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## **Book Review**

## Galileo as a Critic of the Arts

PANOFSKY, Erwin. *Galilée critique d'art.* Transl. Nathalie Heinich. Bruxelles: Les impressions nouvelles, 2016. 112 pp. ISBN: 978-2-87449-417-8, 15 €.

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Once again, Erwin Panofsky returns to the publishing scene. In 2016, *Galilee critique d'art* was again published by *Les impressions nouvelles*. But, in fact, it is not just Panofsky's return. In the French-speaking world, his text was hardly ever published alone. It was almost always accompanied by either Nathalie Heinich's foreword or Alexandre Koyré's review, or by these two works whose considerations gained a weight almost equivalent to Panofsky's own text. On the one hand, Heinich elucidates, in the wake of Pierre Bourdieu, the fruitful method implied in the analyzes of the art historian. On the other, Koyré affirms and unfolds the reach of Panofsky's statements that surpass his place of comfort, those based on the field of the history of the sciences, in which Koyré is considered an authority. And this is how the texts of Heinich, Panofsky and Koyré configure what comes to us as the book *Galilee critique d'art*.

In this work, Panofsky presents us with a series of statements that, in any way, could be included in the foreseeable assertions. It is in the midst of a *disputatio* over the superiority of painting or sculpture, a field where Leonardo da Vinci once engaged, which he places the mathematical physicist Galileo Galilei. In describing him, he does not speak of physical and astronomical theories, but of artistic tastes, he speaks of a character who knew by heart the latin classics, who loved Ariosto and repudiated Tasso, who was a designer and profound connoisseur of painting - even more inclined to study it than mathematics - who was a close friend of the painter Ludovico Cigoli, and for this very reason he was involved in the battle between the partisans of the painting and the sculpture, initiated in century XV.

It is not, therefore, only the exposure of galilean knowledge in the fields of plastic arts, music and literature, but a live engagement, which showed a greater concern than victory over any quarrel. Since Leonardo da Vinci, no one but Galileo, Panofsky points out, provided original contributions in the discussion he unleashed in 1430. Such originality is shown above all in two conceptions issued by Galileo. The first, with no equivalent in the criticism of the sixteenth and seventeenth centuries, developed from the change of the target of valorization in the artistic sphere. Merit comes out of the nature of matter and goes into the effort of the artist. Undermining the classic argument of the partisans of sculpture, Galileo makes a remarkable reasoning: "Farther from the things to be imitated will be the means by which we imitate, the more admirable will be the imitation" (Panofsky, 2016, 32). The fact that sculpture shares the character of three-dimensionality with matter gives it no advantage over painting. "Artificious to the highest point, on the other hand, will be the imitation which represents the relief by its opposite, which is the plane" (Panofsky,

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2016, 31). Larger art is to represent pain not by its natural expression, the crying, but rather by singing. And even greater merit would be to represent it not by the voice that comes from a living being, but by the sound of an inanimate instrument. Galileo emphasizes.

But it is in the wake of this refutation that we find the argument on which the art historian is most concerned. In fact, unlike the italians, the dutchman Johan Albert Bannius, some frenchmen like Mersenne and Descartes, and his own father, Vincenzo Galilei, Galileo did not think that music and poetry were inseparable. So if his reasoning culminates in the greatness of the musician who expresses the secrets of the soul through an instrument that does not possess it, it is also because, for him, instrumental music could - and would be better if it were - to be dissociated from the text. It is then that Panofsky puts in correspondence the Galileo that still had to present with the celebrated mathematical physicist already known. "Galileo's insistence on demanding a clear separation of the values and processes which at the time were commonly held to be inseparable testifies to a critical purism in which one can see the true mark of his genius. Just as he preferred pure music-without words-to singing, and disdained song mixed with sobs or laughter, so he demanded that the quantity of quality be separated, and the science of religion, magic, mysticism and art" (Panofsky, 2016, 35). For this reason, he repudiated, in the field of literature, Tasso's allegorical poetry in the field of painting, Holbein's anamorphs and Arcimboldo's "double images," and in astronomy the discussion of the existence, whether profane or sacred, of the four satellites around Jupiter, a debate that unfolded after the revelation of his discovery.

However, this position of Galileo was not at all unusual. Panofsky outlines a movement of ideas between the Mannerism of the middle of the sixteenth century and the Baroque and Classicism of the seventeenth century. Between 1590 and 1615 approximately, a movement appeared that was contrary to the Mannerism that preceded it and partisan of the values of the Renaissance. Galileo shared with Cigoli, Carrache, Dominiquin, and Agucchi the same inclination to appreciate the clarity, the harmony, the smooth composition of the contours, the fusion of reality and idea, a taste that did not change throughout his life.

But, for Panofsky, this context of reaction contrary to Mannerism does not explain Galileo's inflexible stance. It is neither a "product of historical conditions," nor a reflection of a thought derived from a strictly scientific rationality. What explains the galilean position, not only in the face of Mannerism, but in the different fields of knowledge, are the constitutive principles of his thinking, the greatest of which is "critical purism."

Such is the core of Panofsky's thesis. His main and decisive argument in his favor presents itself with a solution to a problem especially troubling to astronomical historians: Galileo's silence in all his writings on Kepler's laws. Galileo's silence was a fact that should be explained because the mathematical physicist had many reasons not to do so. Partisan and intrepid defender of the copernican system, close to Kepler, Galileo knew, at least since 1612, that his "comrade-in-arms" had corrected and amplified copernicus's astronomical theory. Kepler's modifications, which replaced the circles with the ellipses in the description of the trajectories of the planets, explained in an undoubtedly better way the astronomical observations and later formed the basis of Newton's solution. Even with these theories that would greatly aid him in his defense of the copernican system, Galileo ignored them, repeating the same weaknesses present in the way Copernicus originally conceived them.

Panofsky's answer to the enigma of Galileo's silence against Kepler's laws was that "he seems to have dismissed these laws of his mind, by what might be called a process of automatic elimination" (Panofsky, 2016, 63), elimination resulting from the incompatibility between what Kepler presented and, above all, that dominant principle of his thought and imagination; "critical purism." Galileo saw in Kepler's ellipses the disturbance and confusion of Holbein's anamorphosis and Tasso's poetry. The ellipse was "a form in which 'perfect order' has been disturbed by the intrusion of rectilinearity " (Panofsky, 2016, 64 and 65). It was also a form widely used in Mannerism and expressly rejected by the Renaissance.

Far from the vulgar and predictable assertions, Panofsky attests in his book that "if one considers that the scientific attitude of Galileo influenced his aesthetic judgment, one is entitled to consider as much as his aesthetic attitude has influenced his scientific convictions; and more precisely, one can say that, as a man of science as well as a critic of art, he obeys the same types of controls" (Panofsky, 2016, 58). Due to the demand for clarity and separation between genders, Galileo could not accept the mixture between circularity and rectilinearity - for him, the ellipse was the fruit - nor the animism of Kepler present in his astronomy which, together with his attitude of not rejecting the quantitative data, allowed this to get rid of the fascination for the circularity, manifested in Galileo.

Here is Panofsky, but not entirely *Galilee critque d'art*. This begins with *Panofsky épistémologue* it is followed by two translations: one from the letter of Galileo to Cigoli and one from "Monsignore Giovanni Battista Agucchi and his speech Del Mezzo" - and ends with *Attitude esthétique et pensée scientifique*. The book begins with the outline of a method, with Heinich, and is finalized with the outline of the fruits of Panofsky's analysis, with Koyré. By paying attention to the commentators, however, the reader feels a nuisance caused by a mismatch between the authors whose suggested ratio seems to be full agreement. Heinich claims that Koyré ventured where Panofsky did not allow himself. The art historian did not even say that Galileo's aesthetic tastes were guided by scientific positions, or the other way around. To do this, one had to have "the openness and curiosity of mind of a Koyré" (Heinich, 2016, 9). However, this author does not, at any moment, point out traces of Panofsky's hesitation in admitting relations of influence. Quite the opposite. For him, his intrepidity led him to break with the traditional image of Galileo scientist, and in fact his only mistake was not to employ it, as he does in his text, in his title. But this mismatch goes beyond the attestation of a lack of one or another author. It reflects two different readings of Panofsky's text.

For Heinich, the turbid nature of Panofsky's claims about the relations of influence between artistic and scientific positions is far from being a mistake. He expresses his adoption of another epistemological perspective, different from that which seeks to postulate relations of cause and effect. That is replaced by a perspective that shows "homologies, structural identities common to different fields" (Heinich, 2016, 12), indicates "what could be a sociology or an anthropology of culture which, in true research logic, would finally cease to be exhausted in deriving 'art' from 'society', 'science' from 'social', 'individual' from 'collective' and the 'tastes' from 'social interests'..." (Heinich, 2016, 12). That explains Panofsky's erudition, which is not "knowledge fetish." This author walks in the fields of music, literature, painting, physics, astronomy to highlight "the similarities, the affinities, the logical links to structural constants" (Heinich, 2016, 12), or "structuring schemes." Heinich follows the same reading presented by Bourdieu in his afterword to the Gothic architecture and scholasticism, where, if we admit Fugier Pascal's statement, he brings out, for the first time, his concept of habitus. Bourdieu recognizes it in Panofsky's "search for the locus of all forms of symbolic expression proper to a society and an age" (Bourdieu, 2007, 337). He refuses to "safeguard the rights of creative individuality and the mysteries of singular creation." Doing that is "to deprive oneself of discovering collectivity at the core of individuality in the form of culture. Language of Erwin Panofsky, of the habitus that makes the creator participate in his collectivity, of his time and, without his conscience, guides and directs his seemingly more singular acts of creation" (Bourdieu, 2007, 342). Heinich presents, in his text published for the first time in 1987, the same structuralist reading carried out by Boudieu in 1961. For her, Panofsky had pursued his search for the structuring schemata outlined by Bourdieu. For that reason, he could not clearly trace a causal relationship between Galileo's aesthetic tastes and his scientific stance, which, in Heinich's view, has the great advantage of resolving a blatant contradiction present in Panofsky's text: according to the author, putting an aesthetic response to an epistemological question.

For Koyré, the so-called influence relationship is not questioned. What Panofsky really means when he speaks of Galileo's rejection of Kepler's discoveries is that "he rejected the Keplerian ellipses for the simple reason that they were ellipses ... and not, as it was, circles" (Koyré, 2016, 101). According to Koyré, Panofsky's great merit was, certainly, that he did not commune with Galileo's critical purism by approaching it in a way different from that of science, that is, of the spirit of new science, of opposition to natural places and geometrization of space. Proof of this excommunication was his attitude of not interpreting, like historians, the passages where Galileo clearly affirms "the obsession with circularity" in his spirit - like that of the beginning of his "Dialogue" - taking them à *la lettre*. It was in consequence of this that Panofsky was able to overcome another "obsession": that of the traditional image of Galileo.

Koyré insists on the misery of purism. And soon one sees that his criticism is not restricted to the author of the *Dialogue* or to the historians who have studied it, but it is something greater. In effect, Koyré concludes his text by stating: "Purism is a dangerous thing. And the example of Galileo, which is by no means unique, shows clearly that nothing should be exaggerated. Not even the requirement of clarity" (Koyré, 2016, 109). Since the 1930s, Koyré had already rejected the epistemology of the Vienna Circle, which asserted the need for clarity and purification of the scientific domain, a revival two years before the publication of his review of Panofsky at the time of his meeting with Philipp Frank, at a congress in Boston in 1954. As has been known, since that time, he had already demonstrated in his *Galileo studies* the impossibility of studying the evolution of scientific thought as an independent series - isolated from religious, metaphysical, and philosophical – expressing it later clearly in his *curriculum vitae*, written in 1951. If Koyré does not question Panofsky's statement about the influence of Galileo's aesthetic attitude on his scientific

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conceptions, it is because, for him, there was nothing contradictory in putting, repeating, to an epistemological question, an aesthetic answer. Just as he did not believe it would be contradictory to present a scientific, religious, metaphysical, or philosophical answer to a scientific question. Koyré saw in the art historian, a strong ally in affirming the importance of "trans-scientific" ideas in the course of scientific thought itself. Corollary, Koyré also saw in Panofsky, a strong ally in affirming the indispensability of the historical reconstitution of the guiding elements of thought, since these are not situated in a previously established domain. Hence Koyré's exaltation of impure character is, open to possible cross-links, Panofsky's position. Hence feels at ease in merging the conclusion of the historian's text – which he reproduces - with the conclusion of his review, stating, as in the same voice of Panofsky, that "the ways of human thought are curious, unpredictable, illogical" (Koyré, 2016, 109).

Therefore, if it bears here to say what the Galilee critique d'art is, it may be said that it is a book similar to the mannerist anamorphos so rejected by Galileo. If, looking from the front, it looks like a painting that only brings confusion, as we shift our glance, it lets us glimpse figures whose contours are proficient and clear. Face to face, the book seems a forced and confused mixture, since it brings a text circumscribed by two readings that point in different directions, each of which can be adopted by the reader. The confusion seems to grow when one notices that it is also possible to accept neither. It may be said that if, on the one hand, Koyré presented more of his own convictions than those on Panofsky, on the other, it can be said that Heinich made basic considerations originally directed to a text different from that in question, and that Galilee critique d'Art has distinct characteristics of Gothic architecture and scholasticism. But if we shift our point of view towards the perspective which, with Bourdieu, Heinich calls us, seeking to glimpse Galilee critique d'art in the whole of Panofsky's works, we perceive a solid interpretation of his apparently loose and performative methodology. It is interesting to notice, with Thomas Frangenberg, that a re-reading was carried out, both in the context of semiotics and in structuralism, of Panofsky's texts, and this author was identified as one of the forerunners of these disciplines. And finally, in shifting our point of view in the direction that Koyré points out - less in the search for Panofsky's methodological presuppositions and more in the search for the contributions of his specific analyzes on Galileo - we see above all the extension of the field of historicalphilosophical investigation, in the 1930s. In admitting the influence of Galileo's aesthetic tastes on his scientific stance, Koyré adds within the trans-scientific ideas, situated in the realms of philosophy, metaphysics, and religion, and crucial in Study of the history of the sciences, those ideas coming from the field of the arts.

But, contrary to Galileo's taste, the incitement to the displacement of a point of view is a characteristic, rather, to be appreciated than the opposite. There is the wealth of *Galilée critique d'art*.