

Perspective and Spatiality in the Modern Age The Italian Painting and the Topos of Annunciation between Art, Theology and Science

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Genesis of Modern Age and Rise of Perspective belong one to another
G. Boehm

After the essay of Panofsky, *Perspective as symbolic form*, Perspective became a field of research, surpassing the domain of Art critique and becoming a philosophical argument. How can we think of Perspective as symbolic Form? Is Perspective really a symbolic form? Why is Perspective so important? Because at the beginning of the Modern Age, Perspective as a spiritual figure grounds many symbolic or even many scientific constructions. We could we say that perspective opens the foundation of modern science as such. The "Geometrization" of Vision, beginning with perspective, will be for us the interpretative key in order to understand the Modern Age as a whole. This understanding will allow us to understand the anthropologic dimension arising from the Modern Age, called "Perspectivism"¹.

The following enquiry will be articulated in three parts. Firstly I will consider Perspective in order to show how it must not only be considered as "symbolic" Form but it must be treated as "proto-symbolic Form" as well. Secondly, I will show, interpreting some paradigmatic cases, how the full anthropologic Revolution of the Renaissance will be "opened" and "started" by the constitution of Perspective as iconic tool. Thirdly, I will consider the essential outlines of Perspectivism. Perspectivism will appear, before all, as paradigmatic structure including Perspective, as well as modern science and philosophy. Perspectivism will emerge as something determining the self-interpretation of the modern man: a paradigmatic form of a well-determined approach to the world and to

¹ See Boehm (1969): 11, and Thaliath (2005).

Phainomena². The questions that determine such inquiry are nevertheless topical: is such Perspectivism still valid for the Self-Interpretation of Mankind? If not, under which conditions is it possible to consider the situation of mankind without perspective? Is possible for us thinking independently of a unique perspective?

1. *Perspective as proto-symbolic Form*

In his analysis of Perspective, Erwin Panofsky (1997: 28) affirms that Perspective has been the crucial factor for the “discovery” of the infinite in modern Mathematics as well as for the development of projective Geometry³. In this sense Perspective appears not only as an artistic moment, belonging to painting, but also as a laboratory for something more radical and essential. This “something” is the spatiality itself, as we conceive it as modern citizens, modern scientists and modern men. But what is properly to be understood as Perspective in the Modern Age? Roughly speaking, Perspective is that technique by which we can represent a three-dimensional space in a two-dimensional one, by maintaining all proportions⁴.

How is it also possible that a “simple” technique can generate something more radical or more fundamental? How is it possible that Perspective opens the new horizon of the Modern Age and prepares, at the same time, its foundation? In this sense the definition of Perspective as “symbolic form” appears quite unsatisfying. Firstly Perspective does not appear as “symbolic” at all: on the contrary it appears as radically “mimetic”. Secondly, if we consider Perspective from the point of view of Cassirer’s theory of symbolic forms, Perspective is not a symbolic form⁵.

Symbolic forms such as Myth, Art, Religion, Science, express not only things or

² Thanks to Giuseppe Longo, friend and master, but firstly mathematician, epistemologist and historian of science, who introduced me, many years ago, to such perspective. See Longo, *L’infinito matematico “in prospettiva” et les espaces des possibles*.

³ See Boehm (1969): 13: «The evolution of projective Geometry put the old Doctrine of optical illusion aside. At the same time, Perspective as *perspectiva artificialis* becomes the center of the scientific determination of the new Art. As *Perspectivity*, it takes place in the middle of philosophical thinking, wherein it newly characterizes the Way by which Man thinks of himself in the World».

⁴ See also “*Perspective*”, in *Oxford English Dictionary*, on-line edition, Oxford, 2007: «The art of drawing solid objects on a plane surface so as to give the same impression of relative position, size, or distance, as the actual objects do when viewed from a particular point».

⁵ Of the same opinion is Boehm (1969: 14): «Independently from many interesting and precise issues, the work cannot justify how Perspective can assume the role of an autonomous symbolic Form».

objects, but include «an autonomous energy of the spirit, by which the simple appearing thing receives a significance, an autonomous ideal content»⁶. Language, Myth, Ethics, Aesthetics and Religion are in Cassirer's theory, «a-theoretical functions». Like science, they are «symbolic». How could we then consider Perspective as symbolic form, if it belongs to another symbolic form? Does one accept the symbolic Form "Art" as something like a subspecies? As Panofsky argues, to every Age belongs its own perspective. But why does Perspective appear to be crucial only since Renaissance? Such questions remain unanswered if we accept the simple definition of Perspective as symbolic form. But more questions arise: how should we understand the "symbolic" function of Perspective in the Renaissance as World-building form? Why does perspective perform such a crucial function in the Renaissance and not in other Ages?

Our thesis is: Perspective is neither a symbolic Form in Cassirer's Sense nor a simple historical formation or sub-species of a symbolic Form: Art. Perspective is something more⁷, it represents a crossroad. At this crossroad many exhausted symbolic forms of the Middle Ages meet and fuse. From this fusion something new will be formed and structured. Perspective presents itself as a breakpoint in the "order of discourse" of the Middle Ages. It's matter of a meta-theoretic crossroads among Theology, Art and Science⁸. Only from the fusion of these great constellations of knowing can arise something so strong as the Idea of a World-Picture [*Weltbild*]. Perspective appears at that moment, when the idea of World as something to be captured by "mimesis" and description gives way to the idea of construction. The possibility of symbolic construction includes the "symbolic" activity of science. Such "symbolic" revolution includes all the historical Phenomena that Heidegger describes in *The Age of the World Picture*: science, machine technology, art as Aesthetics, human action as culture, and the loss of the gods [Entgötterung]⁹ all belong to this fundamental idea of construction¹⁰. But

⁶ Cassirer (2001): 7: «[scil. die symbolische Form ist etwas] das drückt nicht bloß ein Vorhandenes aus, sondern eine selbständige Energie des Geistes in sich schließt, durch die das schlichte Dasein der Erscheinung eine bestimmte "Bedeutung", einen eigentümlichen ideellen Gehalt empfängt».

⁷ See Marion (1987: 17): «La perspective ne doit donc pas s'entendre d'abord ni surtout comme une théorie picturale historiquement située (bien qu'elle le soit aussi), mais comme l'office fondamental du regard, sans quoi nous ne verrions jamais un monde. Notre regard accède à un monde – exerce son être-au-monde – parce que la perspective, au sens de l'invisible ménageant le visible, a en propre de voir à travers le visible, donc selon l'invisible».

⁸ Boehm (1969): 13: «The subject-object correlation presents the polarized framework, by which non-cognitive Domains of Culture, Myth, Religion and Art can be determined».

⁹ See Heidegger (2002): 58.

¹⁰ For understanding the crucial role of the idea of "construction" in the Modern Age, see G.

at the beginning they have something essential to do with spatiality, i.e. with a particular conception of space.

Following this new idea of spatiality, every being must be inscribed in an isomorphic, isotropic and homogeneous space. This is made possible precisely by reshaping the essence of experience as a cognitive (subject-object) relation. Now, such radical appearance of the cognitive relation, as implication of this new idea of spatiality, is the result of a long process that the Perspective precisely started and oriented towards its fulfillment. Independently from its aesthetic-historical relevance, the Perspective works essentially on the «phenomenality of phenomena» itself ¹¹. Phenomena have to be inscribed in a sort of scene of the world. The world has become an endless world from many points of view:

In the history of human kind, various epochs stand out in which the structure of reality has undergone clear changes. The question may be left open for now whether the basis for that structural change lay in a new insight, or whether that insight was only made possible by a change in the structure of reality itself. But we do sense a meaningful connection when we learn that three seemingly completely independent, yet inherently related, events took place in close temporal proximity roughly at the outset of the modern era: Columbus' first voyage to America, Luther's and Zwingli's debate whether in the Eucharist the bread is the body of Christ or represents it, and Copernicus' discoveries. (Heisenberg [1927-1955]: 18)

We can isolate here three new forms of spatiality, which intersect and will be radically transformed: a sort of metaphysical spatiality, a sort of anthropological-geographical spatiality and a physical-mathematical one. These three forms converge to the point of fusion of the Galilean-Cartesian revolution, as the geometrization-algebraization of reality and as the first foundation of Perspectivism as anthropological and philosophical Paradigm.

2. *The anthropological and scientific Role of Perspective*

But how can such convergence really take place? An answer, first suggested by Panosky as marginal remark, is systematically articulated by Daniel Arasse (1999). In his Book *L'annonciation italienne. Une histoire de perspective*, Arasse considers the *topos* of Annunciation as iconographic Moment. Through Annunciation and its representation the theological metaphysical idea of infinity, that is to say the transcendent spatiality of God's Will and God's Power, came into the visible. It becomes a sort of visible element in

Lachtermann (1969).

¹¹ See Marion (1987): 19: «la perspective, au delà de son acception historiquement esthétique, travaille à la phénoménalité des phénomènes: par elle l'invisible du regard distend, dispose et manifeste le chaos du visible en phénomènes harmoniques».

the scene of reality: the perspectival style of painting, precisely as geometric construction, made it possible for the immeasurable to become both measurable and visible.

The Annunciation will be used as recurrent *topos*, by which the infinity will be painted, made visible. The question about the power of God and the actual infinity in reality arises in the condemnation of the theological averroistic Theses from Tampier, Bishop of Paris, in the year 1277. The condemnation suggests the possibility that the immediate action of God in the world *is not inconsistent* with the finite nature of the latter. Such condemnation opens a wide doctrinal way for theological theses demonstrating the possibility of the actual infinity in the world. As Zellini argues in his book *A Brief History of Infinity*, the *Apeiron* – since the Middle Age considered as an absurdity – will be inscribed in a history that bring us up to the Renaissance¹².

God, if he will, can show the infinity (as infinite power) also in our finite world. An example of this is the attribution of the full and infinite Grace – *gratia plena atque infinita* – even to a young Woman, Maria¹³. Such a strong theological thesis can help clarify the origins of the idea of infinity in the Modern Age. But how can a theological and iconographical *topos*, heterogeneous to every idea of geometrical space – basically the tale of a poor young woman and of an angel in a poor and dismissed house – represent the first radical phase of the construction of the modern idea of spatiality? Let's consider, in chronological order, some (Italian) paintings. Firstly, the Annunciation of Ambrogio Lorenzetti, Siena, 1344.



Panofsky argues that

¹² Zellini (2005): 75. This interpretation became classical after P. Duhem. See Duhem (1984: 412): «S'il nous fallait assigner une date à la naissance de la Science moderne, nous choisirions sans doute cette année 1277 où l'évêque de Paris proclama solennellement qu'il pouvait exister plusieurs Mondes, et que l'ensemble des sphères célestes pouvait, sans contradiction, être animé d'un mouvement rectiligne». The validity of this assumption is contested in the contemporary research. See Grant (1974) and Piché (1999).

¹³ Gospel of Luke, 1, 26-38.



What makes a picture like Ambrogio Lorenzetti's *Annunciation* of 1344 so important is, first of all, that the visible orthogonals of the ground plane are here for the first time all oriented toward a single point, undoubtedly with full mathematical consciousness; for the discovery of the vanishing point, as the "image of the infinitely distant points of all the orthogonals" is, in a sense, the concrete symbol for the discovery of the infinite itself¹⁴.

It should be noted here that infinity is still to be considered as "potential" infinity. The orthogonals on the ground do not converge to an actual infinity. Only the convergence, i.e. the projection of a potential convergence, can show the infinity by a symbolic metaphor. Let's consider now the *Annunciation* of Gentile da Fabriano, 1425.

The small painting shows the construction of the same scene in the so-called *Domus Mariae*. Maria is sitting on a large bank, her hands humbly posed on the abdomen. Up to this point, it's a classical scene in paintings. What changes? What is important here is the ray of light. Gentile da Fabriano paints the ray of light with a gold dust, going from the window down to Maria, symbolizing Grace itself. The infinity of the Power of God is materially, "materially" painted and embodied. The gold dust gives the idea of something stainless, free from any corruption, supernatural. The ray of light impresses itself in the body of Maria, but also in the body (that is in the matter) of the world. We find now a stronger symbolism, no longer only a projective "induction" to the actual infinity but a figure, through which such actual infinity will be presented and materialized. The infinity comes ichnographically into the space of the finite.



¹⁴ Panofsky (1997): 57. As Arasse (1999): 72 clearly argues, the *Annunciation* of Lorenzetti is a variation of an identical iconographic *topos*: how can we represent the arrival of the infinity in our finite world and not at the same time the "arrival" of the immeasurable in the measure?

Let us consider the Crivelli's Annunciation with St. Emidius.¹⁵

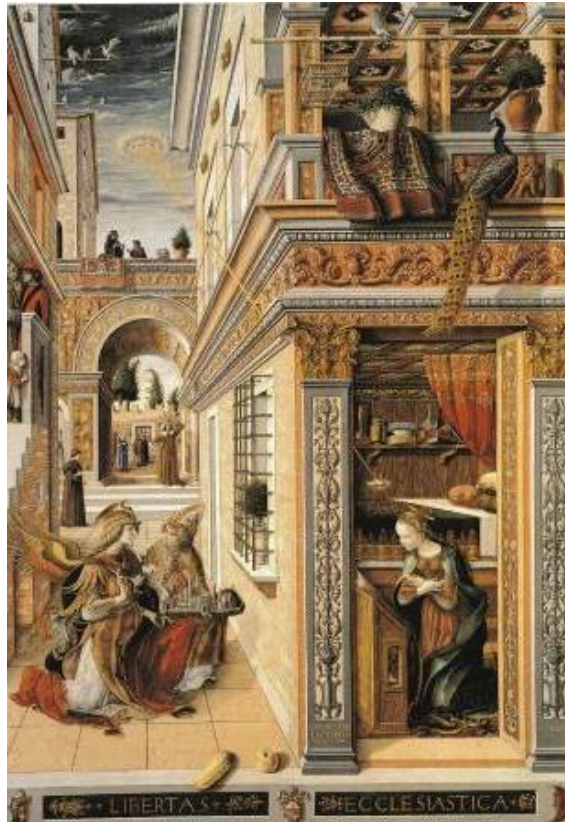
Here we find many dimensions or senses of the painting, but all are linked to the central rule of a perspectival construction. The painting depicts two different scenes from three points of view: we find two spatial situations, two historical moments and two political dimensions of life.

In the spatial scene we experience two different spaces: the open space of the civil life (in the city) and the space of the private life (in the *hortus conclusus* wherein appear objects of domestic life, vegetables, fruits of the *Domus Mariae*).

In the historical scene, we notice the Annunciation as classic *topos* (symbolized by the dove as iconic element) and the announcement of the political independence of the city, Ascoli, from the State of Church, the 25 March 1482 (symbolized by the carrier pigeon).

In the political scene we recognize the dependence of the Virgin (as every Christian) upon the Will of God, and the independence of the City from (the will of) the Church. Gabriel, the Angel, is painted very laicly as an Hermes with the inscription: "*libertas ecclesiastica*".

But what keeps together the duplicity of the scenes (or of the situations) is the *trompe-l'oeil* of the ray of light: it is geometrically impossible (and consequently impossible from the point of view of the perspective)¹⁶. It symbolizes precisely the sign of the actual infinity. The ray suspends the split in every scene in order to establish a unique one. The geometrical play shows, that the wonder is possible only for God.



¹⁵ See Arasse (1999): 188-194.

¹⁶ See Arasse (1999): 194: «Cette Annonciation constitue un cas exceptionnel de cette pratique où la logique perspective est contredite par la mise en place incongrue d'un ou plusieurs objets porteurs de la « grandiose invraisemblance du sacré».

The actual infinity comes iconographically into the space of the visible, and makes of a split reality a unique world. Infinity is inscribed before iconographically and only after geometrically into the realm of the visible. Such inscription can be valid for the infinitely small as well as for the infinitely great, as two asymptotes. Perspective is also the symbol of a radical translation, the translation of the infinity into the space. Thanks to this process of “translation” Galileo can explain to Simplicius in the *Discourse* that a sphere bases itself on an infinitely small point, crossed by endless lines. As Cassirer (1998: 70, Transl. mine) argues: «By Galilei the infinite becomes the principle of knowledge of every determination».

Infinity is translated into the space as referring points of every viewer, because it's precisely the point toward which the viewer orients his attention. This point takes place on the horizon, which provides unity to the representation and puts order among things as matter of vision¹⁷. And precisely by fixing the polarity between a viewer (as subject) and the vanishing point on the horizon, it's possible to acknowledge the second crucial function of perspective: the homogenization and the relativization of space. The iconographic revolution of perspective consists precisely in denying the classical schema of medieval art: the *vertical* triangle structuring the space of painting. The vertical triangle, as symbol of an ontological well-ordered structure (and hierarchy) of the world, will be substituted by an optical horizontal Pyramid:



¹⁷ See Boehm (1969): 23: «Now the space is conceived as homogeneous Multiplicity, corresponding to the actual infinity».



Leon Battista Alberti, in his treatise about paintings, argues: «I sketch a quadrangle, wherein I suppose to be an open window, through which I consider what is painted inside»¹⁸. We can rotate the visual pyramid as we wish by the variation or translation of the vanishing point of perspective, while the topologic principles structuring the space and the objects that are visible into this space still remain the same.

In this sense the homogenization of space shows a new kind of openness to the world, that implies a corresponding homogenization of the objects. The objects are geometrically projected figures that are rooted in the logic of appearance. In other words: «the objects in the painting will be placed through construction in a space before introduced into the plan, that is three-dimensional and unlimited, finding its end precisely at the line of horizon» (Boehm [1969]: 18. Transl. mine).



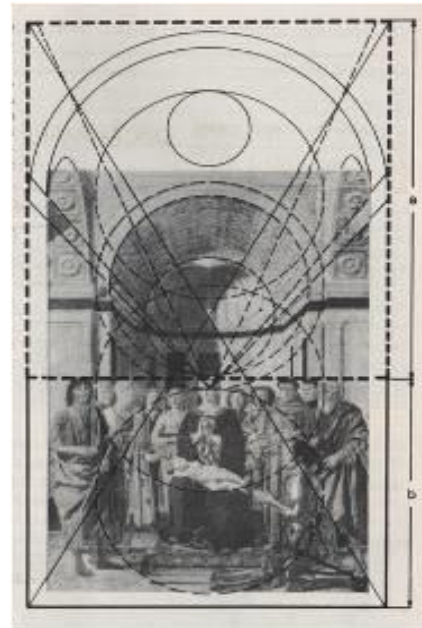
¹⁸ See Alberti (1435): 77. See also Panofsky (1997): 27: «We shall speak of a fully “perspectival” view of space not when mere isolated objects, such as houses or furniture, are represented in “foreshortening” but rather only when the entire picture has been transformed – to cite another Renaissance theoretician – into a “window” and when we are meant to believe we are looking through this window as a space».



In that sense the space itself is to be geometrized or, as Panofsky argues, postulated as homogeneous: «For the structure of an infinite, unchanging and homogeneous space – in short, a purely mathematical space – is quite unlike the structure of psychophysiological space»¹⁹. Its structure is homogenized and the reality – the phenomenal world – will be inscribed in pure geometric principles. Reality is also reduced to a formal-topological regularity. That will be clear by a simple analysis of the so-called Pala Brera of Piero della Francesca. This painting shows, more than others, how perspective represents a radical change of the

theological spatiality and a radical change of the conception of space itself.

Reality is geometrized, because the Geometric is the filigree of reality, it represents its framework, it determines the form and the character of every “objectivity” [Gegenständlichkeit] appearing in such space. The Geometric [*das Geometrische*], as framework of reality, lies on the background of reality, where the “*empeiria*” cannot put its view. It’s what can be viewed or grasped only “*sola mente*”, just with our mind. As Piero della Francesca argues at the beginning of his treatise about perspective, *De perspectiva pingendi*, it’s matter of



¹⁹ Panofsky (1997): 29-30. Panofsky continues: «Perception does not know the concept of infinity; from the very outset it is confined within certain spatial limits imposed by our faculty of perception. And in connection with perceptual space we can no more speak of homogeneity than of infinity. The ultimate basis of homogeneity of geometric space is that all its elements, the “points” which are joined in it, are mere determinations of positions, possessing not independent content of their own outside of this relation, this position which they occupy in relation to each other. Their reality is exhausted in their reciprocal relation: it is a purely functional and not a substantial reality».

an intentional, technical (but nevertheless radical) abstraction²⁰: «Colours will be so to speak desecrated»²¹. In other words: it's matter of a reality "produced", intentionally "constructed" by a spatial form, reduced to spatial forms. It's precisely what Descartes argues in the fourteenth *Regula ad directionem ingenii*, where he clarifies the (new) sense of mathematical dimension:

By "dimension" we understand nothing other than the mode and reason according to which some subject is considered to be measurable: so that not only length, width and depth are dimensions of body, but also gravity is a dimension according to which subjects are weighted, speed is a dimension of motion, and infinite others of the same kind²².

Every dimension or rather every reality is measurable. The next step will now be the mathematization of geometry, because only in the field of mathematics is it possible to explain the visible and a geometrically reduced "image" in relation to infinity²³.

Mathematics is the science of infinity. And precisely such infinity is "something" that orders the geometric, reducing itself to mathematics. Merleau-Ponty (1993: 121) argues: «Science manipulates things and gives up living them». This second form of reduction takes place in the transition from a technique of construction of every geometric figure to the theory of handling with symbols: algebra. The symbolic transforms the geometric into the algebraic. Is not by chance that Descartes (1897-1913: 80) defines the new method of Wallis a «metaphysics of geometry». Thanks to the perspectival revolution and to the perspective itself as new form of technique, the vision will be constructed by rules and principles that are independent from every concrete reality of "empeiria". The vision crosses over that reality for which can be described as an "inhabitation" of things,

²⁰ Piero della Francesca (1480): 7: «We will consider the part of painting, that we can proof with Lines, Edges, Proportions, by speaking of Points, Lines, plans and bodies. This part contains five arguments: the first is seeing, i.e. the eye; the second is the form of seen thing; the third is the distance between eye and seen thing; the fourth are lines, going from the borders of the thing to the eye; the fifth is the space between eye and the seen thing» [Translation mine]. See also Martone (1985): 173-186. See Boehm (1969: 33): «the prevalence of the sketch (disegno) makes clear how the guarantee of being of the World-image will be given at first and that it builds up the Artwork».

²¹ See Held (2012): 38.

²² Descartes, *Regulae ad directionem ingenii*, AT X, (1897-1913): 447.

²³ See Boehm (1969): 35: «Mathematics is the element that provides a stability of our grasping objects and the determination of the appearing as object will be led by such grasp. The object so mathematically determined is "first" in the proper sense of the word, he gets the character of stability. In the perspectival construction, as relation of the objectal space with the point of the eye, the intuition of the artist becomes owner of the stability of things».

of a dimension of natural places for things²⁴. Only without “natural place” can we talk philosophically about Perspectivism, i.e. we can speak (and think) as if the subject could take every place in the world²⁵.

3. *Perspectivisms*

The vision, as dioptric vision, now follows pure geometric-mathematic principles. Merleau-Ponty (1993: 275) argues: «Descartes’s *Dioptrics* is [...] the breviary of a thought that wants no longer to abide in the visible and so decides to reconstruct it according to a model-in-thought». But what is most interesting is that by Descartes, geometry – what precisely “exhausts” reality – will be solved, reduced to a “grey Ontology”²⁶, the ontology of “Perspectivity” (see Boehm [1969]: 88) or rather the ontology of the algebraic object²⁷. Now it’s possible, on the horizon of infinity, to find infinity. But once more such infinity can only be grasped by an egological metaphysics, i.e. a metaphysics of the *ego* – in other words “sola mente”! The clear and distinct perception of such infinity belongs properly not to mathematics itself – because mathematics uses infinity only for symbolic calculations – but to a metaphysical enquiry.

We need no deeper knowledge of the history of philosophy in order to be aware of a simple fact: the paradigmatic nature of perspective is deeply rooted in Descartes’s

²⁴ See G. Boehm (1969): 76: «the perspectival structure of space, the construction of which is deeply related with the evolution of space in the Modern Age, as an infinite homogeneous space, does not suggest any possible reference to Aristotle’s Doctrine of Space, claiming the essential relation of the thing with its place».

²⁵ Kaulbach (1990): 7: «the claim of modern man and citizen of a free construction of the world, is to be considered parallel with his liberation from the constrictions of a metaphysical world, that would blind him in a cosmic order».

²⁶ For the concept of «ontologie grise», see Marion (1987b): 186: «ontologie grise, parce qu’elle ne se déclare point, et se dissimule dans un discours épistémologique. Mais surtout, parce qu’elle porte sur la chose, en tant qu’elle se laisse départir de son *ousia* irréductible, pour prendre le visage d’un objet, étant soumis entièrement aux exigences du savoir. De la chose à l’objet: la chose peut se définir comme ce qui, fondamentalement, fait question, soutient donc aussi sa propre cause à partir d’elle-même. L’ontologie grise, parce qu’elle maintient la chose dans la grisaille de l’objet, témoigne donc de la griserie (de l’*hybris*) de l’*ego* “maître et possesseur” du monde réduit à l’évidence».

²⁷ See Boehm (1969): 33: «The problem is not to fix the relation between the object and its image. Image is for Descartes, as for the user of the perspectival method, only a sketch-construction, that brings up the relation between spatial thing and image. Colors come after to colour the sketched tectonic, but coloring has no importance. Image consists in data, that will be distributed on the plan, and data contain all sufficient information for the construction of the things».

foundation of egology. But we have to go beyond a simple fascination, and consider how crucial are Kepler's *Paralipomena ad Vitellionem* and Descartes's *Dioptrics* for such inscription (or rather translation) of the visible into the thinkable (*cogitabile*). These two works open the "Golden Age" of projective and descriptive geometry, that extends itself to Euler and Monge (see Frairopi [2009]: 11-40). But if the *Paralipomena* has a not secondary influence on Descartes, Descartes itself radicalizes Kepler's approach by going beyond. He develops the process of cognitive determination of geometry and its foundation by the *cogito*. He also makes explicit how deep but still incomplete is the process of sublimation of the first mathematical approach developed by perspective. It still remains incomplete precisely because the possibility of inscription of the infinity in the geometry of vision cannot be made clear. The inscription of infinity into the space, made by the technique of perspective cannot remain a stable element for science and knowledge, if it is not acquired, absorbed, by thought.

The complexity of Descartes' *Discourse* lies prominently in the search of such implementation of geometry – of the *Dioptrics* as new perspectival geometry of vision – to natural sciences. But such implementation requires a further condition: the awareness that such implementation is impossible without a metaphysical (i.e. ultimate) foundation. The relationship between the *Discourse* and the three essays (and the *Dioptric* in particular) is naturally not occasional at all. It shows first and foremost the anthropological and metaphysical distance of Descartes from the optics of the Renaissance. Precisely this distance makes it possible to transfigure Perspective into Perspectivism²⁸. Thanks to the inscription of a "simple" Perspective of vision into Perspectivism, Descartes can overcome the entire physiological tradition of theory of vision, from Galen to Kepler.

By such physiological theory of vision, the image prints itself on the crystalline of the eye, and will be brought through intentional species to the optical nerve. Descartes orients himself to a complete mechanization of vision. Such radical philosophical "decision" brings one then to the translation of a fully mechanized vision – and of mechanics itself – to the metaphysics of the *ego*. The man – then the *ego* – is a "spectator mundi". But such spectator finds his own stability not by the topological principles sketched by perspective but by the *cogito*. The stability of vision, of the "theôrein", belongs to a transcendent nature and must be fully determined by metaphysics.

²⁸ See Fichant (1994): 48: «[Descartes] intègre son optique à toute sa philosophie naturelle et plus encore [...] il fait de sa théorie de la vision l'un des pivots et des fondements de son mécanisme».

However the *ego* alone cannot stabilize such transcendent nature. An ontologically grounded mechanics (of vision) can measure only the coefficient of deformation of seeing and can grasp the similarity between image and object. But such similarity let the world as a whole ontologically undetermined.

What let us certify that the code of our vision is the only code and not just a code among others? What stabilizes the ontological nature of the world, i.e. the egological dimension of subjectivism? Only a first philosophy, grounding the ontological-algebraic stabilization of the nature, can fully determine the field of vision conceived as perspectival openness. But what determines ultimately – in the field of a first philosophy – the relation between a perspectival fully mechanized vision and ontology? Kant (2010: B 243) would say: «a divinity as mediation» [*Gottheit zur Vermittlung*]. Precisely that divinity firstly appears as infinite power («puissance infinie») and only after as object “in idea”²⁹. As Descartes argues very clearly: «Je dis que la notion que j’ai de l’infini est en moi avant celle du fini» (Descartes, *Lettre à Chanut*, AT, X, [1897-1913]: 341).

In the same letter to Chanut, not by chance, Descartes writes – as an *apax legomenon* – about the infinity of God’s Power in Christian Religion, and expressively about the incarnation (*Mysterium Incarnationis*). That should not mean, that Descartes bases his approach to infinity on the tale of annunciation. That shows “only” that in the “order of discourse” of the Modern Age, that will be oriented by perspective, the infinity of God’s Power firstly will be fixed by perspective itself and only after can it be sublimated, by Descartes, into his Onto-theo-logy.

There are three moments of the “appearance” of God into the narrative context of the *Meditationes de prima philosophia*. Firstly appears the infinity of God’s Power by the hypothesis of the creation of mathematical truths («création des vérités éternelles»); secondly God appears «sub specie infiniti» (by the idea of the infinite); and thirdly his existence will be ontologically proved. On the infinity “in idea” it’s possible to recognize a very deep need for Descartes’ metaphysical foundation: every act of seeing cannot be ultimately justified by any metaphysics of the *cogito*. In other words: any metaphysics of I-thoughts as self-referred mental states is insufficient. Every act of seeing grounded by metaphysics of the *cogito* can be coherent, but not necessarily “true”.

Perspective grounds also the essential relation between subject (viewer) and infinity as gnoseological asymptote of every exploration of science (in Bacon’s image): two examples of it are the Damon of Laplace and the “omnimoda determinatio” by Kant. In

²⁹ See Marion (1981): 261: «Ce mésusage du code, qui rend compte des “erreurs des sens”, se radicalisera, dans la *Première Méditation*, avec l’argument du Malin Génie».

the distance opened by such relation – that is a dynamic but topologically invariant relation – appears something new: it's the fundamental concept of every ontological, anthropological and socio-political conception of the Modern Age. Such concept is the representation [repraesentatio, Vorstellung]. Coming back to Heidegger, such a "representing" [vor-stellen] here means:

to bring the present-at-hand before one as something standing over-and-against, to relate it to oneself, the representer, and, in this relation, to force it back to oneself as the norm-giving domain. [...] And what goes along with this is that man set himself forth as the scene in which, henceforth, beings must-set-themselves-before, present themselves – be, that is to say, [in the] Picture. Man becomes the representative [Repräsentant] of beings in the sense of the objective.

Only in this way:

now for the first time there exists such a thing as the "position" of man. Man makes depend on himself the way he is to stand to beings as objective. (Heidegger [2002]: 68-69)

We could add: only the man decides which vanishing point of his perspective he will fix as the goal of his activity, of his construction, of his exploration. But by such autonomous decision the man not only accepts, but realizes the perspectival relation between subject and infinity. Infinity means here the teleological terminus of every activity as perspectival invariant structure. Only in this way the construction of his logical-scientific as well as social or political World-Picture can be thought as free, safe, from every catastrophe (See Menissier [2010]: 187-216). Between that perspectival vanishing point and the position (or rather the *situation*) of the subject lies a transparent and diaphanous space. Such space can be determined independently from every metaphysical order or hierarchy:

The words "place" and "space" signify nothing really different from body which is said to be in place, but merely designate its magnitude, figure, and situation among other bodies.

Descartes concludes:

But if at length we are persuaded that there are no points really immovable in the universe, as will hereafter be shown to be probable, we will thence conclude that nothing has a permanent place unless in so far as it is fixed by our thought. (Descartes, *Principia philosophiae*, AT VIII, II, § 13; *translation mine*)

The fixed point lies in thought, but it's also the thought itself, that can only stay in relation with the other point as infinity. Even when Descartes' Metaphysics will be enlarged by a multi-perspectival Dimension (i.e. by Leibniz), the relation between both

points still remains the same (the subject as finite and God as infinite monad)³⁰.

The multi-perspectival universe of Leibniz, conceived “ad maiorem dei Gloriam”, links the individuality of our lived experience with the objective reality of the world. Such harmony encompasses every modality of representation (see Busche [1997]: XVII^l). Leibniz tries to enlarge his form of Perspectivism by *Monadology*, that determines the perspectival view as situation of every living experience of the world, i.e. of every finite monad. It can be possible only because every lived experience, as perspectival view, is a representation.

Perspectivism is so strong, so deeply rooted in the order of discourse of the Modern Age, that it can determine the idea itself of space and spatiality. Such strong Perspectivism presupposes that every situation is linked with a “situs” without qualitative distinction.

It’s possible then that such strongly constituted Perspectivism can remain invariant even if its metaphysical presupposition will be denied, as by Kant. According to Kant, there is no more an infinity of God, no divinity for mediation as ultimate foundation of every theoretical and practical activity, but only a teleological point as vanishing point of every human perspective (see Kant [2010]: B 429). Only in such perspectival space can human reason orient itself.

What perspective forms and structures is the sense of a human position (and condition) in the world. But such situation can be only understood as a “being-in-a-space”, not in a natural place, or as a “self-orienting-in-a-space”. But what is crucial here is precisely the exhaustion of reality in the conception itself of such space: reality loses every possibility of opposition to human activity (from a theoretical as well as from a practical point of view). It is matter of a reality without any character of friction, of a “World-in-Image” or “imaged world”, that cannot resist the human activity³¹.

³⁰ Leibniz (2014): § 57: «And just as the same town when seen from different sides will seem quite different - as though it were multiplied perspectivally – the same thing happens here: because of the infinite multitude of simple substances it is as if there were that many different universes; but they are all perspectives on the same one, differing according to the different points of view of each monad».

³¹ See for example Blumenberg (1980): 16. One could ask: if Perspective structured the spatiality of Modern Age and also its formal idea of time, what constitutes properly the pragmatic temporality of human production, i.e. the temporality of its evolution? A possible answer, opening, of its side, new horizons in the field of history of science, can be: Alchemy. See Eliade (1953: 205, 208): «Alchemy pursues the very old dream of *homo faber* and realizes it. It is the dream of working to the perfection of matter in order to become perfection. [...] The representation of the alchemist transformation is the mythic coronation of the Trust in the

The problem is now: now, when such a human project experienced its radical failure (from a theoretical as well as from a socio-political point of view), when the possibility of such a World-Picture will be broken into a kaleidoscopic set of partial representations, what remains of such World-Picture? What is the Form that we can give to the human situation or human condition when the phenomenal world multiplies itself in a multidimensional space? What is the situation of thinking in such multidimensional reality? A new way, in order to think of reality as well as our knowledge or our practice beyond that metaphysical Perspectivism (as ego-onto-logical structure), is suggested by Merleau-Ponty, in *The Visible and the Invisible*. It's matter of a space that is no more the space of perspective but a *n*-dimensional topological space:

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Take topological space as a model of being. The Euclidean space is the model for perspectival being, it is a space without transcendence, positive, a network of straight lines, parallel among themselves or perpendicular according to the three dimensions, which sustains all the possible situations – Underlying appropriateness of this idea of space (and of velocity, movement, time) with the classical ontology of the *ens realissimums*, of the infinite entity. The topological space, on the contrary, a milieu in which are circumscribed relation of proximity, of envelopment, etc. is the image of a being that, like Klee's touches of color, is at the same time older than everything and "of the first day" (Hegel), that the regressive thought runs up against without being able to deduce it directly or indirectly (by "choice of the best") from Being by itself, that is a perpetual *residue* – It is encountered not only at the level of the physical world, but again it is constitutive of life, and finally it founds the *wild* principle of Logos [...]. (Merleau-Ponty [1968]: 211)

Maybe, at this point, where Perspectivism failed, where that World-Picture imploded under the action of our extremely or too massive projecting, a new dimension of thinking arises. This new dimension appears as openness of a human situation that we define as *Multiversum*. For such form of "situation", other forms of art and of geometry are arising.

Captions

[Fig. 1] Ambrogio Lorenzetti, *Annunciazione*, 1344, Siena, Pinacoteca Nazionale

[Fig. 2] Gentile da Fabriano, *Annunciazione*, 1423-1425 ca., Città del Vaticano, Pinacoteca Vaticana

[Fig. 3] Carlo Crivelli, *Annunciazione con Sant'Emidio*, 1486, Londra, National Gallery

possibility of the transformation of Nature by human work».

[Fig. 4] Simone Martini, *Annunciazione tra i santi Ansano e Margherita*, 1333, Firenze, Galleria degli Uffizi

[Fig. 5] Piero della Francesca, *Polittico di Sant'Antonio*, 1460-1470, Perugia, Galleria Nazionale dell'Umbria

[Fig. 6] Piero della Francesca, *Pala di Brera* (Sacra Conversazione con la Madonna col Bambino, sei santi, quattro angeli e il donatore Federico da Montefeltro), 1472, Milano, Pinacoteca di Brera

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