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PARACONSISTENCY AND DIALECTICS AS COINCIDENTIA OPPOSITORUM IN THE PHILOSOPHY OF NICHOLAS OF CUSA

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"Philosophy is a collection of big mistakes, but mistakes so seemingly close to an aspect of truth, that they require serious consideration as premises, at least until their consequences and revelations become temporarily exhausted." (Florencio Asenjo, 1985)

There is an obvious conceptual connection between the modern concept of paraconsistency and the traditional term *coincidentia oppositorum* (coincidence of opposites) as the corner stone in the philosophy of Nicholas of Cusa (or Cusanus, 1401–64). When I was considering this connection, my attention was attracted by a couple of passages concerning Cusanus from some seminal recent books on paraconsistency. I have in mind especially the following three works: 1. Graham Priest, *In Contradiction* (1987), 2. *Paraconsistent Logic*, eds. G. Priest, R. Routley and J. Norman (1989), 3. Graham Priest, *Beyond the Limits of Thought* (1995).¹ In (1) Cusanus is only mentioned among "the number of philosophers who have consciously believed explicit contradictions"²; in (2) he is included into the Christian tradition of Neo-Platonism³, and his *coincidentia oppositorum* is represented with a famous passage from Cusanus' major work *De docta ignorantia* ("Of Learned Ignorance", 1440) where the coincidence between *maximum* and *minimum* is stated:

...in no way do they [distinctions] exist in the absolute maximum [the One]... The absolute maximum... is all things and, whilst being all, it is

¹For details, see References.

²Priest 1987, p. 120.

³Priest and Routley 1989, p. 19.

none of them; in other words, it is at once maximum and minimum of being (*Of Learned Ignorance*, I, 4).⁴

In the third (3) of the mentioned books, a whole section of the first chapter (1.8) is devoted to Cusanus' thought, considered from the point of limits of expression and (in)comprehensibility of God. Priest states that in Cusanus' philosophy we have a paradoxical, and —as he argues— also a "dialetheic" situation (Priest defines "dialetheia" as a true contradiction), since Cusanus "accepts this contradiction about God [i.e. incomprehensibility vs. comprehensibility] as true"⁵; Priest points out that also in this case, as in many other philosophical cases, *both* contradictory claims, named by him "Transcendence" and "Closure", are true:

Moreover, even to claim that God is incomprehensible [Transcendence] is to express a certain fact about God. Hence we have Closure.⁶ Cusanus, then, unlike Aristotle, not only perceives the contradictions at the limits of the expressible, but endorses them.⁷

In general, I agree with Priest's conclusions —however, I think something more (or, maybe better to say, *less*) should be said concerning the "diale-theism" of Cusanus, so the main object of this paper is to put forward this distinction. In the following discussion I prefer to use the traditional term *dialectic(s)*, adv. *dialectical*, because I think that Priest's term "dialethe-ism" has, at least from the epistemological point of view which I am concentrated on, almost the same or very close meaning as the historical concept of (Hegelian) dialectic: the contemporary "dialetheism" is supposed to be a *logical* reconstruction of classical philosophical dialectics, revival of dialectical methods of thinking and formalization of them by means of modern nonclassical logics.⁸

One more introductory remark has to be put here: in recent literature of paraconsistency there is no quite unanimous, among paraconsistent logicians generally accepted distinction between paraconsistent and dialectical

⁴*Ibid.*, p. 20. ⁵Priest 1995, p. 24. ⁶*Ibid.* ⁷*Ibid.*

⁸In Priest 1987, p. 4, we read: "It is the main claim of this book that Hegel was right: our concepts, or some of them anyway, are inconsistent, and produce dialetheias."

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logical systems. Following Priest, we will say that a logical system is paraconsistent, if and only if its relation of logical consequence is not "explosive", i.e., iff it is not the case that for every formula P and Q, P and not-P entails Q; and we will say a system is *dialectical*, iff it is paraconsistent and yields (or "endorses") true contradictions, named "dialetheias" (I take over this term from Priest, because it has no adequate classical equivalent). A paraconsistent system enables to model theories which in spite of being (classically) inconsistent are not trivial, while a dialectical system goes further, since it permits dialetheias, namely contradictions as true propositions. Still following Priest, semantics of dialectical systems provide truthvalue gluts (its worlds or set-ups are overdetermined); however, truth-value gaps (opened by worlds or set-ups which are underdetermined) are considered by Priest to be irrelevant or even improper for dialectical systems.9 Beside that, sometimes the distinction is drawn between weak and strong paraconsistency, the latter considered as equivalent with dialectics. A reader of recent literature in this field may have an impression that dialectics as strong paraconsistency is more a question of ontology than of logic itself, namely that it states the existence of "inconsistent facts"¹⁰ (in our actual world) which should verify dialetheias. But it remains an open question whether, for example, semantical paradoxes express any "inconsistent facts".

Now let us go to Nicholas of Cusa. The question is: can we claim that Cusanus is a dialectical philosopher, can we say that his coincidentia oppositorum is a precursor of Hegelian dialectic and eo ipso of contemporary dialectical logic, formally (re)constructed by Priest and other paraconsistent and/or dialectical logicians? In the following discussion I am arguing that the epistemological attitude of Cusanus, expressed by himself as docta ignorantia, precludes any simple (or "categorical") affirmation of contradictions, as well as, of course, Cusanus does not accept the simple negation of them in the manner of the classical (Aristotelian) logic. This point can be expressed also in this way: docta ignorantia does not affirm contradictions just simpliciter, but ambigue -namely, Cusanus' opposita, forming an "endorsed" contradiction, are both true or both false, depending on how we understand them. The term "dialetheia", when applied to Cusanus, should be taken -- differently from Priest-- in a double sense, applied not only to truth-value gluts, but also to truth-value gaps: a contradiction as coniunctio oppositorum is true not only if its opposites are both true, but

⁹"...the issues raised by the modification of these logics to allow for truth-value gaps are not, strictly speaking, relevant to paraconsistency." (Priest and Routley 1989a, p. 171) Cf. also Priest 1987, sections 4.7 and 4.8.

¹⁰See: Priest 1987, p. 67.

also if they are both false.¹¹ (Formally, this revised concept of dialetheia means that the rejection of the Law of Non-Contradiction entails the rejection of the Law of Excluded Middle.¹²) Indeed, a typical Cusanus' dialetheia, for example the conjunction of "Transcendence" (P) and "Closure" (not-P), mentioned above, has always two sides, like Janus' head: from its "positive side" (leading to the "positive way", traditionally called *via positiva*), its opposites are both true (i.e., the propositional conjunction 'P and not-P' is true); but if we consider dialetheia from its "negative side" (leading to the "negative are both false (i.e., the propositional conjunction 'P and not-P' is true); but if we consider dialetheia from its "negative side" (leading to the "negative way", traditionally called *via negativa*), its opposites are both false (i.e., the propositional binegation 'neither P nor not-P' is true).¹³ My point here is that just this ambiguity of dialetheias is essential for understanding the "middle way" of Cusanus —the way directed by his basic epistemological insight and maxim: *docta ignorantia*. We will return to this point later.

We always meet difficulties when we try to interpret an ancient informal wisdom with our modern formal means. Cusanus' *coincidentia opposito-rum* has not been written in the formal language, even less it presented a well-defined logical system. So it is certainly difficult to determine its "underlying" logic, since "it is only in contemporary times that a clear conception of a formal or semantical system has developed."¹⁴ Nevertheless, we can surely claim that the underlying logic of Cusanus' philosophy is not Aristotelian, but (at least) *paraconsistent* —in the sense, outlined above, namely that the relation of logical consequence (albeit informal one) in Cusanus' philosophical thought is not "explosive": *docta ignorantia* surely

¹¹A possible objection that two opposite false propositions cannot form a contradiction does not seem very convincing. Think, for example, of the following two false propositions: 'The round square is white' and 'It is not the case that the round square is white' —is this a formal contradiction or not? I think it is, in spite of possible further remark of a classical logician that propositions which include empty terms are meaningless, not false. (We will meet this problem again when considering Cusanus' concept of the "maximal circle".)

¹²Peter Suber, for example, defines the principle of dialectic in this way: "Let us call the principle of dialectic (PD) the principle that neither the PNC [Principle of Non-Contradiction] nor the PEM [Principle of Excluded Middle] is true. In dialectical logics 'truth' may be defined coherently so that neither the PNC nor PEM is true in it, even if they have some 'provisional' applications." (Suber 1997, on the Web)

¹³From the point of view of standard modern logic, these two dialectical "ways", formally expressed by propositional conjunction and binegation, are extensionally equivalent, namely both false. However, in traditional metaphysics they used to be distinguished, so that every modern dialectical logic which is supposed to be "materially adequate" for formalizing ancient philosophical dialetheias, should take this distinction into account.

¹⁴Priest and Routley 1989, p. 3.

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admits a philosophical theory which is inconsistent and non-trivial— such a theory is Cusanus' philosophical "system" itself. Let us call it (the system of) *Docta Ignorantia* (DI) and ask: is (DI), being paraconsistent, also dialectical? The answer is not so obvious as it seems from Priest's passages concerning Cusanus. In order to see the problem more clearly, we have to examine some relevant passages from Cusanus' great work *De docta ignorantia*.

When we try to understand Cusanus' philosophy from the point of view of modern logic(s), we must not forget the following: God, named as *maximum*¹⁵, is, by *coincidentia oppositorum*, also *minimum*, however, this *concidentia* is incomprehensible for human reason (*ratio*), for our discursive, logical thinking —yet it is in an unthinkable transcendent way present to our mind (*mens*, *intellectus*), namely by an intellectual intuition, philosophical contemplation. The incomprehensibility of *coincidentia oppositorum* for human reason (for our logical, even dialectical thinking) is considered by Cusanus to be essential for his philosophy. Here are two relevant passages:

Maximum absolutum incomprehensibiliter intelligitur, cum quo minimum coincidit. (De docta ignorantia, Book I, Chapter 4)¹⁶

Supra omnem igitur rationis discursum incomprehensibiliter absolutam maximitatem videmus infinitam esse, cui nihil opponitur, cum qua minimum coincidit. (Ibid.)¹⁷

From the point of view of Cusanus it would be a mistake to think "positively" (or *simpliciter*) the coincidence of opposites —since reason, using the

¹⁵Cusanus follows here Anselm of Canterbury: maximum est id quod maius cogitari nequit.

¹⁶In English translation: Nicholas Cusanus, *Of Learned Ignorance*, translated by Fr. Germain Heron, Routledge & Kegan Paul, London 1954: "The absolute maximum is known but not understood. Maximum and minimum are synonymous." (p. 12). Or, translated more literally: "The absolute maximum is comprehended in an incomprehensible way to coincide with the minimum." (I prefer to quote the Latin original in my text, and the English translation in notes, because some of my principal points refer directly to Cusanus' Latin formulations. In quoting the original, I am using the bilingual Latin-German edition of Cusanus' works, see References.)

¹⁷"We know that the absolute maximum is infinite, that it is all things since it is one with the minimum; but this knowledge is away and above any understanding we could reach by discursive reasoning." (*Op. cit.*, p. 14).

principle of non-contradiction, actually cannot think *coincidentia oppositorum* which is *supra omnem rationis discursum* (i.e., "beyond the limits of thought"); and that is why it cannot be rationally decided whether opposites are both true or both false. This point is very important for understanding Cusanus' *docta ignorantia*.

However, on the other hand, Cusanus is not a mystic, he is a great philosophical thinker who —like his brothers in spirit: Plotin, Eriugena, Kant, Wittgenstein, Nagarjuna and others— "manages to say a good deal about what cannot be said"¹⁸. How does Cusanus manage to do it?

In his last work *De apice theoriae* ("Of the Summit of Contemplation", 1464), as well as many times before, Cusanus wrote:

Posse igitur videre mentis excellit posse comprendere. (De ap. th., ch. 10)¹⁹

However, what does it mean —*videre mentis*? It is easier to say what it does not mean as what it actually means. (Needless to remark, this is one of the most difficult classical philosophical questions.) For Cusanus, "to see by mind" means neither a rational cognitive act nor just sitting and contemplating in silence. *Mens* (and/or *intellectus*, the distinction between them is not sharply outlined in Cusanus' works) by contemplating "sees" *symbols* which "transfer"²⁰ mind from their positive, finite meaning (being immanent in the world, articulated in language) to infinite transcendence, beyond any positive meaning and distinction.

And here Cusanus is especially interesting: for him, the most important philosophical "symbols" are provided by mathematics (mostly by geometry as the dominant mathematical discipline in those times). Cusanus based his metaphysical "intuitions" on geometrical symbolic models. Of course, he considered mathematics in its ancient (Platonic and Pythagorean) sense, namely as the clearest reflection of the universal order, of the World of Forms, —nevertheless, his idea that in the mirror of mathematics as "symbolic thinking" metaphysical and/or theological truths can be "seen" by the intellectual intuition, is new in the pre-Renaissance philosophy, and it is inspiring nowadays as well. Cusanus wrote:

¹⁸A famous remark of B. Russell on Wittgenstein in his introduction to *Tractatus*.

¹⁹"So, the ability to see by mind exceeds the ability to understand." (The translation is mine.)

²⁰Lat.: transferre, cf. Docta ignorantia I, 12.

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Consensere omnes sapientissimi nostri et divinissimi doctores visilibia veraciter invisibilium imagines esse atque creatorem ita cognoscibiliter a creaturis videri posse quasi in speculo et in aenigmate. Hoc autem, quod spiritualia per se a nobis inattingibilia symbolice investigentur, radicem habet ex his, quae superius dicta sunt, quoniam omnia ad se invicem quandam nobis tamen occultam et incomprehensibilem habent proportionem, ut ex omnibus unum exsurgat universum et omnia in uno maximo ipsum unum. (De docta ignorantia, I, 11).²¹

And in this symbolic way of contemplating God's incomprehensible and infinite being mathematics play a very important role:

...si finitis uti pro exemplo voluerimus ad maximum simpliciter ascendendi, primo necesse est figuras mathematicas finitas considerare cum suis passionibus et rationibus, et ipsas rationes correspondenter ad infinitas tales figuras transferre... (Ibid., 12).²²

One of the most famous mathematical "figures" of Cusanus which he used for symbolic representation of *coincidentia oppositorum* is the coincidence of ("the maximal") circle and a straight line (tangent); this coincidence is the "incomprehensible" limit of the sequence of larger and larger circles.²³ Let's quote Cusanus' comment to this "figure":

 21 In English translation (*op. cit.*, p. 25): "All our greatest philosophers and theologians unanimously assert that the visible universe is a faithful reflection [image] of the invisible, and that from creatures we can rise to a knowledge of the Creator, 'in a mirror and in a dark manner' [in enigma], as it were. The fundamental reason for the use of symbolism in the study of spiritual things, which in themselves are beyond our reach, has already been given. Though we neither perceive it nor understand it, we know for a fact that all things stand in some sort of relation to one another; that, in virtue of this inter-relation, all the individuals constitute one universe and that in the one Absolute [maximum] the multiplicity of beings is unity itself." (The phrase *quasi in speculo et in aenigmate* is St. Paul's: 1 *Cor* 13, 12.)

²²"If then we want to reach the Absolute Maximum through the finite, we must, in the first place, study finite, mathematical figures as they are, namely a mixture of potency and act [? -: figures with their properties and proportions, see the orig.!]; then we must attribute [? -: transfer] the respective perfections [?] to the corresponding infinite figures..." (*op. cit.*, p. 27).

²³Cusanus knew, of course, only Euclidean geometry, however, his models for *coincidentia oppositorum* offer an insight which is in modern times very relevant concerning the intuitive comprehension of Non-Euclidean geometries —and, consequently, modern cosmological theories, based on Einstein's general relativity. In our context we leave this precious part of Cusanus' cosmological thought aside.

...quare linea recta AB erit arcus maximi circuli, qui maior esse non potest. Et ita videtur quomodo maxima et infinita linea necessario est rectissima, cui curvitas non opponitur, immo curvitas in ipsa maxima linea est rectitudo. Et hoc est primum probandum. (Docta ignorantia, I, 13).²⁴

This model ("symbol") of *coincidentia oppositorum* can be advanced by including triangles: the Triangle with "the maximal angle" coincides with the straight line and with the Circle; this is supposed to be a *reductio ad perfectionem* of geometrical objects, since: *Circulus est figura perfecta unitatis et simplicitatis*. (*Doc. ign.*, ch. 21; "The circle is a perfect figure of unity and simplicity.", *op. cit.*, p. 46), and just in the "infinite circle" the coincidence of opposites reveals itself in the most manifest, although still "symbolic" way:

Haec omnia ostendit circulus infinitus sine principio et fine aeternus, indivisibiliter unissimus atque capacissimus. ... Patet ergo centrum, diametrum et circumferentiam idem esse. Ex quo docetur ignorantia nostra incomprehensibile maximum esse, cui minimum non opponitur. Sed centrum est in ipso circumferentia. (Ibid.)²⁵

We could go on with Cusanus in his geometrical symbolism by introducing the infinite Sphere instead of the Circle: "...centrum maximae sphaerae aequatur diametro et circumferentia..." (*Doc. ign.*, ch. 23)²⁶, but for our

24"...the straight line *AB* will, therefore, be the arc of the greatest possible circle. In this our first point is proved, for we have shown that in such a line straightness and curve are not mutually exclusive but are one and the same thing." (*op. cit.*, p. 29).

 25 "All this we gather from the infinite circle, which having neither beginning nor end is eternal, is infinitely one and infinite in capacity. ...it is evident that the centre, diameter and circumference are one and the same. The lesson we can learn in [from] our ignorance is that the Maximum, which is at once the minimum, is incomprehensible; and in it the center is the circumference." (*op. cit.*, p. 47).

 $26^{\circ\circ}$...the centre of the infinite sphere is equal to the diameter and circumference..." (*op. cit.*, p. 51). It is interesting to notice the similarity between the proposed transition from circle to sphere in Cusanus' thought and the suggested intuitive transitions (i.e. on the level of imagination) from lower to upper dimensionality in modern polidimensional geometrical spaces (as models for contemporary cosmology etc.).

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purpose the Circle will do. Let us denote this "maximal" Circle whose *centrum est in ipso circumferentia*²⁷ with Greek capital letter Ω , and —making a sort of thought experiment —suppose that Ω can be an object of thought (an idea in the Lockean sense, without any heavy ontological commitment); then we put a pair of Kantian questions which lead to an antinomy, similar to Kant's first antinomy:

(Q) Is Ω finite?

Answer: It seems reasonable to assert YES, since every *circle* is finite, even "the maximal"; it is irrelevant if its center coincides with its circumference.

(Q') Is Ω infinite?

Answer: Again it seems reasonable to assert YES, since how could it be finite if its *circumference is nowhere* and its *center everywhere*? Therefore (by *reductio*): if Ω is not finite, then it is infinite.

Of course we might object that *reductio ad absurdum* is not applicable in such limit cases, but here I have in mind another point: in case we argued otherwise (quite symmetrically, following *via negativa*), we could answer NO to both questions (Q) and (Q'), asserting negatively that Ω is neither finite nor infinite. The point of *docta ignorantia*, relevant for our context, is that in such "limit questions" (which contain the ideas of the Ω -type) no human reason (not even dialectical mind in Hegel's sense) can decide whether both opposite answers are true or both false. This point sounds very like Kant's "solution" of antinomies, but there is an important difference: Kant "solved" his antinomies so that, to say shortly, he negated the legitimacy of *both* opposites on the theoretical level (by another *reductio*, since in classical logic both opposites cannot be demonstrated as true), and by rejecting both opposites Kant consequently rejected also the concept of actual infinity on the theoretical level of "pure reason", but he accepted infinity in another sense, namely on the level of "practical reason", as a

 27 In this formulation Cusanus takes over the Hermetic and Neo-Platonic traditions that God is like *sphaera cuius centrum ubique, circumferentia nullibi* (sphere whose center is everywhere, circumference nowhere; *cf.* Alexandre Koyré 1957, ch. 1, note 19). Of course, Cusanus, according to his *docta ignorantia*, does *not* mean that God's essence is "spherical", but: "Illi vero qui actualissimam dei existentiam considerarunt, deum *quasi* sphaeram infinitam affirmarunt." (Those who consider the most actual existence of God, affirm that God is *like* the infinite sphere. [Italics are mine.])

More direct, concerning spherity, is Cusanus when speaking about *cosmos* which might be imagined as the infinite sphere whose center is everywhere, circumference nowhere. (Cusanus is not a pantheist, he does not identify God with the universe.) —Needless to say, these ancient thoughts are very actual and relevant for the modern cosmological theories which tell us that the big-bang, a presumed "centre" of our cosmos, was not some "local event", however immensely magnificent, but that it happened (is still happening) *everywhere*, like *sphaera cuius centrum ubique*, *circumferentia nullibi*.

"dialectical idea". Figuratively said, Kant solved the Gordian knot by cutting it into two separate ends, and so he managed to preserve classical logic. On the contrary, Cusanus in his "system" of *Docta Ignorantia* has not tried to preserve classical (Aristotelian) logic —at least on the level of *maximum*— since he did not accept the "simple" (and in his time already traditional) abolition of paradox by cutting its knot into two separate ends. Moreover, Cusanus endeavored to sustain an apparent absurdity: coincidence of opposites. And I think that just this preserving of *opposita ut opposita* is the most precious stone of his wisdom.

So, if we return to the main question of this paper: can we consider Cusanus' *Docta Ignorantia* (DI) a dialectical theory in the sense of admitting true contradictions (dialetheias)? Yes, provided dialetheias are not limited to conjunctions of opposita which are both true, but include also opposita which are both false. The main argument for this claim is *docta ignorantia* itself as the principal Cusanus' epistemological and methodological maxim: the essence of the learned ignorance is that in principle it can not (and will not) decide which way to the highest knowledge ("knowledge beyond knowledge") is the right way: *via positiva* or *via negativa*. They both are right, but none of them separately —and they both, taken together, are also wrong, since there is a "middle way" which transcends them both: *docta ignorantia*.

If we want to express the "underlying logic" of Cusanus' (DI) by means of modern (nonclassical) logic, the best approach is to take as the basic matrix *four-valued semantics*, known from Michael Dunn's semantics for First Degree Entailment (Dunn 1976, see also: *Entailment*, Vol. II, 1992, § 50). Four values are: true (T), false (F), both true and false (B), neither true nor false (N); T and F are classical truth-values, B and N may be called dialectical (and *eo ipso* paraconsistent) truth-values. Of course there are intuitive problems with both dialectical values, however, problems concerning N are in no respect more difficult than problems concerning B. Otherwise said, truth-value gaps are from the intuitive point of view equally (un)problematic as truth-value gluts. Dunn discusses this intuitive symmetry of gaps and gluts in the following passage:

...how do we go about motivating allowing sentences to be assigned no truth value? The answer is, of course, "dually" to our motivation for both truth values. Rather than think about the (*per impossibile*) truth conditions for contradictions, we think about the (*per impossibile*) "non-truth conditions" for tautologies. The classical truth-table considerations of (i)–(iii) above [in the previous section] tell us that the only way that $p \lor \sim p$ could possibly (better, *impossibly*?) be non-true is for *p* to have neither truth value.

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Here again we are not arguing that there are sentences that are in fact neither true nor false. (We are not saying that there are not, either. There may be "truth-value gaps" due, for example, to failure of denotations of singular terms $...)^{28}$

The important point in this passage is the emphasis that four-valued semantics which includes the value *N*, does not mean that there are *in fact* such sentences which are neither true nor false (any more than that are because of the value *B in fact* such sentences which are both true and false). I understand this point also as an admonition that "factual" diale-theias do not actually exist, neither in gluts nor in gaps, since real facts (on the ontological level) cannot contradict themselves, and consequently, true "factual" sentences which correspond to facts by *adaequatio*, cannot be *in fact* both true and false or neither. However, the issue of this discussion depends on how we understand facts, *adaequatio*, truth etc., and so it is far out of the scope of this paper. I can just agree with Dunn, saying: "By the way, we are painfully aware of the strangeness of some of our remarks motivating the [four-valued] semantics." (*Ibid.*)

But on the other hand we should not forget that by applying the fourvalued semantics as the most appropriate "underlying logic" to Cusanus' (DI), we do not apply it to "factual" sentences, but to sentences which are "beyond the limits of thought" (or at least very near these limits). In the quotation above, Dunn presumes that truth-value gaps can emerge due, for example, to failure of denotations of singular terms. We may ask: is Cusanus' term maximus circulus, whose centrum est in ipso circumferentia, which we denoted with Ω —a token of such a failure? Does singular term Ω denote anything at all? From the "factual" point of view, this term seems to be empty. Cusanus, of course, knew it, but it was not his point, since it is perfectly clear that maximus circulus makes sense only in the limiting process of thought, in "transfer" from comprehensible finite figures to the incomprehensible maximum (cf. above: rationes correspondenter ad infinitas tales figuras fransferre...). So, here there is no "denotation failure" ---- on the contrary: maximum which (who) is to be "denoted", can only be denoted by negative way, i.e., by failure of positive denotation.

If four-valued semantics is the most adequate "underlying logic" of Cusanus' (DI), we may still ask: which of the four values T, F, B, N is (are) designated? Provided we accept the classical designation for the first two values, namely T^* (designated) and F (undesignated), we have to decide which of two dialectical values (B, N) is/are designated and which not. Here again we must take into account Cusanus' principal stance: docta

ignorantia. (DI) precludes the decision (better, abstains from decision) which of two dialectical values is/are designated —the learned ignorance can only say that *both* are designated (*B** and *N**) or *none* of them (*B* and *N*). Let me give an example, borrowed from Priest (see above): he argues that "Transcendence" and "Closure" are both true in Cusanus' teaching, and this is supposed to be one of reasons why his philosophy is dialectical (Priest says "dialetheic"). Right, but from the point of (DI), "Transcendence" and "Closure" can be considered as both false as well. They only cannot be of different truth-values, i.e., "Transcendence" true and "Closure" false, or *vice versa*, since this would not make sense in dialectical thinking of Cusanus, for in this case *coincidentia oppositorum* would be resolved into its positive and negative counterparts —*via positiva* and *via negativa*— like the "Gordian knot", cut into two separate ends of rope, or "Janus' head" into two flat faces.

Still another question may be put here, namely: does the proposed symmetrical designation of truth-values nevertheless lead to iteration of everhigher values, that is, into infinite regress? I think this is not the case, since (DI) effectively stops the further choice (iterated "oscillation") between two dialectical values, as well as between (B^* and N^*) and (B and N), by excluding (B^* and N) and (B and N^*), and by "identifying" (B^* and N^*) with (B and N). We can take, metaphorically, *docta ignorantia* as a "fixed point" for *coniunctio oppositorum*. Of course, formally we could go on and evaluate (DI) itself with a "fifth truth-value", say DI, but this would mean just something like "The Rest" (beside truth, falsity, both and none) in the four-valued scheme of the Buddhist philosopher and dialectician Nagarjuna.²⁹ The fifth value does *not* mean that another truth-value in the proper sense is added to the four, since "The Rest" is out of them all, the upper limit of iteration.

After having written the major part of this paper, I have discovered that my interpretation of Cusanus' *coincidentia oppositorum* is close to some ideas of Lorenzo Peña concerning the same subject. Peña puts the question: "In which sense the contradictions in God do not contradict themselves?"³⁰ And he answers that contradictions in God, according to Cusanus, remain contradictions, they do not disappear *simpliciter*, for "in God, opposition"

²⁹Presented by Priest & Routley 1989, p. 17. See also: Priest 1998: "In ancient Indian logic/metaphysics, there were standardly four possibilities to be considered on any statement at issue: that it is true (only), false (only), neither true nor false, or *both*. Early Buddhist logic added a fifth possibility: none of these. (This was called the *catushkoti.*)"

³⁰Peña 1989, p. 67. The original is in French: "En quel sens les contradictions en Dieu ne se contredisent pas?" (This and the following passages from Peña are translated by the author of this article.)

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and non-opposition of contradictions coincide".³¹ Peña's main reference here is Cusanus' statement from *De visione Dei* (III, 150): "*In infinitate est oppositio oppositorum sine oppositione*."³² We may ask, how can the "opposition without opposition" be rationally conceived at all? In a sense, it can. Peña introduces next to contradiction its opposite (better, symmetrical) concept, "neutrodiction":

Nous avons vu que le Cusain exprime la c.o. au moyen de deux sortes des formules: des *contradictions* (de la forme 'x est f et x n'est pas f') et des *neutrodictions* (de la forme 'x n'est ni f ni non-f' —qui normalement seraient regardées comme équivalentes à des formules du genre: 'Ceci n'est pas vrai: ou bien x est f ou bien x n'est pas f').³³

The "neutrodiction" is actually negation of Excluded Middle in its stronger form (with alternative). Peña, like me, thinks that Cusanus in his *coinciden-tia oppositorum* negates not only Non-Contradiction, but also Excluded Middle. This position is different from the "positive way" of Priest's "dialetheism", which rejects Non-Contradiction, though endorses Excluded Middle, and so avoids truth-value gaps. Peña goes on claiming "that neutrodiction and contradiction are just the two faces of the same medal" and that *concidentia oppositorum* demands that we "do not favor neither affirmation nor negation".³⁴ The equidistance is required towards affirmation and negation, and consequently towards positive and negative theology and/or philosophy. How can logic express this equidistance? Peña says:

En Dieu uniquement se réalisent tout à la fois, pour n'importe quelle détermination, les quatre alternatives envisagées par Nicolas dans sa formulation de ce qu'on pourrait appeler "le principe du cinquième

³¹*Ibid.*, p. 59: "...en Dieu coïncident l'opposition et la non-opposition des contradictoires."

³²*Ibid.*, p. 65. ("In infinity is opposition of opposites without opposition.")

³³*Ibid.*, p. 71. "We have seen that Cusanus expresses the coincidence of opposites with two types of formulas: the *contradictions* (of the form 'x is f and x is not f') and the *neutrodictions* (of the form 'x is neither f nor non-f' —which are normally considered as equivalent to formulas of the type: 'It is not true that: either x is f or x is not f')."

³⁴*lbid.*, p. 75. The whole passage in original: "...que neutrodiction et contradiction ne sont que les deux faces d'une seule médaille —du reste équivalentes d'après la plupart des calculs logiques— [...] L'unité supradivine exige donc que nos conjectures sur elle, pour qu'elles approchent le plus possible de sa simplicité complicative, ne privilégient ni l'affirmation ni la négation."

exclu": esse, uel non esse, uel esse et non esse, uel nec esse nec non esse (De docta ignorantia I, 212), principe auquel notre philosophe semble accorder une plus incontestable évidence qu'à celui du tiers exclu.³⁵

It is interesting that Priest & Routley come to the similar conclusion when they consider the "negative dialectic" of Nagarjuna. As we have already said, his dialectic was based on a four-valued scheme (*tetralemma*) with values: T, F, B, N, —"to which both the Buddha and Nagarjuna in effect added the further value A, for the Rest, for everything that did not fit into the too neat and clean logical lattice."³⁶ This "everything" is as well "nothing" (*sunyata*) —the great silence of Buddhist wisdom. And this silence which is truly "beyond the limits of thought", is intended also in Cusanus' *docta ignorantia*.

Let me conclude: *Docta Ignorantia* (DI), if considered from its "positive side", is a paraconsistent and dialectical philosophical theory, however, its presumed "truth-value", say *DI*, is *not* an actual fifth truth-value (next to *T*, *F*, *B*, *N*), for it is present only *in absentia*, i.e., in the "principle of excluded fifth". (DI) requires equidistance towards two dialectical truth-values (*B* and *N*): the very essence of (DI) is this impossibility of any rational, logical choice between via positiva and via negativa. Their coincidentia, reached by *docta ignorantia*, opens the gate in "the wall of paradise", as Cusanus would say.

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³⁵*Ibid.*, p. 77. "The four alternatives, considered by Cusanus, are together and for whichever determination realized only in God, the alternatives in Cusanus' formulation of, we may say, 'the principle of excluded fifth': *esse, uel non esse, uel esse et non esse, uel nec esse nec non esse (De docta ignorantia* I, 212), the principle upon which, as it seems, our philosopher confers more incontestable evidence than upon the excluded third."

³⁶Priest & Routley 1989, p. 17.

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