diségno || 15 / 2024

Readings/Rereadings

## A Reading of Alexander von Humboldt's Kosmos between Scientific Observation and Images of Nature

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Kosmos [I] by Alexander von Humboldt (1769-1859) –the geographer born in Berlin to whom we owe the modern concept of landscape– evokes a 'doctoral passion' in me: it was, in fact, during the years in which I was working on my thesis for the doctoral program in Survey and Representation of the Built Environment that, driven by a growing interest in the complex issues present in the concept of landscape, I came across this fundamental text.

From Rosario Assunto to Franco Farinelli [Assunto 1973; Farinelli 1992], references to the work of the scientist Humboldt were recurrent and manifold, and I searched out his original works in the University of Padua Library and the Marciana Library: leafing through those large-format books, often translated into French or Italian and accompanied by extraordinary iconographic apparatuses, opened up longcultivated perspectives of study to me. But what was the reason for so much interest in Humboldt's works on the part of Italian landscape scholars in the period between the late 1980s and the following decade?

The key to interpretation suggested on several occasions by Franco Farinelli furthers the scope of *Kosmos* beyond geography, in turning to an approach to landscape that ranges from science to



Fig. 1. Frontispiece of the first italian edition, Vol. 1, 1860.

Fig. 2. Frontispiece of the first German edition, Vol. I, 1845.





Fig. 3. Heinrich Göppert, Alexander von Humboldt, Lithographien nach versteinerter Flora mit aufgeklebter Humboldt-Notiz, o.D. (da: https:// digital.staatsbibliothek-berlin.de/werkansicht?PPN= PPN832956058&PHYSID=PHYS\_0005&DMDID =DMDLOG\_0001).

aesthetics, a holistic approach that includes both firmly connected material components and immaterial aspects. In Alexander von Humboldt's monumental scientific production –of which *Kosmos* represents the conclusion, the scientific and theoretical epilogue of a vision at once of nature and culture– the engine of inquiry finds its spark in the incessant and meticulous observation of environmental phenomena.

The scientific description of nature, far from being exclusively concerned with the "objective" analysis of the earth's crust, requires the correlation between all events through the use of a "geognosy" (descriptive geology) capable of connecting phenomena and tracing them back to environmental contexts endowed with autonomous characteristics. Man is a fundamental part of any environment, since his action can modify its elements; therefore, the analytical tools needed to know, interpret, and construct "views of nature" –the geographical contexts– must pertain to both natural and human sciences.

"In order to depict nature in its exalted sublimity," Humboldt writes, "we must not dwell exclusively on its external manifestations, but we must trace its image, reflected in the mind of man, at one time filling the dreamy land of physical myths with forms of grace and beauty, and at another developing the noble germ of artistic creations." [Humboldt 1849, Vol. II, p. 371] The aspects of nature that thus define environmental contexts -- the just-mentioned "views," - appear so interrelated as to require the contribution of both the sciences and art, as well as the historical awareness of the different ways in which mankind has related to physical space. The result is an idea of landscape having multiple dimensions, not all of which can be easily measured, not all of which can be traced to an objective metric, of mathematical, geometric, cartographic order.

In the preface to *Kosmos*, Humboldt writes, "This general picture of nature, which embraces within its wide scope the remotest nebulous spots, and the revolving double stars in the regions of space, no less than the telluric phenomena included under the department of the geography of organic forms (such as plants, animals, and races of men), comprises all that I deem most specially important" [Humboldt 1849, Vol. I, p. xii].

At this point, it should be noted that Humboldt's multidisciplinary investigation of nature, conducted through an observation ranging from botany to mineralogy, and from astronomy to



Fig. 4. Album der Humboldt-Lokalitäten in der neuen Welt, o.D. (da: https://digital. staatsbibliothek-berlin.de/werkansicht?PPN=PP N825685826&PHYSID=PHYS\_0005&DMDID =DMDLOG\_0001).

anthropology, is always supported by written descriptions and supplemented by improbable amounts of graphic annotations, drawings, sketches, interpretive schemes, views, maps... up to the invention of the famous "cutaways" –orographic cross-sections/profiles– capable of combining measurable parameters and visual synthesis.

One might say that *Kosmos*, in its 'almost' five volumes –the fifth was to remain incomplete– has no images, unless one were to consider as such the synoptic charts of the plates; in any case, the presence of images is evoked by the centrality that the conceptual, and at the same time visual tool of the



Fig. 5. Album der Humboldt-Lokalitäten in der neuen Welt , o.D. (da: https://digital. staatsbibliothek-berlin.de/werkansicht?PPN=PP N825685826&PHYSID=PHYS\_0011&DMDID= DMDLOG\_0001).

Views of Nature (Ansicthen der Natur/ Tableaux de la Nature) [von Humboldt 1808 (1858; 1998)] holds in the German geographer's entire scientific career. "In the work on the Cosmos on which I am now engaged," –these are again the words of the Berlin-born scientist– "I have endeavoured to show, as in that intitled Ansichten der Natur, that a certain degree of scientific completeness in the treatment of individual facts, is not wholly incompatible with a picturesque animation of style" [Humboldt 1849, Vol. I, p. xi].

Such a 'visual' and 'pictorial' approach to the description of natural phenomena constitutes a constant method of investigation throughout the entire Humboldtian oeuvre: in all interdisciplinary areas of his research, nature -the object of scientific observationcannot be described only through the writing of a rigorous text, but also needs to be 'shown', that is, illustrated, made visible 'pictorially' in such a way that aspects and correlations can be discerned.

This program of theoretical and applied research –as we would say today– was perfected by Humboldt during his many voyages of exploration, first and foremost, in the one that took him to the "Equinoctial Regions" (Central America) [von Humboldt 1910; 1814-1834 (1986)]: indeed, I believe that one cannot understand *Kosmos* without keeping in mind the wealth of illustrations documenting the survey, at once both accurate and concise, realized while traveling through those exotic lands [2].

Humboldt's 'picturesque' travels include accounts, written narratives, as well as the graphic or pictorial 'translation' of what he had observed, or, in other words, the vivid images of landscape painting: in the descriptions of the lands of the Mediterranean basin and the Near East, as in those ever more distant and exotic, a unique figurative language acts as a link between the different features of the observed cultures, allowing the homologation of artificial and natural objects thanks to a consolidated style and a wellestablished compositional technique [Salerno 2020].

It is perhaps for this reason that, after developing a method of inquiry –which as I recall consisted of both scientific and aesthetic presuppositions– in *Kosmos* it appears unnecessary to include illustrations, but only to 'methodologically' refer to the need



Fig. 4. Album der Humboldt-Lokalitäten in der neuen Welt , o.D. (da: https://digital.staatsbibliothekberlin.de/werkansicht?PPN=PPN825685826&PHY SID=PHYS\_0015&DMDID=DMDLOG\_0001).

Fig. 5. Alexander von Humboldt, Vues des Cordillères, pl. 51, autograph sketch (da: https://www.faz. net/aktuell/feuilleton/jahrhundertkauf-stiftungpreussischer-kulturbesitz-erwirbt-humboldtstagebuecher-12694469.html).

for landscape painting, as, moreover, is well explained in the second volume [3]: "Landscape painting, and fresh and vivid descriptions of nature alike conduce to heighten the charm emanating from a study of the external world, which is shown us in all its diversity of form by both, while both are alike capable in a greater or lesser degree, according to the success of the attempt, to combine the visible and invisible in our contemplation of nature" [Humboldt 1849, Vol. II, p. 440].

And a few pages later, again in the second volume, Humboldt adds: "Landscape painting, though not simply an imitative art, has a more material origin, and a more earthly limitation. It requires for its development a large number of various and direct impressions which, when received from external contemplation, must be fertilized by the powers of the mind, in order to be given back to the senses of others as a free work of art. The grander style of heroic landscape painting is the combined result of a profound appreciation of nature, and of this inward process of the mind" [Humboldt 1849, Vol. II, p. 453].

Therefore, he continues: "The conception of the natural unity, and the feeling of the harmonious accord pervading the universe, cannot fail to increase in vividness amongst men, in proportion as the means are multiplied, by which the phenomena of nature may be more characteristically and visibly manifested" [Humboldt 1849, Vol. II, p. 457].

Perhaps it is because landscape, even today, continues to seem to us such a multifaceted concept that it can be likened to a "bat" concept [Farinelli 1991], that the Humboldtian lesson, so attentive to multiple interpretive registers, seems so relevant to us, and all the more so because of its ability to synthesize material and immaterial components into images.

## Notes

[1] In the text I will refer to the Italian edition of the work: von Humboldt 1961. The entire publication of Kosmos. Entwurf einer physischen Weltbeschreibung in German was published between 1845 and 1862.

[2] See the recent digitization of the Berlin-born

geographer's diaries which can be consulted at the *StaBi Digitalisierte Sammlungen* of the Berlin State Library, *Alexander von Humboldt's travel diaries*, from which the images accompanying this contribution are taken: <a href="https://digital.staatsbibliothekberlin.de/suche?queryString=categories">https://digital.staatsbibliothekberlin.de/suche?queryString=categories :%22Alexander%20von%20Humboldt%22%20</a>

tageb%C3%BCcher&fulltext=&junction=&featu re=humboldt> (accessed 29 November 2024).

[3] Pitture di paesaggi. Applicazione delle arti del disegno alla fisionomia delle piante e varia forma di queste nelle zone diverse: von Humboldt 1861, Vol. II, pp. 60 and following.

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## Reference List

Assunto, R. (1973). *Il paesaggio e l'estetica*. Napoli: Giannini

Farinelli, F. (1991). L'arguzia del paesaggio. In *Casabella*, nn. 575-576, pp. 10-12.

Farinelli, F. (1992). I segni del mondo. Immagine cartografica e discorso geografico in età moderna. Firenze: La nuova Italia.

Humboldt, Alexander von. (1849). Cosmos: A Sketch of a Physical Description of the Universe. London: Henry G. Bohn. Translated from the German by E.C. Otté.

Salerno, R. (2020). An Archeology of Global

Images' Languages: The Picturesque Case. In XY, nn. 9-10, pp. 48-61.

von Humboldt, A. (1808). Ansicthen der Natur mit wissenschaftlichen Erläuterungen. Tübingen: Johann Georg Cotta [French ed. (1858). Tableaux de la Nature. Milano: Charles Turati; Italian ed.: F. Farinelli (Ed.). (1998). Quadri della Natura. Firenze: La Nuova Italia].

von Humboldt, A. (1810). Vues des cordillères, et monumens des peuples indigènes de l'Amérique. Paris: chez F. Schoell.

von Humboldt, A. (1814-1834). Atlas géographique et physique des régions équinoxiales du nouveau continent: fondé sur des observations astronomiques, des mesures trigonométriques et des nivellemens barométriques. Paris: Librairie de Gide [Italian ed.: (1986). Viaggio alle regioni equinoziali del Nuovo Continente. Roma: F.Ili Palombi Editori].

von Humboldt, A. (1861). Cosmos. Saggio di una descrizione fisica del mondo. Venezia 1861. Translated from the French by G. Vallini. Roma: presso Benigno Scalabrini. <https://www.google.it/books/edition/\_/kulqKrWyWaAC?hl=it& kptab=publisherseries> (accessed 29 November 2024) [Original ed. (1845-1862). Kosmos. Entwurf einer physischen Weltbeschreibung. Stuttgard und Tübingen: Johann Georg Cottal.