knew Hebrew and gives the Hebrew letters.

<sup>3</sup> See Professor Carveth Read on "*exceptio probat regulam*" (*Logic*, 4th ed., p. 274).

<sup>4</sup> Lib. i., cap. 25, p. 60: "Iovem omnipotentem, genitorem, genetricemque Deum."

<sup>5</sup> Cusanus himself allows this as regards the philosophers, referring to Cicero *De natura Deorum*.

as one and three, most wise, light unapproachable, life, truth and so forth, there is, says Cusanus, still idolatry unless it calls in also the negative theology which removes all attributes. In so far as he is simply infinite, God is neither truth nor intellect nor light, neither Father nor Son nor Holy Spirit. Infinity, as infinity, is neither generating nor generated nor proceeding. "When considered as infinity, God is neither one nor many, and, according to the theology of negation, nothing is found in God but infinity." According to that theology, he is "cognoscible neither in this nor in a future world."<sup>1</sup> Nevertheless, the negations that remove the more imperfect things from the most perfect are truer than others. It is truer that God is not a stone than that he is not life or intelligence; truer that he is not ebriety than that he is not virtue; and, correspondingly, the affirmation is truer that he is intelligence and life than that he is earth, stone or body.

This of course is quite consistent with the rest. A pantheism so formally complete as that of Spinoza not only does not assert, but definitely denies, that all manifestations of the reality in things are equal. In Book ii, therefore, we go on to an account of the differences of manifestation within the universe. Nothing in it, Cusanus says, is precisely like anything else. Grades to which no limit is assignable can be passed through without reaching either the maximum or the minimum. The motions in the heavens are never exactly repeated. Even in geometrical diagrams actual equality is impossible; nothing agrees precisely with anything else in figure or in magnitude. Similarly for music, there are countless differences in instruments, voices, and so forth; it is only in the abstract rule that exact proportion obtains. Again, the arithmetical idea of number is not applicable with precision. No one is quite like any one else in anything; and if one were to try for a thousand years to imitate another, he would never attain precision, though the sensible differences might sometimes not be perceived. Changes of a thing can only take place by continuous degrees.

Positions like these passed over in one way or another to Bruno and afterwards to Leibniz; but there is not in Cusanus any anticipation of the central doctrine of Leibniz, the notion of a monad or ultimate individual, psychical in nature. In Bruno there is something of the kind; but, though Leibniz knew works of Bruno, the origins of his own doctrine seem to be traceable without supposing that his acquaintance with them had any important influence.

<sup>1</sup> Lib. i., cap. 26, p. 64: "nec cognoscibilis est in hoc saeculo, nec in futuro."

We have seen that, while the universe, in the view of Cusanus, has no assignable limits, it is not, as Bruno held, actually infinite in extension to correspond with the infinity that its principle has without reference to extension. As contrasted with the infinity of God, the universe could be greater than it is. The reason why it cannot actually be greater, is that matter, or possibility, in which it is founded, by its very nature cannot be extensible to infinity. Thus the mathematical paradoxes of Cusanus pass finally into symbolism. For Bruno also, they are not directly applicable to the cause or principle of the universe; they remain in the region of number and extension; but they have direct application to the universe regarded as actually infinite in space and with absolutely no limit—not merely no assignable limit—to the number of its “worlds”.

Coming to the question of the individual, Cusanus treats it in a way that has little in common with Bruno's treatment of it by reference to atomic speculations. Nothing, he says, is from itself (*a se*) except the maximum simply as absolute. Since this is perfect, how then can there be imperfection in creatures? His reply, brought to its extremest generality, is that the unity in creatures comes from their cause, but that the plurality, the diversity, has no positive cause, but arrives contingently.<sup>1</sup> The creature is “neither God nor nothing”; but it is not a mixture, for there can be no mixture or composition of God (as being) and nothing. The detailed argument here is decidedly difficult; some of the positions stated being evidently only “dialectical”. I agree with the editor<sup>2</sup> that the “pantheism” of some of them is only apparent, if he means naturalistic pantheism;<sup>3</sup> but, in a more generalised meaning of the term, I do not see how the reasoned philosophy of Cusanus can be called anything else. What creatures have from God, Cusanus concludes, is the unity and perfection compatible with their contingency. Each created being acquiesces in its own perfection as a created being, not desiring to be any other thing supposed more perfect, but loving in the first place its own reality as a divine gift, choosing to perfect and preserve this incorruptibly.<sup>4</sup>

<sup>1</sup> Lib. ii., cap. 2, p. 71.

<sup>2</sup> *Ibid.*, p. 73 n.

<sup>3</sup> This is definitely classed by Cusanus (lib. i., cap. 25, p. 61) as an error of some pagans, who held that God is not “outside things” except by an abstraction of the intellect, like “first matter”. The element of “transcendence” that he insists on was, however, retained by Bruno, whose pantheism is undoubted.

<sup>4</sup> Lib. ii., cap. 2 *fin.*

The philosopher himself is evidently not altogether satisfied with the position that individual differences are merely contingent; for in the next chapter he suggests a different answer to his question; *viz.*, that the many pre-existed from eternity in the mind of God, but under the form of unity. The divine intellect, knowing that things cannot participate equally in the equality of being, understood one thing in this way, another in that; and thus they are differently determined, though from one essence.<sup>1</sup> The former answer, however, is repeated on the next page: "the being of a thing is not anything in so far as it is a diverse thing".<sup>2</sup> The nearest Cusanus comes to a solution is to state the antithesis between the "complicatio" of the many in the unity of God and their "explicatio" in the plurality of things. He confesses that he does not in the end understand how this can come about; for of course "the mind of God," though he does not himself raise the objection, is a phrase not corresponding precisely to the "infinite" or "maximum" of his philosophy; but he finally points out, to those who speak in terms of popular theology: "If you say, his omnipotent will is the cause, and will and omnipotence are his being, you must necessarily confess that you are completely ignorant of the mode."<sup>3</sup>

Returning from the diversities of the universe to its nature as a whole, Cusanus finds that, in relation to its principle, the absolute maximum, it is only a relative maximum (*maximum contractum*). It imitates the absolute as far as it can, but is subject to the limitation that its identity is in diversity as its unity is in plurality.<sup>4</sup> The entities in it were not successive emanations, but came forth all at once, since without all its parts in their kinds the universe could neither have been the universe nor perfect in its own manner. In its limitation (*contractio*) to being this or that in its different parts, and not simply one, consists its distinction from God. God, or the absolute maximum, unites contradictories, the world or universe only contraries.<sup>5</sup> Through the mediation of the universe, God, who is the most simple unity, is in all things; as the plurality of things, by means of the one universe, is in God.

Cusanus cites from Anaxagoras the principle that all things are in all (*quodlibet esse in quolibet*), remarking that it is

<sup>1</sup> Lib. ii., cap. 3, p. 76.

<sup>2</sup> *Ibid.*, p. 77.

<sup>3</sup> *Ibid.*, p. 78. As a possible aid to the imagination, a suggestion is added to think of one face mirrored at less and greater distances; the distances to be supposed not local, but signifying degrees of remoteness from the truth of the face.

<sup>4</sup> *Ibid.*, cap. 4, p. 80.

<sup>5</sup> *Ibid.*, p. 79.



perhaps older than Anaxagoras. He makes of it, however, not a physical but a metaphysical principle. He does not mean that no actual thing exists without a mixture, in greater or less proportion, of all the elements, so that no physical element is separable in its purity from the rest. What he seems to mean is that each particular thing points to all the other things in the universe as necessary to make up the whole in its organic unity. "One grade," as it is briefly expressed, "could not be without another, as in the members of the body everything contributes to everything, and all are contained in all."<sup>1</sup> As Humanity considered absolutely is to man as "contracta humanitas," so is God to the world.

The idea of "contractio" means essentially manifestation in things many and distinguishable and knowable only in relation to one another. The universe as "contractum" is not found except unfolded in genera (in generibus explicatum), and genera are not found except in species. Last, in this mode of consideration, come individuals as actually existent things. This Peripatetic touch at the end, Cusanus somewhat obscurely argues, is not inconsistent with his Platonism: "universalia" are not to be regarded as simply "entia rationis".<sup>2</sup>

Discussing the question whether there is an absolutely indeterminate possibility or matter, he concludes that there is not. Only in God do absolute actuality and absolute potency exist, and here they coincide. Absolute possibility in God is God. All things except the first principle being necessarily relative (contracta), nothing in them can be said to be in absolute, as distinguished from relative, potency.<sup>3</sup> In things possibility is always determinate, so that the world could not have been except in the limited modes in which it is. There cannot be a maximum or minimum of possibility in things admitting of less and more, but only a relative possibility of particular things which depends on contingencies.

The predominant position of Platonism in the thought of Cusanus is well illustrated in a disquisition on the soul of the world. He completely rejects gradation between the "mind" and "soul" of the universe as explanatory of anything, and brings back all to the simplicity of the "one infinite form of forms," namely, God. Yet he cannot oppose

<sup>1</sup> Lib. ii., cap. 5, p. 84.

<sup>2</sup> *Ibid.*, cap. 6, pp. 87-88.

<sup>3</sup> *Ibid.*, cap. 8, p. 94: "Quare possibilitas absoluta in Deo est Deus, extra ipsum vero non est possibile; nunquam enim est dabile aliquid per se, quod sit in potentia absoluta, cum omnia, præter primum, necessario sint contracta".

the Platonists without praising the acuteness and rationality of their arguments and remarking (rather irrelevantly) on the unreasonableness of Aristotle's fault-finding.<sup>1</sup>

This rejection of a Neo-Platonic distinction is not, as might perhaps be suspected, an accommodation to Christian theology; for Cusanus observes that many Christians have accepted the notion of a soul of the world as a power subordinate to God, and have tried to defend their position by Scripture.<sup>2</sup> The Cardinal's own doctrine is a more stringent monism. The forms of things, he says, are not distinct except as they are relative (*nisi ut sunt contracte*); in so far as they exist absolutely, they are all in one without distinction. "One infinite exemplar only is sufficient and necessary." It is true that we have to distinguish in the world the "reasons" of distinct things, but this has reference only to the things considered relatively (as "*contracta*"), not to the "one most simple reason of all things". There are no intermediate powers between the absolute and the relative.<sup>3</sup> God alone is soul and mind of the world in so far as these are considered as absolute.

Yet Cusanus himself, in the next chapter, seems to bring in an intermediate power in another way; making of motion a kind of spirit of the universe serving as the "means of connexion of potency and act".<sup>4</sup> "Nature is as it were a complex (*complicatio*) of all things that are done by motion." "This motion or spirit descends from the divine spirit." By it potency passes into act and act into potency. Mediating motion amorously connects all to unity, so that there may be one universe out of all. By this motion things, each unlike the rest, are moved to preserve themselves, if possible in a better state, and to preserve the species by union of the sexes.<sup>5</sup> In this relative order there is no motion that is simply greatest; for the greatest motion coincides with rest (*maximum with minimum*).<sup>6</sup> These positions Cusanus sums

<sup>1</sup> Lib. ii., cap. 9, p. 99. No doubt the editor is right in supposing that the reference is to Aristotle's criticism of the doctrine of Ideas.

<sup>2</sup> Cudworth, in fact, with his doctrines of a "plastic Nature" and so forth, still did this in the seventeenth century.

<sup>3</sup> Lib. ii., cap. 9, p. 101: "*Solus enim Deus est absolutus, omnia alia contracta*".

<sup>4</sup> *Ibid.*, cap. 10, p. 104.

<sup>5</sup> He guards himself against the narrow teleological interpretations that subordinate one species of things to another. "Light," he says (ii., 12, p. 112), "shines from its own nature, not that I may see." The organic character of the universe, however, makes all serviceable to all.

<sup>6</sup> As Bruno afterwards put the "relativist" view: to say that the universe as a whole is moving with infinite velocity would be the same as to say that it is unmoved.

up in one of his philosophical trinities ; assigning to the Father potency, to the Son "act" or "form," and to the divine Spirit "unifying harmony" or "connexion by motion".

As the maximum and minimum of motion coincide, so do the circumference and centre of the universe. In the paradoxical phrases eagerly taken up by Bruno, centre and circumference are everywhere and nowhere. There is no perfect circle in nature, for a truer can always be given than any assigned one. No heavenly body ever returns to the same position or repeats its course with perfect exactitude as regards temporal order. These beginnings of the new astronomy have been indicated above. In detail, as the editor shows, Cusanus had predecessors,<sup>1</sup> though the new ideas quite logically follow from his metaphysics. A fermentation of scientific thought on astronomy, we perceive, had begun in the fifteenth century, which in the sixteenth was retarded for a time and in the early seventeenth received a severer check in the condemnation of Galileo. The very fact that the new cosmology grew in demonstrative force seems to have intensified the organised resistance to it till the breaking-point came.

Some of the ideas of Cusanus, I have suggested, point to a phase of thought later than that which ruled in the next movement of scientific astronomy, for which the "infinite universe" of Bruno became a sort of generally recognised philosophical completion. The world of physics, Cusanus says, though it is not infinite, yet cannot be conceived as finite, since it has no boundaries.<sup>2</sup> Elsewhere he calls it "finite" in a certain sense, that is, as opposed to the "absolute infinity" of its metaphysical principle. The worlds, though innumerable to us, were created "in number". This, however, does not modify his view that there is no absolute position or motion. The relativity of motion and position in general is stated with a completeness not exceeded even by Bruno.<sup>3</sup>

Treating finally of the place of the earth in the universe, he declares it impossible for us to know that it is the only

<sup>1</sup> See the long note to lib. ii., cap. 11, pp. 105-106.

<sup>2</sup> Lib. ii., cap. 11, p. 107: "Cum hic non sit mundus infinitus, tamen non potest concipi finitus, cum terminis careat, inter quos claudatur."

<sup>3</sup> *Ibid.*, p. 109: "Complicata igitur istas diversas imaginationes, ut sit centrum zenith, et de converso, et tunc per intellectum, cui tantum docta servit ignorantia, vides mundum et eius motum et figuram attingi non posse, quoniam apparebit quasi rota in rota, et sphaera in sphaera, nullibi habens centrum vel circumferentiam, ut praefertur."

Of course Bruno would have applied this statement to his infinite universe: the difference is that Cusanus had in reserve the denial of infinitely extended matter and actually innumerable bodies.

realm of "corruption," as the Peripatetics taught. Corruption may be merely resolution into principles that still persist in various ways. The "forms" of things may migrate from one part of the universe to another,—that is, to other inhabited worlds. The material elements are resolved into one another, but this resolution does not take place without limit; the transformations always leave them in a certain proportion.<sup>1</sup> Before Bruno, Cusanus had completely turned away from the mediæval view that our earth is "vilissima et infima". To a spectator in another part of the universe, it would appear as a bright star. And it does not follow, because other worlds besides the earth are inhabited, that they are inhabited by nobler natures; for there can be nothing nobler in its kind than the intellectual nature of man.<sup>2</sup>

<sup>1</sup> Lib. ii., cap. 13.

<sup>2</sup> *Ibid.*, cap. 12, p. 113: "non enim appetit homo aliam naturam, sed solum in sua perfectus esse."