

Landscape Painting Between Art and Science

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In 1807 the German naturalist Alexander von Humboldt published a small book entitled *Ansichten der Natur* (*Aspects of Nature*), which resulted from his more than five-year trip through the American continent.¹ On the contrary to the thirty volumes of his *Voyage de Humboldt et Bonpland*, published between 1805 and 1836 in Paris this small work from 1807 offered the reader what Humboldt understood as the synthesis of his experience, obtained through a collection of “Naturegemälde,” or “Paintings of Nature.” What Humboldt desired to reveal to the reader was a synthetic view (“Totaleindruck”), obtained by a detailed analysis of the multiple local phenomenon (including the human dimension) that composed the physiognomy (“Physiognomie”) of each specific segments of our planet.² For each of the climatic segments that he explored during his trip through the American continent he tried to compose a “painting,” or a “picture” that would have the power to put that segment of nature before the eyes of the reader, as lively as it appeared to him at the time of his voyage. Summarizing this intent, Humboldt wrote in the introduction to the first edition:

Timidly I deliver to the public a group of works created in face of the great objects of nature, the Ocean, the forests of Orinoco, the steppes of Venezuela,

1. Alexander von Humboldt arrived in Venezuela on the 16th of July 1799, after traveling during five years through the continent. He visited Cuba, Colombia, Equator, Peru, Mexico and the United States, returning to Europe on the 3. of August 1804.

2. The inclusion of human dimension in the “picture of nature” constructed by Humboldt is of seminal importance, since it attributes a moral dimension to landscape. Following Winckelmann, Humboldt believed that the natural formations proper to each region were responsible for the moulding of the character of its habitants: “[...] knowledge of the national character in the different parts of the world is closely related with the history of Humanity and its culture. Since even if the origin of this culture is not only determined by physical influences, its direction, the melancholic or gay character of men depends in great part of climatic conditions.” Cf. Humboldt, *Ansichten der Natur*, Stuttgart: Reclam, 1992, p.75.

the Peruvian and Mexican deserts. Some fragments were written in loco and then fused into a Totality. The great panorama of nature, the proof of the joint action of forces, and the renewal of the pleasure that an unmediated view of the tropics delivers to men of sentiment, are the aims that I pursue.³

The book was therefore organised as a series of “ekphrasis” of nature, and as such, referred to a classic rhetorical genre that was of great relevance for literary and artistic production, at least since the Renaissance.⁴ This fact places Humboldt’s work not only in the category of scientific discourse, to which it certainly belongs, but also in that of an aesthetic discourse, presenting itself unequivocally as literature.⁵ Humboldt’s deliberate association with the “Ekphrasis” tradition is clearly affirmed in one of the conferences he delivered at the Singakademie in Berlin between 1827 and 1828, and known today as the “Kosmos-Vorlesungen”.⁶ In this text, Humboldt offers a short history of descriptions in literature, trying to demonstrate that these descriptions had achieved its plenitude only in his own time, especially with French authors such as Buffon, Bernardin de St. Pierre and Chateaubriand – even if he quotes several examples from Antiquity to the Renaissance – when it became a specific literary genre: “Under the French, these descriptions of nature, especially of exotic nature, became a sub-genre of literature, a ‘poësie descriptive’”.⁷ However, still according to his opinion, the French tended to fall into an excess of subjectivity, harmful to the genre. Goethe, on the other hand, was his ideal model:

Above all we want to mention the great master, in whose work prevails a profound sentiment towards nature. In the ‘Werther’, as well as in the ‘Voyage’ [to Italy], or in the ‘Metamorphosis of Plants,’ all over, reverberates this

3. “Schüchtern übergeben ich dem Publikum eine Reihe von Arbeiten, die im Angesicht grosser Naturgemälde, auf dem Ozean, in den Wäldern des Orinoco, in den Steppen von Venezuela, in der Einöde peruanischer und mexikanischer Gebirge entstanden sind. Einzelne Fragmente wurden an Ort und Stelle niedergeschrieben und nachmals nur in ein Ganzes zusammenschmolzen. Überblick der Natur im grossen, Beweis von dem Zusammenwirken der Kräfte, Erneuerung des Genusses, welchen die unmittelbare Ansicht der Tropenländer dem fühlenden Menschen gewährt, sind die Zwecke, nach denen ich strebe.” Humboldt, *Ansichten der Natur*, op.cit., p.5.

4. On the importance of *Ekphrasis* for humanistic discourse, especially discourse on art in the 14th and 15th Centuries, see: Michael Baxandall, *Giotto and the Orators*, Oxford: Oxford University Press, 1971. On the Ekphrasis tradition see: Gottfried Boehm and Helmut Pfotenbauer (ed.) *Beschreibungskunst – Kunstbeschreibung*, Munich: Fink, 1995.

5. For a detailed analysis of Humboldt’s discourse, placed between science and art, see: Lúcia Ricotta, *Natureza, Ciência e Estética em Alexander von Humboldt*, Rio de Janeiro: Mauad, 2003.

6. Humboldt, Kosmos-Vorlesung (Vorlesung 16) in: Projekt Gutenberg www.gutenberg.spiegel.de/anonymus/universm/universm.htm

7. “Bei den Franzosen bilden diese Schilderungen der Natur besonders der exotischen, einen eignen Zweig der Litteratur, die *poësie descriptive*.” Humboldt, Kosmos-Vorlesung, op.cit.

enthusiastic sentiment that touches us like ‘a soft wind blown from a blue sky.’⁸

In the postscript to a recent German edition of the *Ansichten der Natur*, Adolf Meyer-Abich reiterates the importance of Humboldt’s encounter with Goethe for his intellectual development, understanding Humboldt’s propositions in great part as an attempt to put in practice Goethe’s convictions regarding science: “Humboldt can be thought as the completer of Goethe’s researches on Nature,” he writes.⁹ This intense identification with Goethe’s holistic point of view also explains the artistic quality to be found in Humboldt’s works, since for the German poet true knowledge depended on an intense collaboration between art and science: “Dich im Unendlichem zu finden/ Musst unterscheiden und dann verbinden,”¹⁰ wrote Goethe in 1803, in a passage dedicated to Luke Howard, a scientist who researched clouds. The differentiation belonged to the scientist’s task, while the synthesis to the artist. Based on analytic method, science was capable of discriminating minute differences, but only art was capable of promoting a synthesis of dispersed elements, revealing them united in an essential gaze.¹¹ As Goethe’s disciple, Humboldt consciously adopted a literary form for his *Ansichten der Natur*, looking for a synthesis that would take the reader one step further than the detailed descriptions present in the *Voyage*.

The present paper will not however discuss Alexander von Humboldt’s literary style, or his uses of the lettered tradition. My intent is rather to stress the importance that the aesthetic dimension of his work had for Humboldt, in order to discuss his relation to another art genre, placed by him side by side with literature in its capacity to implement the synthesis essential to knowledge, namely, landscape painting. To understand what concept Humboldt had of this genre is of seminal importance since it will have significant consequences for the development of landscape painting, not only in Europe, but above all in different parts of Latin America, including Brazil.

Speaking of the purpose of landscape painters in a central chapter of the *Ansichten der Natur* entitled “Ideas on the physiognomy of plants,” Humboldt poetically affirms: “under his hands [the painter’s hand], the huge mag-

8. “Vor allen aber erwähnen wir hier den hohen Meister, dessen Werke ein so tiefes Gefühl für die Natur durchdringt. Wie im *Werther*, so in der Reise, in der Metamorphose der Pflanzen, überall klingt dies begeisterte Gefühl an und berührt uns gleich wie ein sanfter Wind vom blauen Himmel weht”. “Ein sanfter Wind von blauen Himmel weht”, is quoted from Goethe. Humboldt, *Kosmos-Vorlesung*, op.cit.

9. Adolf Meyer-Abich, “Nachwort”, in: Humboldt, *Ansichten der Natur*, op.cit., p.149.

10. Goethe, *Goethe Werke*, HA, vol. 1, p.349. A literal translation could be: “To find yourself in the infinite, you must differentiate, and then unite.”

11. On the relations between art and science in Goethe see Werner Busch’s articles: “Die Ordnung im Flüchtigen – Wolkenstudien der Goethezeit”, and “Der berg als Gegenstand von Naturwissenschaft und Kunst. Zur Goethes Geologischem Begriff”, in: Sabine Schulze (ed.) *Goethe und die Kunst*, Frankfurt and Weimar, 1994.

ical picture of nature reveals itself, in few and simple traces, as in the written work of men.”¹² For Humboldt, as for Goethe, literature and painting were able to help the scientist to produce a synthesis. Although not all literature, and not all paintings (we remember the critic he made to excess of subjectivity in the French for example). In some passages of his work Humboldt makes clear that not all forms of landscape painting can serve as partner to science. In the same “Kosmos”-Lecture quoted above, after the small history of the descriptive genre in literature, Humboldt made some appointments on the development of landscape painting, condemning the northern, as well as the Italian landscape painting tradition:

At the time of the renaissance of Italian art we find the beginning of landscape painting in the Holland school and under the disciples of Van Eyck. More specifically, Heinrich von Bloss tried first to reduce the size of the figures in order to allow the landscape to grow in importance. Also in the big Italian landscape paintings of the late period: Titian, Bassano, Carracci, there is no precise imitation, especially in respect to exotic nature, and they also use certain objects in an affected and conventional way, for example, they give the Tamara Palms, which immigrated from north Africa to Sicily and Italy, a rough and strange appearance.¹³

There remains thus the following question: if for Humboldt not all types of landscape painting could be of some utility to science, what was then the model of landscape painting adopted by him? As occurs with so many aspects of his work, it is possible to affirm that also in regard to this subject Humboldt was guided by his master Goethe. Therefore, to understand his point of view it will first be necessary to examine the poet’s position on the theme. Under Goethe’s influence, Humboldt adopted a classic model of landscape painting, although distinct from that proceeding from the tradition inaugurated by Claude Lorrain and Nicolas Poussin. A model that tried to accomplish a synthesis between the two main tendencies of landscape painting inherited from the seventeenth century: the ideal landscape, and the “veduta”, originated in the north.¹⁴ Goethe became very interested in this new conception of landscape painting, after having studied with no less than the creator of this new genre, the German painter residing in Naples, Jakob Philipp Hackert (1737-1807),¹⁵ during his voyage in Italy. It is known that

12. Humboldt, *Ansichten der Natur*, op.cit., p.86.

13. “Zur Zeit des Auflebens der italischen Kunst finden wir den Anfang der Landschaftsmalerei in der niederländischen Schule, u. bei den Schülern Van Eyk’s. Namentlich hat Heinr. von Bloss zuerst versucht die Figuren sehr zu verkleinern, um dadurch die Landschaft hervortreten zu lassen. - Auch bei den großen italischen Landschaften der spätern Zeit Tizian - Bassano, Caracci findet sich keine genaue Nachahmung, besonders der exotischen Natur, u. auch sie bedienten sich für gewisse Gegenstände, angenehmer, conventioneller Formen, z.B. geben sie die Dattelpalmen, die doch aus Nordafrika nach Sicilien und Italien hinüber gewandert waren, ein eigen schuppiges, wunderliches Ansehen.” Humboldt, *Kosmos-Vorlesung*, op.cit.

Hacket also discussed his method and theoretical concepts in detail with Goethe, and the poet considered them of such importance that he decided to publish these ideas in 1811, as part of a biography he wrote on the artist.¹⁶ It is therefore very probable that Goethe discussed Hackert's positions on landscape painting with Humboldt, who he encountered for the first time in 1795 in Weimar. How much Goethe was thinking of a painter like Hackert to collaborate with his friend, and naturalist becomes evident in a passage of a letter sent by him to Humboldt in April 1807, the year of Hackert's death. He writes: "Our excellent Hackert has suffered a stroke in Florence. He hopes to recover himself once more for the art. I would like to have someone like him at your side in the tropical countries."¹⁷ The reference to "'our' excellent Hackert", also leaves no doubt that Humboldt was familiar with the artist.

Goethe, Hackert and landscape painting

Taking into account Goethe's conservative position with respect to visual arts, the great value he attributed to History painting, and the systematic opposition he made to the new romantic tendencies that were emerging in his time,¹⁸ it is only possible to understand the great interest he showed towards Philipp Hackert's landscape painting if we consider his ideas on the relationship between art and science. These are the same ideas that influenced Humboldt in other aspects of his works, and that made it natural for him to adopt Goethe's point of view also with respect to the representation of landscape.

From early on Goethe cultivated an intense scientific activity parallel to his work as poet and art theorist. His interest in science was reinforced in the years around 1770, when he came into contact with the Suisse doctor Johann Caspar Lavater (1714-1801), starting to collaborate in his collection of mate-

14. Ideal landscape was a kind of equivalent of pastoral poetry that aimed to create an idyllic view of the natural world, as it supposedly existed in Antiquity. *Veduta*, on the other hand, was understood as a faithful registration of a specific segment of nature, without idealization, and it was practiced more frequently in the north, especially in Holland, along the 17th century.

15. Hackert was born in Prenslau, and after studying in France he settled in Italy in 1768, first in Rome, and then in Naples, where he became first painter to the Bourbon king Ferdinand IV.

16. Goethe wrote a Hackert biography in 1811, which included the "Theoretical Fragments on landscape painting" written by the artist shortly before his death in 1807. Hackert's original letters, which were edited by Goethe for his publication can be found in: Norbert Miller and Claudia Nordhoff (ed.), *Lehrreiche Nähe. Goethe und Hackert*, Munich and Vienna: Hanser, 1997.

17. "Unser trefflicher Hackert in Florenz hat vom Schlagflusse gelitten. Er hofft sich wieder für die Kunst zu erholen. Seines gleichen hätte ich wohl in Ihrer Gesellschaft den tropischen Ländern gewünscht" Correspondence between Goethe and Alexander von Humboldt, in: www.bibliothek.bbaw.de/Goethe.

18. On Goethe's relation to romantic artists such as Caspar David Friedrich and Philipp Otto Runge, see: Frank Büttner, "Abwehr der Romantik, in: *Goethe und die Kunst*, op.cit., p. 456-482.

rial for a book on physiognomy, later published under the title of *Physiognomische Fragmente (Physiognomic Fragments)*.¹⁹

Obsessed by the idea of demonstrating a correlation between the external appearance of humans, and their character, Lavater collected portraits of famous people throughout Europe, accompanied by a description of their personality.²⁰ These portraits were traced preferably in silhouette (“Schattenrise”), and then submitted to a comparative method, in order to determine the possible connections between certain physical appearances and traces of character. Lavater’s methodology envisioned a “reduction” of human form to its essential elements, captured in the silhouettes, and a comparison of the obtained results.²¹ The book dedicated a whole chapter to silhouette, in which he made the following commentary:

From the simple silhouettes I put together more knowledge about physiognomy than from all other reports; through it I refined my sensibility to physiognomy more than through the observation of nature that is always in transformation; A silhouette summarises the dispersed attention, concentrates it in simple contours and limits, making observation easier, light and exact; the observation, and with it also comprehension.²²

This form of proceeding fascinated the young Goethe who incorporated it into his own scientific approach. As Carl Weizsäcker observes,²³ Goethe developed a method of investigation based on comparative morphology, where form was not rooted in an abstract law, such as science in his time was starting to do, but where law itself was to be derived from visible form. Using

19. Other important personalities of the time, such as Füssli, Herder, Lenz, Merck, Sulzer, and Gessner, were also involved in Lavater’s project. On Goethe’s relation to Lavater, see: Ilsebill Berta Fliedl, “Lavater, Goethe und der Versuch einer Physiognomik als Wissenschaft”, in: *Goethe und die Kunst*, op.cit., p. 192-203.

20. Goethe’s first contact with Lavater occurred because of this project. After Goethe had become suddenly well known because of the publication of his first romance *Götz von Berlichingen* in 1772, Lavater sent him a letter asking for a portrait accompanied by a description. A lively exchange of letters followed, and in 1774 Lavater arrived in Frankfurt a.M. to pay a visit to Goethe and guarantee his direct collaboration in the project of his book.

21. Lavater developed his new anthropological method largely based on his readings of Winkelmann, especially of his famous descriptions of the Belvedere statues, to which he refers frequently in his *Physiognomische Fragmente*. The book contained, for instance, a whole chapter dedicated to the Apollo Belvedere, in which, he delivered a “scientific” analysis of the statues head, accompanied by a drawing of its silhouette. Cf. Pfotenhauer, Bernauer and Miller (ed.), *Frühklassizismus*, op.cit., p.409-411.

22. “Aus blossen Schattenrissen hab’ich mehr physiognomische Kenntnisse gesammelt, als aus allen übrigen Porträten: durch sie mein physiognomisches Gefühl mehr geschärft, als selber durch’s Anschauen der immer wandelnden Natur. – Der Schattenriss fasst die zerstreute Aufmerksamkeit zusammen; concentriert sie bloss auf Umriss und Gränze, und macht daher die Beobachtung einfacher, leichter, bestimmter; -- die Beobachtung und hiemit auch die Vergleichung.” Cf. Lavater, *Physiognomischen Fragmenten*, apud. Fliedl, op.cit., p.193-94.

23. Carl Friedrich Weizsäcker, “Einige Begriffe aus Goethes Naturwissenschaft”, in: *Goethe Werke*, op.cit., vol. 13, pp.539-555

such a method of morphologic description and form comparison, Goethe expected to be able to see relations between the various instances of reality, or, in other words, to visualize nature's immanent order.

Another observation about Goethe's way of thinking is important to understand his position as a scientist especially during and right after his trip to Italy.²⁴ Since, according to his point of view, there was an essential link between men and the world – “mater never exists without the spirit, and spirit never exists without mater”²⁵ – to order the exterior world was to order the interior world at the same time. To reveal nature's order (in the goethean sense of recognizing the links present in reality) was, therefore, the equivalent of harmonizing the spirit with it. But how did this investigation of reality take place?

Goethe understood science as knowledge about the form. Law, the specific order that rules a certain phenomenon in nature, should thus be looked for in the physiognomy of the phenomenon itself. Sight becomes an essential instrument for scientists who worked, as we said before, to separate what they thought was different, and approximate what was seen as similar. However, since the essence of the phenomenon laid in itself, the final expression of order, or of natural law revealed in this process could not be a part of science that always proceeded in an abstract way, but could only be fully exposed in art. This “image of nature” produced by art had an advantage over nature itself, since its static character revealed a permanent view of nature in which no casual elements associated along the course of its eternal transformation was present.²⁶ Here we also find the origin of Humboldt's idea of “Naturgemälde” (Paintings of nature).

According to Goethe, in the modern world prevailed analytic science in which “to comprehend the non human objects a dispersion of strength and capacities, a fragmentation of unity, is almost inevitable”.²⁷ This model, however, did not favour the integrating movement between art and science that had been a distinctive mark of thinkers in Antiquity. From his point of view, a fierce battle should be fought in order to re-conquer this antique harmony, so essential to knowledge, to the moderns. And we could say that Goethe recog-

24. Goethe's voyage to Italy is normally considered as a point in his career in the direction of a certain classicism, after the *Sturm und Drang* period. Cf. Herbert von Einem, “Nachwort”, in: *Goethe Werke*, Munich: Beck, 1989., vol.11.

25. “Weil aber die Materie nie ohne Geist, der Geist nie ohne Materie existiert (...)”. Goethe, “Die Natur”, in: *Goethe Werke*, vol.13, p.48.

26. Here we can easily identify some affinity between Goethe and Lavater. The latter also believed to be able to find a connection between character and physiognomy only in the sensorial manifestation of the phenomenon, and was convinced that he would see these manifestations with more clarity in the silhouette, than in the phenomenon itself.

27. “(...) zu Erfassung der mannigfaltigen aussermenschlichen Gegenstände eine Zertheilung der Kräfte und Fähigkeiten, eine Zerstückelung der Einheit fast unerlässlich ist (...)” Cf. Goethe, “Winckelmann und sein Jahrhundert”, in: *Goethe Werke*, op.cit. vol.12, p.100.

nised in Hackert's landscape painting a privileged path to the accomplishment of this task.

Goethe's interest in Hackert can only be fully understood along these lines. He found in Hackert an artist that worked according to his own principle of analysis und synthesis, recognizing the (individual) characteristic elements of a landscape, and integrating them, through art, in a meaningful totality – in a “Naturgemälde” – to use the concept developed later by Humboldt. Trying to understand the special place that Hackert occupied in Goethe's aesthetic education, Wolfgang Krönig comments:

The revealing gaze, and a reproduction of the clarity and the order of observed natural phenomenon – these characteristics of the best possibilities implied in Hackert's work, must have found a special echo in Goethe (...)

Hackert is not for him an artist that could be placed to the side or replace great Italian figure painters, but an artist that makes the relation between art and nature the centre of his work.²⁸

In becoming Hackert's disciple in Italy, Goethe desired to see landscape with his eyes, that is, with the eyes of a “naïf” painter,²⁹ capable of identifying the essential forms of nature and delivering them in a synthetic image. For his part, as a teacher Hackert reassured Goethe that there was a precise method to be followed in order to learn the metier.³⁰ The poet, therefore submitted himself happily and optimistically to these principles, and apparently also transmitted these lessons on to Humboldt. The specific understanding of landscape painting that followed from all these encounters was in the last run

28. König e Wegener, *Jakob Philipp Hackert. Der Landschaftsmaler der Goethezeit*, Colonia, Weimar e Viena: Böhlau, 1996, p.25.

29. The word “naïf” here must be understood in the Schillerian sense, in which the poetic “self” was still in direct contact with the cosmos, where the rupture between self and world had not yet occurred. Goethe wrote in his introduction to Hackert's biography: “The description of his life, from where we took the present passages, is written in a very simple and sincere style, especially the bigger part from Hackert's own hand, in a way that immediately reminds everyone of the naivety (*Naïvetät*) of Cellini and Winckelmann.” (“Die Lebensbeschreibung, woraus wir den gegenwärtigen Auszug liefern, ist in einem sehr einfachen, treuerzigen Styl verfasst, besonders der grössere Teil von Hackerts Hand, so dass sie jeden gar bald an Cellinische und Winckelmannische Naïvetät erinnert.” Goethe, citado em Krönig e Wegener, op.cit., p.21.

30. During his second stay in Rome, Goethe makes the following observation in his voyage diary: “Herr Hackert hat mich gelobt und getadelt und mir weiter geholfen. Er tat halb im Schertz, halb im Ernst den Vorschlag, achtzehn Monate in Italien zu bleiben und mich nach guten Grundsätzen zu üben; nach dieser Zeit, versprach er mir, sollte ich Freude an meinen Arbeiten haben. Ich sehe auch wohl, was und wie man studieren muss, um über gewisse Schwierigkeiten hinauszukommen, unter deren Last man sonst sein ganzes Leben hinkriecht.” (“Sr. Hackert made me complements and critics, and continues to help me. He has made me a proposition, somewhat joking, somewhat seriously, that I stay eight months in Italy to train [my Hand] after good principles. After this period he guaranteed that I would find pleasure in my work. I can also see very clearly what and how one should study to overcome some difficulties, that otherwise, will remain for a whole life.”). Goethe, “Italienische Reise”, in: *Goethe Werke*, op.cit., vol.11, p.351.

what defined its privileged position side by side with literary descriptions, as a faithful partner of science, in the context of Humboldt's work.

Hackert's 'theoretical fragments' and Humboldt's 'pictures of nature'

Goethe's first reference to Jacob Philipp Hackert appears in his voyage diary under the date of 15th November 1786, thus before his trip to Naples.³¹ However, it was during this trip that he established closer contact with the painter. Amazed by his capacity to capture the Italian landscape, he decided to become his pupil. While in Caserta, near Naples Goethe wrote in his diary on March 15th 1787:

'He also conquered me completely, being patient with my shortcomings [...]. When painting aquarelles, he always has three colours at hand, and since he works from the background into the foreground, applying the paints one after the other, he obtains a picture that no one can quite understand from where it came.'³²

In his last stay in Rome before returning definitively to Weimar, Goethe met Hackert once more, giving continuity to his drawing lessons and visiting the Galleries of the city in his company, in order to hear his commentaries on the landscape paintings of Gaspard and Nicolas Poussin, Claude Lorrain, and other ancient and modern artists. It is therefore unquestionable that Goethe's view on landscape painting was formed in great part under the impact of his contact with Hackert. What above all fascinated Goethe was Hackert's mastery of the details of nature: the types of trees, the geography of landscape, and the proper atmosphere of the places depicted, without being subservient to reality, as was landscape painting in the north, and retaining all what was essential, or in Goethe's own terms, giving landscape a Form. Goethe wrote during his second stay in Rome: "I was out with Mr. Hackert, who has a unbelievable capacity for copying nature, giving at the same time a Form to the drawing."³³

In Goethe's understanding, by unifying the ideal landscape painting of Italian tradition with the detailed observation practiced in the northern "veduta" paintings, Hackert had found a form of extracting the ideal element from the real landscape. That is, of putting its universal aspect in evidence. As Norbert Miller comments: "[...] he learned with Hackert how to see ordinary landscape as ideal, and to value the observation of characteristic details

31. The reference is to a meeting during a stay in Frascati, in which drawings of the people present were discussed in the group. Hackert appears as experienced painter who gave counsel to the amateurs artists. Goethe, "Italienische Reise", op.cit., p.160-162.

32. Goethe, *Italienische Reise*, op.cit.

33. Idem, entrance: Rom June 16th 1787.

as precondition to the apprehension of the whole.”³⁴ It was this naïf way of looking at the world, similar to the gaze of the ancients, that Goethe desired to learn with Hackert.

FIGURE 12-1. Jacob Philipp Hackert, “View of the Vesuvius,” 1794, oil 62,7 x 88 cm, private collection.



How much Hackert’s artistic principles correspond to what Goethe saw in his work is a difficult question to answer. However it is certain that Hackert’s methods and their visible results came very close to Goethe’s convictions about Landscape painting, and they must have been perceived by the poet as a concrete visualization of his dream to integrate science and art.

Remembering, on the one hand, the great ascendance that Goethe had over Humboldt, and on the other hand the profound impression that Hackert left in Goethe, it should not come as a surprise that we find numerous overlappings between the understanding of the landscape painter’s task exposed in Hackert’s *Theoretical fragments*, and certain passages in the “Ansichten der Natur.” It seems possible to say that, through his contact with Goethe, Alexander von Humboldt inherited several theoretical principles put forward by Hackert, transforming them into valuable instruments of research about the physiognomy of the earth. In Humboldt’s hands, Hackert’s theoretical positions became the fundamental principle that should guarantee a perfect collaboration between scientist and artist.

One of the central points of agreement between the ideas developed by Hackert and those exposed by Humboldt refers to their definition of the elements, which structured the general impression of a landscape in the “human imagination,” as well as the specific methods applied to represent these elements. In his “Theoretical fragments” Hackert insisted that the essential element of a landscape was its vegetation, recommending the attentive study of trees as a central part of the education of a competent landscape painter. However, acknowledging the infinite time necessary for an artist to get to

34. Norbert Miller e Claudia Nordhoff (org.), *Lehrreiche Nähe. Goethe und Hackert*, op.cit., p.43.

know, and draw all kinds of trees, Hackert proposes their division in three prototype groups, following the form of their branches and leaves. These prototypes should serve as aid to art students: “According to my principles the trees could be divided in three categories, as I personally engraved and published them. The artist and the dilettanti should train their hand on them, if they would like to learn to draw.”³⁵

FIGURE 12-2. Jacob Philipp Hackert, Title page of the book: “Principles to learn how to draw landscape from nature,” 1802.



In the *Ansichten der Natur*, Humboldt seems to adopt Hackert's idea about the centrality of vegetation for imposing a general impression of nature on the senses: “it is impossible to deny that the central element determining this impression is the vegetation (“Pflanzendecke”);” he would write in his book. Humboldt also adopts the idea of a morphological classification of the vegetation, considering the spontaneous tendency of some artist to bring forth such a classification: “The painter (and here precisely the artist's fine sentiment towards nature plays a role) distinguishes in the background a landscape with pines, or palm- bushes, from a beech-tree, but not this from other foliage-tree forests.”³⁶ In the sequence, Humboldt expands Hackert's classification of trees from three to sixteen prototype groups that should help the artist to drive his natural sensibility towards efficient collaboration with science³⁷: “Sixteen plant forms fundamentally determine nature's physiognomy.” [...] “How interesting and rich for the landscape painter would be a

35. Goethe, “Hackert Biographie”, in: Johann Wolfgang Goethe Sämtliche Werke, vol.13, Münchner Ausgabe, Munich and Vienna, 1986, p. 614.

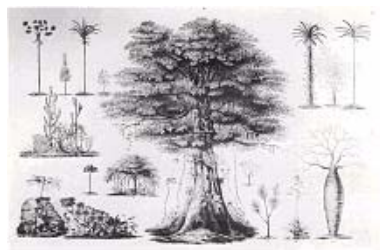
36. “Der Maler (und gerade dem finen Naturgeföhle des Künstlers kommt hier der Ausspruch zu!) unterscheidet in dem Hintergrunde einer Landschaft Pinien oder Palmengebüsche von Buchen-, nicht aber diese von anderen Laubholzwäldern!” Humboldt, *Ansichten der Natur*, op.cit., p.77.

37. It is only natural that Humboldt expanded the number of tree-types, since he was interested in including all the new tropical species in his classification.

work that would first present their individually to the eyes of the painter, the sixteen principal forms described, and then present them in their mutual contrasts!”³⁸

This passage still makes evident a certain hierarchy in the process of construction of a landscape. The artist should initially capture its individual elements, in order to compose, in a posterior moment, using his notations, the masses or the contrasting groups. These groups are responsible for the “total impression”, or the character of the specific region studied. This same conception of the process of execution of a landscape painting also appears later in the *Kosmos*:

FIGURE 12-3. Spix and Martius, “Plants of Tropical America” Lithography from “Atlas of the Voyage to Brazil,” 1823.



The sketches drawn before natural scenes can only lead to the representation of the character of distant regions after regressing [from these regions], in finished landscapes. They will be executed in an even more perfect way if the enthusiastic painter has drawn or painted outside, before nature, a great quantity of isolated studies of tree tops, opulent branches carried with flowers and fruits, tipped trunks covered with parasites, or orchids, cliffs, strips of river margins, and parts of floret grounds.³⁹

The careful construction of the landscape from solid knowledge of its partial aspects is central to Hackert’s theory on landscape. According to him, the attentive study of individual types was a guarantee of the richness and variety of the vegetation in the finished picture. An artist that did not make an effort to learn the different isolated forms of nature would, in a large composition, always tend towards painting the same kind of trees. This is also Hackert’s hardest critique regarding the great landscape painters of the Italian tradition:

38. Idem, p.77 and p.86. Drawings of individual species followed by drawings of these species inserted in bigger groups, forming great masses of vegetation can be found frequently in the *Flora Brasiliensis* of Spix and Martius.

39. Alexander von Humboldt, *Kosmos*, apud. Renate Löschner (ed.), *Artistas Alemães na América Latina*, Berlin, 1978, p. 24.

The most important thing in a landscape composition is to guarantee that everything is grand, such as in Nicholas and Gaspard Poussin, Carracci and Domenichino. [...] We can however reproach in these, the fact that their trees are always the same, and that only rarely one can be differentiated from the other.⁴⁰

In the same sense, Hackert wrote on the artist's learning process: "When the artist's hand becomes more or less trained, being able to take notes of all the changes of form in the leaves and in the trees, then he should draw copying nature, without loosing much time with copies of drawings."⁴¹

In the same way, the integration of the moral and physical aspects of landscape, proposed by Humboldt in his concept of "Naturgemälde" (pictures of nature), that is, the recognition of its historical dimension⁴², had already been phrased in Hackert's *Theoretical Fragments*, as determining the picture's final visual result. The integration of Nature and History in landscape painting is discussed in the *Fragments* under the title of "Moral Effect", where the author emphasises the pleasure one enjoys from the vision of a landscape punctuated by human history: "Some landscapes give us exceptional pleasure when they represent localities where great deeds, such as battles, or other grand historical events took place."

As Herbert von Einem argues⁴³, Goethe saw human history as an integral part of nature, and certainly approved and valued the presence of the human dimension present in Hackert's landscapes. It is possible that this question, which occupied him especially during his stay in Italy, was theme for discussion with his friend Alexander von Humboldt. For his part, Humboldt would have given a more anthropological character to the subject when treating it in his "Ansichten der Natur" some years later: "The knowledge of the natural character of each different region of the world is intimately tied to human history and culture." Not only the memorable historical events add to the landscape, as in Hackert's conception, but also its character is determined by the specific symbiosis installed locally between men and his habitat.

Evidently such ponderings were also in the mouth of many men of science of the time, and could be traced directly back to Winckelmann, among others. However I would like to suggest here that in many aspects the procedures recommended by Hackert in his *Theoretical Fragments* helped Humboldt to materialize the idea of a picture of nature ("Naturgemälde") as an

40. Goethe, "Hackert Biographie", op.cit., p.617

41. Idem, p.615.

42. Meyer-Abich gives the following description of the concept of Naturgemälde in Humboldt; "(...) it is no more and no less than the harmony of physical and moral Nature, or from a modern point of view: the harmony between Nature and History." In: Humboldt, *Ansichten der Natur*, op.cit., p. 159.

43. Herbert von Einem, "Nachwort", in: Goethe Werke, Munique: Beck, 1989, vol.11, p.59.

essential path in the process of acquiring knowledge of the world, and of humanity.

The fact that it was Hackert's works, and not those of the romantics for instance, to served for Humboldt as model for the description of the painter's task, has its importance. It meant, among other things, as Werner Busch notes,⁴⁴ the naturalist's adoption of a classical view of landscape, clearly implied in the concept of "Totaleindruck" ("total impression").⁴⁵ Humboldt's preference for classical painting of the kind proposed by Hackert is also evident in the list of the artists, who collaborated with him in the illustration of his books. For this task he called on men like Gottfried Schick, Bellman, or Friedrich Wilhelm Gmelin, all related in one way or another to Goethe's artistic circle in Weimar. Wilhem Gmelin, for instance, was even mentioned by Meyer and Fernow in their introduction to Goethe's *Winckelmann und sein Jahrhundert* (Winckelmann and his century):

Under artist who draw monochromatic landscapes we find on Hackert's side the already mentioned Birman and Kniep, beside these, Gmelin (...). As Hackert's personal friend he learned his techniques with this master, proving to have good knowledge of effect, posture, etc., while drawing nature with fidelity.⁴⁶

FIGURE 12-4. Spix and Martius, "Extraction and preparation of the turtle eggs at the Amazon river" From "Atlas of the Voyage to Brazil," 1823.



Alexander von Humboldt was also a reference figure to many artists who travelled through Brazil, such as Johann Moritz Rugendas, Thomas Ender and Carl von Martius, contributing to determine the form in which they cap-

44. Werner Busch, "Der berg als Gegenstand von Naturwissenschaft- und Kunst. Zur Goethes Geologischem Begriff", in: *Goethe und die Kunst*, op.cit., p. 485-518.

45. The idea is opposed to the non-classic concept of *vedute* painting. Humboldt's classic taste is also revealed by the fact that he chose François Gerard, a student of Jacques-Louis David as his teacher during the time he was in Paris, after returning from America. Cf. Löchner, op.cit., p.27.

46. Goethe, Meyer, Fernow, "Winckelmann und sein Jahrhundert", apud. *Goethe und die Kunst*, op.cit., p.508.

tured the Brazilian nature⁴⁷ in their work. Since these artists were frequently in contact with the local Academy it is plausible to think of an influence of the hackertian model on Brazilian landscape painting, intermediated by Alexander von Humboldt.⁴⁸ This would help to explain, for instance, the important difference existing between North American landscape painting, strongly impregnated by an aesthetic of the sublime, and the Brazilian production, which maintains an intriguing relationship with the type of painting invented by Jakob Philipp Hackert and his disciples.

47. It is certain, for instance, that Nicolau-Antoine Taunay maintained contacts with Spix and Martius, who arrived in Brazil in 1817 as members of a Scientific expedition.

48. Luciano Migliaccio has also pointed out another possible path for the reception of Hackert's theory and practice regarding landscape painting. According to the author, the Portuguese king, who immigrated with his court to Brazil in 1808, and was married to a Bourbon princess, tried to adopt the pattern of patronage established by the King Ferdinand IV in Naples with the direct help of his court painter J.Ph. Hackert. Luciano Migliaccio, "A paisagem clássica como alegoria do poder do soberano: Hackert na corte de Nápoles e as origens da pintura de paisagem no Brasil", in: Claudia Valladão de Mattos (ed.) *Goethe e Hackert: Sobre a Pintura de Paisagem. Quadros da Natureza na Europa e no Brasil*, São Paulo: Ateliê Editorial, to be published in 2004.

