

Logic and Heresy II
International Medieval Congress

Leeds, July 13th-16th, 2009

Logical Theology or Theological Logic:
What happened between 1400 and 1600?

Karin Verelst
FUND-CLEA, Vrije Universiteit Brussel
kverelst@vub.ac.be

Introduction

This presentation aims at formulating a question, not an answer. It is the outline of a research program concerning the connections between logic, rhetoric and theology through an analysis of basic different approaches to infinity and paradoxicality in metaphysics and cosmology.

“Logic” refers to the fundamental conceptual structure of a theoretical set-up (cfr. physical theories), rather than to an a priori “empty” deductive framework.

Michel Serres*: *Selon que l'Univers est infini ou le Monde fini, le Monde est centré ou l'Univers décentré. A ces options fondamentales concourent toutes les décisions portant sur la configuration, le mouvement et l'équilibre cosmiques, c'est-à-dire (...) sur les concepts géométriques, mécaniques et astronomiques. La vision cosmologique est le paradigme compréhensif de toutes ces options, le problème du point fixe en est (...) la marque élémentaire.* ERGO: Ptolemaeus, Copernicus, Kepler ↔ Cusa, Bruno, Leibniz, Newton (Pascal)

“Blasphème philosophique: la Révolution copernicienne a peu de poids” (p. 650). BUT: shift from deixis to theoria!

*Le système de Leibniz et ses modèles mathématiques, 4th ed. PUF, Paris, 2001.

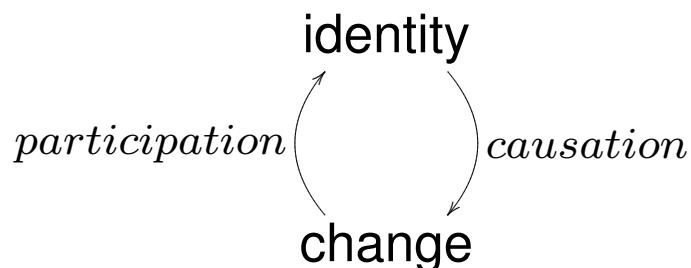
Excursus: Metaphysics and Logic

Logic and metaphysics are closely intertwined. Different logical systems bring about different metaphysical schemata (Plato's infinitary paraconsistency and Aristotle's finitist consistency arise from different methods of "division" of both things and concepts seen as "extensions". Even nominalism has to secure somehow the connection between thought and reality!

! A metaphysical system is **not**:

- a “theory of what there is” (Quine)
- a theory of “being *qua* being” [τὸ ὅν ἡ τὸ] (Aristotle, *Met.* Γ, 1003a20). (“being *qua* being” is the most general statement *within* metaphysics (PC).

It is a partial or total description of the world in which the following dual relationships hold :



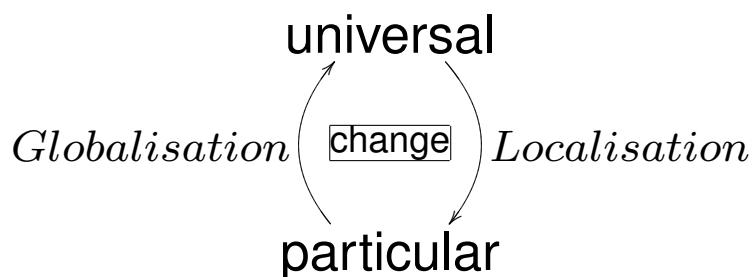
causation (time!) = forward implication;
participation = backward implication
(asymmetry of “becoming”).

The backbone structure of the scheme is **logical**: it is always grounded in some variant of the **principle of contradiction**. Why? To avoid paradoxes. Since Antiquity it is known that theories claiming to describe the “real world” have to deal with paradoxical phenomena of plurality and motion (→ Zeno!).

Solution? a general strategy which divides the “world” into a layer of identity and stability (Being) and one of change (non-Being), *connected by a time-dependent relation of causality* (Meyerson). These **layers** are characterised by two kinds of infinity, each with its own mode of generation: (simultaneous) division and (stepwise) addition [Arist., *Phys.* 204a 6].

This strategy := a **classical metaphysics (CMet)**

To sum up, CMet does come down to a “world-view” based on a more general global-local duality:



Method: The Art of finding New Ideas

Parmenides's “way”(to the truth: ὁδός. Verb μεθοδεύω: to follow the way to, to follow closely; to go together: the correct way for the mind to “find” (discover) new ideas. Link between origin of the world and origin of new ideas about it! [cfr. Derrida, as cited in M.H. Keefer, *The Dreamer's Path: Descartes and the Sixteenth Century*, Renaissance Quarterly, 49, 1, 1996.]

Ars inveniendi was a hot topic during Early Modernity:

- Descartes: *Discours de la Méthode; Regulae at Directionem Ingenii*: mathematical methods applied to nature → Logique de Port Royal (based on mathematical reasoning)
- Newton: *Regulae Philosophandi — Book III Principia*: scientific method
- Leibniz: *Caracteristica Universalis*: formal mathematics, algebra of ideas

Essential: link between new “truths” and reality. Criticism of method of *disputatio* of the School: link has been severed → possibility of arbitrary argumentations for whatever point of view.

Nothing new under the sun!!! Plato against the Sophists' use of conceptual contradictions:

For it is from the mutual intertwinement of the Forms that reasoning comes forth [Sophist, 259(e) Cfr. Aristotle [Met. A, 987b(31-32)] ⇒ The connection between Forms and definitions is that participation in the Form constitutes what the formula defines. [K.M. Sayre[†]]

Purely rational explanation: deduction from first principles. But where do the first principles come from?

Problem of be-coming: Realm of paradoxical origin lies outside this world. Aristotle: τὸ πρῶτον κινοῦν ἀκίνετον (First and unmoved moving).[‡] In this realm classical logic does not hold. Throughout philosophical history ∃ attempts to conceptualise this paradoxical realm and give it a place. Infinity-paradoxicality (cfr. Aristotle's criticism of Plato in Book I of the *Metaphysics*).

→ Theological import: nature of G.O.D. Metaphysical theology (Newton (*De Gravitatione!*), Leibniz) vs. Renaissance “paradoxaliteitsdenken” (paradoxical thinking): Cusa, Bruno.

[†] *Plato's Late Ontology*, Princeton University Press, Princeton, New Jersey, 1983, p. 8.

[‡] L. Couloubaritsis, *La physique d'Aristote*, Ousia, Bruxelles, p. 368.

Bruno: (...) dalla qual coincidenza stimiamo ch'al fine è divinamente detto e considerato **che li contrarii son negli contrarii**, onde non sia difficile di pervenire a tanto, **che si sappia come ogni cosa è in ogni cosa**: quel che non poté capire Aristotele e altri sofisti. [De L'Infini, de L'Univers et des Mondes, Les Belles Lettres, Paris, 1995, p. 351.]

Costui **facendo differenza tra la materia di cose superiori et inferiori** (...) quella ne l'istante de l'eternita, questa ne l'istanti del tempo; quella insieme, questa successivamente; **quella explicamente, questa complicamente; quella come multi, questa come uno; quella par ciascuno e cosa par cosa, questa come tutto e ogni cosa.** [De la Cause, du Principe et de l'Un, Les Belles Lettres, Paris, 1995, p. 251.]

Influence of Cusanus: complicatio-explicatio [“compli-
catio oppositorum”; De Coniecturis II, 1].

As long as you have oppositions, you did not reach the ultimate level of the reality involved: *Maximum absolutum incomprehensibiliter intelligitur; cum quo minimum coincedit.* [E. Hoffmann and R. Klibansky (eds.), *Opera omnia, De Docta Ignorantia*, I, capitulum IV.]

Diese Regel verbindet metaphysische Grundeinsichten, die seit Platon und Aristoteles einem unendlichem regreß in prizipientheoretischen Fragen ablehnten.[§]

God as coincidentia oppositorum: *Deus est supra nihil et aliquid (...). Et haec est omnipotentia eius, qua quidem potentia omne id, quod est aut non est, excedit, ut ita sibi oboediat id quod non est sicut id quod est. Facit enim non-esse ire in esse et esse in non-esse. Nihil igitur est eorum, quae sub eo sunt et quae praevenit omnipotentia sua. Et ob hoc non potest potius dici hoc quam illud, cum ab ipso sint omnia.* [De Deo Abscondito, 9.][¶]

Serres's schema is incomplete:

- ★ finite & centred;
- ★ infinite & paradoxical
- ★ infinite & decentred

(Deixis implicit in Bruno's position: many worlds, but “La natura opera dal centro” [Serres, p. 648.])

[§]T. Leinkauf, Nicolaus Cusanus. Eine Einführung, Aschendorf Verlag, Munster, 2005, p. 91.

[¶]E. Hoffmann and R. Klibansky (eds.), *Opera omnia*, Lipsiae, In Aedibus Felicis Meiner, 1932.

Logic and Rhetoric

Five Rhetorical Canons:

Inventio: find (new) thoughts by method of *loci*

Dispositio: arrangements of arguments

Elocutio: aspect of eloquence

Memoria: mnemotechnical + needed for inventio

Pronuntiatio: also: *actio*. The actual speech, oration.

Inventio is related to Ars memorativa! “Memory palaces” Place *imagines agentes* in the *loci* of your mental building. Walk through it and retrieve the images ≡ remembering ((r)e-vocare): **meta-hodos!!!** [Cicero, *De Inventione*, *De Oratore*; Anon. *Ad Herennium*]

! Pseudo-Longinus: τό θύμος, **the sublime**.

A way of structuring reality. The “logic” of this thing is like the “logic” of the building (classical house constructed according to a fixed basic plan).^{||} Renaissance: extension to cosmic scale. Giordano Bruno’s “sigilla”.**

^{||}Paolo Rossi and Stephen Clucas, Logic and the Art of Memory: The Quest for a Universal Language, Continuum International Publishing Group, 2th ed., 2006.

**F. A. Yates, *Giordano Bruno and the Hermetic Tradition*, The University of Chicago Press, Chicago and London, 1991 [1964].

[Descartes] ne croioit pas qu'on dût s'étonner si fort de voir que les Poëtes, même ceux qui ne font que niaiser, fussent pleins de sentences plus graves, plus sensées, & mieux exprimées que celles qui se trouvent dans les écrits des Philosophes. Il attribuoit cette merveille à la divinité de l'Enthousiasme, & à la force de l'Imagination. [Adrien Baillet, *Vie de Monsieur Descartes* (1691), paraphrasing Descartes's *Olympica* manuscript of 1619-20]

Reform of rhetoric ≡ reform of art of memory ≡ reform of logic (Ramus, Port Royal). Theological implications (↔ “enthousiasts”)

Il peut paraître paradoxal (...) de chercher un rapport entre le déclin de l'enthousiasme, au sens religieux et mystique, et le progressif discrédit, sensible au cours du XVIIe siècle, des rhétoriques et poétiques qui font de l'enthousiasme (...) l'ultime ressort de la plus haute création artistique et littéraire. [M. Fumaroli^{††}

Les premières manifestations d'un parti “moderne” dans les rangs mêmes des humanistes apparaissent au XVIe

^{††}“Crépuscule de l'enthousiasme au XVIIe siècle”, in: Héros et Orateurs, Droz, Geneva, 1996, p. 350.

siècle, chez un Pierre de la Ramée, initiateur d'une réforme anti-aristotélicienne de la rhétorique qui faisait fusionner dialectique et rhétorique, et qui dissocie de l'élocution l'invention et la disposition. [M. Fumaroli^{††}]

Connection to art: Rafael (Renaissance) – Pozzo (Baroque). From the labyrinth to the maze. Architecture: Piranesi. XX century: self-reflexive (Escher) [Jan Van Den Brande].

*Car les contraintes psychologiques et même physiques qu'exerça la réforme de L'Eglise - du côté protestant comme du côté catholique - ne furent que de peu inférieures à celles exercées par la Révolution française à son apogée ou - mutatis mutandis - par la révolution soviétique. (...) A un moment donné, la censure avait transformé la personnalité: les gens avaient perdu l'habitude d'utiliser activement leur imagination et de penser par "qualités", car cela n'était plus permis. La perte de la faculté d'imagination active entraîna forcément avec elle l'observation rigoureuse du monde matériel et celle-ci se traduisit par une attitude de respect pour toute donnée quantitative et de soupçon envers toute assertion d'ordre "qualitatif". [I.P. Couliano, *Eros et Magie à la Renaissance*, Flammarion, Paris, 1984.]*

^{††}La Querelle des Anciens et Modernes, Gallimard, Paris, 2001, p. 8.