Anja Werner

Alexander von Humboldt’s Footnotes: “Networks of Knowledge” in the Sources of the 1826 Essai politique sur l’île de Cuba

Abstract

When it comes to footnotes, Alexander von Humboldt was ahead of his times even though his references leave much to be desired by today’s academic standards. This article examines the footnotes of Humboldt’s Essai politique sur l’île de Cuba (1826). While it is not always easy to decipher his sometimes cryptic references, the undertaking is worthwhile: Humboldt’s footnotes do not only reveal his vast networks of knowledge. They also provide glimpses of ongoing, contemporary disputes among different scholars that involve Humboldt’s writings. They also present Humboldt’s reactions to such disputes. Exploring Humboldt’s footnotes consequently allows the reader to access both Humboldt the scholar and Humboldt the human being.
Introduction

In the *Essai politique sur l’île de Cuba* (hereinafter “Essai”), Alexander von Humboldt did not only analyze his own extensive data collection and merge it with those of his contemporary scholar-scientists as well as with observations from three hundred years of travel narratives on the Americas. He also engaged in discussions with those other authors and texts across time and space, thereby initiating dialogues rather than merely presenting the ponderings of his own vivid mind. The *Essai* is quite conscious of its position within the scholarly-scientific world of its day, even if this self-awareness is expressed in at times rather subtle and even ironic ways, such as in the different layers of its footnotes.

Reconstructing Humboldt’s references allows us to explore the underlying building blocks that may be considered an essential part if not the essence of his complex “networks of knowledge.” In fact, for an early nineteenth-century scientist-scholar, Humboldt was untypically meticulous in citing his sources—he did attribute information to its originators, an unquestioned academic standard today but not so in Humboldt’s time. Then again, in spite of his pioneering role in comparatively carefully preparing citations for his writings, his references leave much to be desired from the perspective of a twenty-first century historian. Or was there a system behind some of the carelessness in his sources? It seems also likely that typesetters might have contributed to incorporating a few mistakes in Humboldt’s multi-language web of citations. Leaving hindsight aside, however, Humboldt’s idea of references is intriguing in itself and merits further inquiry.2

In his footnotes, Humboldt more or less openly collected and commented on observations from scholar-scientists, politicians, abolitionists, even pro-slavery authors, and travelogue writers. He also incorporated a second and rather veiled layer of references to both critical and friendly discussions of his overall work besides reacting in a courteous manner to other’s—as well as his own—alleged mistakes in the process of gathering and analyzing data. In some instances, debates about an alleged mistake of his were discussed in several journals at once. Humboldt certainly took note of these discussions and duly referenced them in his *Essai*. It adds another dimension to reading the *Essai* today when this underlying layer becomes as transparent once again as it must have been to Humboldt’s contemporary readers.

Back then, in a much smaller “global” scholarly-scientific community, Humboldt’s references must have been much more accessible, especially as he often referred to luminaries who were very much alive and busy publishing their own findings. Of course, while Humboldt relished the scientific-scholarly dialogue with others, it was somewhat of a challenge for him to keep it going, as the type of research that he wanted and produced was not easily available. He therefore also needed to engage in a dialogue with himself. That is, I found every now and then that references to a colleague’s publication also refer to Humboldt’s own work. After all, he collaborated with quite a number of scholar-scientists of his day. Moreover, other authors borrowed extensively from Humboldt and did not necessarily mention that fact. It was up to Humboldt himself, among others, to point out the problem, which might also explain why he decided to put so much effort into his own reference work.

The goal of this paper is to provide a first glimpse of the comments, corrections, and attitudes that Humboldt wrapped up in his occasionally rather cryptic references. The basis of my analysis is my research about the persons that Humboldt mentioned as well as a bibliography of the sources that he referenced in his *Essai*.

---

1 This article was first outlined in the context of Vanderbilt University’s Humboldt-in-English project (HiE) in 2009.


6 For example, the very first footnote of his *Reasoned Analysis* points to his collaboration with Jabbo Oltmanns on the *Recueil d’observations astrononimiques [etc.]*. Paris: Schoell, 1808-1811.

It was possible to trace most of Humboldt’s references and eventually to arrive at exactly the piece of information that he cited.

Besides the possibilities of numerous online library catalogues and online archival finding aids in the Americas and in Europe, a starting point for my search was *The Humboldt-Library: A Catalogue of the Library of Alexander von Humboldt* compiled by Henry Stevens in 1863 and reprinted in 1967. Curiously, however, few publications that date from before the 1830s are listed. Those mentioned include maps, manuscripts, particularly valuable and personally esteemed books, as well as Humboldt’s own publications. This raises the question of what happened with the volumes that Humboldt cited in his *Essai* but that are not listed as a part of his library. He must have sold or given away books upon completing his American travelogue. Be that as it may, *The Humboldt-Library* implies that, in the late 1820s, upon moving from Paris back to Berlin, Humboldt not only began a final phase of working on his American travelogue, but he also started to part with those sources that had formed its basis.

### Observing and Interpreting Humboldt’s References

In his *Essai*, Humboldt quoted sources that were composed in at least nine languages: French, Spanish, English, German, Dutch, Portuguese, Italian, Latin, and ancient Greek. In a number of cases, he resorted to the same work in two different languages, such as when referring to the *Letters from the Havana* by Robert Francis Jameson, which was first published in English in 1821, and, subsequently, in 1826, in French. Humboldt sometimes referred to the English *Letters from the Havana*, but also mentioned an *Aperçu statistique*, which is actually the same work, whose complete title in French starts out with *Aperçu statistique de l’île de Cuba*, précédé de quelques lettres sur la Havane and so on. The French version by Bertrand Huber, French Minister of Foreign Affairs, is more than simply a translation. It contains Jameson’s original seven letters to which “Mr. Huber added,” as Humboldt himself observed in the first volume of his *Essai*, “much important information on trade and Cuba’s customs system” (vol. I, p. 281n).

It was not the only example of Humboldt’s including additional references to editions in the same and other languages. The fact that he did so insinuates that, for him, the production of knowledge never stopped but instead was an ongoing process, which may also explain why none of the various editions of his own books are identical: his cosmos of knowledge was a dynamic one. It kept changing as scholars and scientists kept further developing their own as well as their colleagues’ findings. Other examples may be found in the *Essai*. In the case of Bryan Edwards’ 1793 *The History, Civil and Commercial, of the British Colonies in the West Indies*, Humboldt appears to have gone through five editions: When first citing Edwards, Humboldt explicitly referred to the first edition, which was published in two volumes in 1793 (*Essai*, vol. I, p. 91). Later on in his *Essai*, however, Humboldt suddenly mentioned a volume III (vol. I, p. 167) and even a volume V (vol. I, p. 333). By then, he must have been quoting from the 1819 fifth edition in five volumes. Edwards’ extended fifth edition merits further inquiry, for the man had been dead for nearly two decades by the time it was published.

A few oddities in Humboldt’s references may be attributed to plain human error. For instance, Humboldt provided for William Dampier’s *Voyages and Descriptions* three different publication dates: 1696, 1599, and, finally, the correct date—the volume was first published in 1699 (vol. I, pp. xxxiv, 352; vol. II, p. 6, respectively). Then again, some of Humboldt’s references are obscured by idiosyncratic punctuation and italics, as is the case with an Italian source in the *Essai* (vol. I, p. 58n) that reads “Maraschini sulle formazioni delle rocce del Vicentino, p. 177.” A missing comma and the fact that the entire phrase is italicized make it difficult for people without any knowledge of Italian to realize that the author’s name is Abbé Pietro Maraschini and the name of the publication *Sulle formazioni delle rocce del Vicentino saggio geologic*. It was published in Padua in 1824. Humboldt owned an earlier French version of Maraschini’s work from 1822.

---


What makes tracking Humboldt’s sources somewhat challenging—but also illustrates his thinking and possibly his taking up an author once again at a later point— is his tendency to provide very short titles so that his references to one and the same work vary in the course of his *Essai*. Up to the nineteenth century, book titles could be very long. They were more like abstracts. Humboldt at times picked the beginning and then again a later phrase from the long title for his short references. For example, he repeatedly cited “Dampier’s Voyages and Descriptions” or simply “Dampier’s Voyages.” At the beginning of the *Essai*’s volume two, however, he introduced “Dampier, Discourse of Winds, Breezes and Currents.” This is actually one and the same book published in 1699. The overall title is Voyages and Descriptions. Vol. II. In Three Parts. The third part of volume II is entitled A Discourse of Trade-Winds, Breezes, Storms, Seasons of the Year, Tides and Currents of the Torrid Zone throughout the World…. and it goes on. Humboldt therefore moved from citing a general reference to a specific section of the same book.\footnote{Dampier, William. 1699. *Voyages and Descriptions*. Vol. II. In Three Parts, viz. 1. A Supplement of the Voyage Round the World, Describing the Countreys of Tonguin, Achin, Malarca, &c. Their Product, Inhabitants, Manners, Trade, Policy, &c. 2. Two Voyages to Campeachy; with a Description of the Coasts, Product, Inhabitants, Logwood-Cutting, Trade, &c. of Jucatan, Campeachy, New-Spain, &c. 3. A Discourse of Trade-Winds, Breezes, Storms, Seasons of the Year, Tides and Currents of the Torrid Zone throughout the World: With an Account of Natal in Africa, its Product, Negroes, &c. By Captain William Dampier. Illustrated with particular Maps and Draughts. To which is Added, a General Index to both Volumes. London: James Knapton. Humboldt apparently used the first edition of this volume (1699). He only quotes from that volume. The first volume, A New Voyage round the World, was published in 1697.}

Something similar may be observed with regard to articles, which were sometimes called “memoirs” in English back then. Humboldt repeatedly cited the author of an article alongside the name of the overall publication rather than providing the article’s title. For instance, one reference reads “Roxburgh, Repertory, Vol. II.” William Roxburgh had published various short contributions in Alexander Dalrymple’s *Oriental Repertory*, a multi-volume collection of scholarship that appeared between 1791 and 1797. In the 1793 volume number two, Roxburgh wrote about the “*Hindoo Method of Cultivating the Sugar Cane* […]”, thus discussing the issue that Humboldt mentioned in his *Essai* upon citing Roxburgh.\footnote{Roxburgh, William. 1793. “An Account of the Hindoo method of Cultivating the Sugar Cane, and Manufacturing the Sugar and Jaggary in the Rajahmundry Circur; interspersed with such remarks, as tend to point out the great benefit that might be expected from encreasing this Branch od Agriculture, and improving the quality of the Sugar; also the process observed, by the Natives of the ganjam District, in making the Sugars of Barrampore.” *Oriental Repertory*, ed. Dalrymple, Alexander (East India Company). Vol. 2. London, printed by G. Bigg, 1791-97. p. 497-514.} Apparently, in the much smaller transatlantic scholarly-scientific communities of the eighteenth and early nineteenth centuries, Humboldt’s readers must have been familiar enough with Dalrymple’s *Oriental Repertory* to be able to infer Roxburgh’s role as the author of an article in that publication.

The above examples show that in his reference work, Humboldt was rather efficient. Evidently, he read selectively by focusing on relevant materials. As a result, he occasionally quoted exclusively from a specific section of a single source. For example, Humboldt referred only to chapter V of Henry Bolingbroke’s *1807 A Voyage to the Demerary.*\footnote{Bolingbroke, Henry. 1807. *A Voyage to the Demerary Containing a Statistical Account of the Settlements There, and of Those on the Essequibo, the Berbice, and Other Contiguous Rivers of Guayana*. London: Richard Phillips. There are also editions from 1809 and 1813. Humboldt did not specify which one he used.} Likewise, he exclusively quoted from the chapter on a “Route to the Pacific Ocean (263-332)” in volume II of William Davis Robinson’s *Memoirs of the Mexican Revolution.*\footnote{Robinson, William Davis. 1821. *Memoirs of the Mexican Revolution including a narrative of the expedition of General Xavier Mina*; to which are annexed some observations on the practicability of opening a commerce between the Pacific and Atlantic oceans, through the Mexican isthmus, in the province of Oaxaca, and at the Lake of Nicaragua; and the vast importance of such commerce to the civilized world. London: Lackington, Hughes, Harding, Mavor, & Lepard. 2 vols. Note that there is also an apparently one-volume edition from 1820.}

**Scholarly-Scientific Disputes in the References**

Humboldt actually appears to have obscured some of his sources on purpose: insiders would recognize the source in question and thereby understand that Humboldt was following a certain discourse. Having thereby acknowledged a specific issue, he did not have to discuss it himself anymore, which could have been an advantage if his own work was being criticized. He preferred to find subtler ways to exonerate himself without engaging with a critical author on an unprofessional level. Footnotes were ideal helpers in this regard.

Then again, in a few instances, references are crystal clear and easy to identify, such as when Humboldt quoted Leopold von Buch, whom he esteemed very highly and whose books he piled up in his library.\footnote{See Stevens, *The Humboldt Library*.} The more obscure the references are, the more interesting are therefore some of the underlying disputes. Humboldt
was in a way courteous in both including and obscuring references to works that for different reasons might have caused him unease. Then again, others did not always live up to Humboldt’s scholarly-scientific expectations of presenting new data and instead simply quoted Humboldt’s findings without always acknowledging him. It meant that even in works that were published by other authors, Humboldt encountered his own data rather than something new.

Some authors, while providing solid scientific data, voiced opinions contrary to Humboldt’s, which meant for Humboldt to find a way that allowed him to include the data without discussing the author’s point of view. An obscure source may be the key in such cases. For example, with regard to sugar cane cultivation in the Caribbean, Humboldt twice mentioned a “Mr. Bockford” (vol. I, pp. 215, 220), obviously referring to a publication yet without ever identifying it. The man in question was William Beckford, nephew of a mayor of London also named William Beckford and cousin of the illustrious British writer William Thomas Beckford. The William Beckford in question here (1744-1799) was a sugar planter in Jamaica, a historian, and a patron of the arts. In 1790, he published a work about Jamaica, which defended the slave trade but urged for amelioration. Humboldt’s persistence in calling Beckford Bockford without identifying him suggests that, while he was at ease with Beckford’s data, he did not wish to discuss the plantation owner’s personal convictions. It is not the only time Humboldt did so in his Essai: In vol. 1, p. 321 he mentioned data provided by a “Mr. Norris” without giving any clues that Robert Norris had been an English trader in West Africa from the 1750s to the 1780s who defended the slave trade in a 1789 publication, thus preventing heavy regulation of the slave trade in the early 1790s.

As regards the problem of authors “borrowing” from him, Humboldt also took note. For instance, in volume II (p. 283) of his Essai, Humboldt observed that different works published during the Spanish colonies’ wars of independence were based on data that he had released in 1808. The accompanying footnote exempts Robinson’s 1821 Memoirs of the Mexican Revolution from this criticism and then lists four short references.

The first of the references reads “Edinb. Rev., 1810, January.” It appears to refer to The Edinburgh Review or Critical Journal, No. 34, (February 1811), pp. 372-381, which printed a review of a two-volume 1810 book entitled Present State of the Spanish Colonies, Including a Particular Report of Hispaniola, or the Spanish Part of St Domingo. The book’s author was William Walton, Jr., “Secretary to the Expedition which captured the City of Santo Domingo from the French, and resident British agent there.” The review mentioned Humboldt on p. 381—apparently, Walton had liberally “borrowed” from him, for the review’s author complained that in Walton’s vol. 2, “the Travels of Humboldt … are so outrageously pillaged, and the obligation so little acknowledged, that we have no kind of temptation to pursue our criticism any further.” Not even providing the review’s page numbers, Humboldt merely and rather delicately hinted at the matter of his work being “pillaged,” yet leaving specifics up in the air. One needs to leave through the entire volume of the Edinburgh Review in question to pinpoint the review as the item to which Humboldt must have referred in his Essai. The second of the three references reads “Walton in Colonial Journal, 1817 (March and June).” It is a letter to the editor in two parts by Walton himself, which consequently provides another example of Walton’s approach in addition to the two volumes of the Present State.

The sources three and four take the issue one step further by illustrating that the problem of authors’ “borrowing” from Humboldt occurred in several languages...
"Networks of Knowledge" in the Sources of the 1826 Essai politique sur l’île de Cuba (A. Werner)

simultaneously, including besides the English-speaking world also scientific communities in the French- and Spanish-speaking worlds. Hence, the third source, a reference to the 1823 Bibliothèque universelle des sciences, belles-lettres, et arts, faisant suite à la Bibliothèque Britannique, rédigée à Genève par les auteurs de ce dernier recueil was reprinted in Humboldt’s fourth reference to the Bibliotheca Americana, vol. 1, actually a Spanish-language publication that contains an excerpt from Humboldt’s Vues des Cordillères, entitled “El Chimborazo” (pp. 108-115).

Put differently, even though Humboldt followed a wide range of scientific and scholarly publications in numerous languages in an attempt to engage in a vivid scientific dialogue, he kept encountering his own findings in the texts written by others. The dialogue thus kept turning into a monologue, which is a criticism – if not an underlying motivation – that may be traced in Humboldt’s sources and his comparatively meticulous references. He thereby urged for a more transparent and even regulated scholarly and scientific approach.

Sometimes disputes involving Humboldt’s findings stretched out over various publications, with Humboldt’s Essai merely being one instance in a chain of publications. In vol. II, pp. 80-81, Humboldt cautiously acknowledged that a Mr. Atkinson had come up with different results regarding the equator’s mean temperature, challenging the data that Humboldt had released in his work on isothermal lines, which was published in French in 1817 and subsequently, in 1820/21, in English. In the Essai, Humboldt moved on to citing David Brewster’s findings in the “Edinb. Journal of Science, 1829, no. 7, p. 180.” (While a reference to an 1829 journal in an 1826 publication might hint at an error, it need not necessarily be so. In this case, however, Humboldt – or the typesetter – apparently confused 1826 and 1829.)

When Humboldt published his Essai in 1826, it seemed that he had erred. While he acknowledged his possible mistake, he also proceeded carefully to illustrate that Atkinson was the likelier candidate to be in the wrong. In fact, the Essai’s entire final sub-chapter right before the Supplément is devoted to proving that Atkinson had erred (vol. II, pp. 79-92). Above all, Humboldt stressed the point that many different factors had to be taken into consideration when grappling with a problem. The sub-chapter contains on p. 91 Humboldt’s carefully obscured reference to Atkinson in the observation that “it does not at all seem likely to me that equatorial temperature can reach 29.2° C, which is what the knowledgeable and esteemed author of a report on Réfractions astronomiques claims.” This author was Atkinson, whose treatise, written in English, was entitled “On Astronomical and other Refractions; with a connected Inquiry into the Law of Temperature in different Latitudes and at different Altitudes.” Humboldt provided the title of an English-language publication in French, which he apparently did because of the fact that his reputation was at stake. Note that, moreover, Humboldt simultaneously dashed forward in a new direction: Up to then, the discussion had been in Fahrenheit, but when referring to it in his Essai, Humboldt—rather uncharacteristically—provided both Fahrenheit and Celsius as if to show how very much at ease he was with converting measurements.

The story does not end here. In 1827, that is, the year following the publication of Humboldt’s Essai, David Brewster, the editor of the Edinburgh Journal of Science, defended Humboldt, arguing that in his “admirable paper on Isothermal Lines,” Humboldt had “naturally” given “a preference to observations made in the old world, where the distribution of temperature did not exhibit the Geological Society of London. The publication schedule must have been known well in advance.


27 For example, Humboldt (vol. I, p. 65) also quoted Charles Lyell’s paper “On a recent Formation of Freshwater Limestone on Forfarshire,” which was read in 1824 and 1825 but not published until 1829 in the Transactions of the Geological Society of London. The publication schedule must have been known well in advance.


the same anomalies which occur in the New World. Just as Humboldt had intimidated in his *Essai*, Atkinson’s criticism was not valid. Brewster now presented further evidence backing up the solidity of Humboldt’s research and thus supporting Humboldt’s observation that Atkinson had not been right to criticize him.

**Conclusion**

The Humboldt-Brewster-Atkinson exchange in four different publications is an example of the ongoing dialogue underneath the surface of one of Humboldt’s texts. In his *Essai*, Humboldt engaged in pioneering scientific-scholarly dialogues, which he made transparent by carefully referencing his sources. Ironically, however, Humboldt also had to create textual webs himself, for the type of publication that he desired required a foundation of numerous other texts—in the same thorough style—that did not quite exist. He therefore had to contribute not simply by writing his travelogue but by basing it on a network of other such publications to which he had contributed either by co-authoring them (knowingly or unknowingly) or by having initiated a discussion, as was the case with the equator’s mean temperature. One might say that in his scholarly-scientific dialogues, Humboldt was to some extent talking to himself. Humboldt’s writings—or networks of knowledge—are as much a monologue as they are a dialogue. For monologues, however, they are vivid and open to new perspectives and therefore continue to inspire science and scholarship even today.

**References**


Beckford, William. *A Descriptive Account of the Island of Jamaica with Remarks upon the Cultivation of the Sugar-Cane, throughout the Different Seasons of the Year, and Chiefly Considered in a Picturesque Point of View: Also Observations and Reflections upon What Would Probably be the Consequences of an Abolition of the Slave-Trade, and of the Emancipation of the Slaves* [2 vols.]. London, Printed for T. and J. Egerton, 1790.


---


31 Examples of Humboldt collaborating with various contemporary naturalists in processing his data may be found in, e.g., Fiedler, Horst and Leitner, Ullike. 2000. *Alexander von Humboldts Schriften. Bibliographie der selbständig erschienenen Werke*. Berlin: Akademie Verlag, 217.
"Networks of Knowledge" in the Sources of the 1826 *Essai politique sur l’île de Cuba* (A. Werner)


Norris, Robert. *Memoirs of the Reign of Bossa Ahâdee, King of Dahomy an Inland Country of Guiney: To Which Are Added, the Author’s Journey to Abomey, the Capital; and a Short Account of the African Slave Trade.* London: Printed for W. Lowndes, 1789.

Robinson, William Davis. *Memoirs of the Mexican Revolution including a narrative of the expedition of General Xavier Mina; to which are annexed some observations on the practicability of opening a commerce between the Pacific and Atlantic oceans, through the Mexican isthmus, in the province of Oaxaca, and at the Lake of Nicaragua; and the vast importance of such commerce to the civilized world.* 2 vols. London: Lackington, Hughes, Harding, Mavor, & Lepard, 1821. Note that there is also an apparently one-volume edition from 1820.

Roxburgh, William. “An Account of the Hindoo method of Cultivating the Sugar Cane, and Manufacturing the Sugar and Jaggery in the Rajahmundry Circar; interspersed with such remarks, as tend to point
“Networks of Knowledge” in the Sources of the 1826 Essai politique sur l’île de Cuba (A. Werner)

out the great benefit that might be expected from increasing this Branch of Agriculture, and improving the quality of the Sugar; also the process observed, by the Natives of the ganjam District, in making the Sugars of Barrampore.” Oriental Repertory, ed. Dalrymple, Alexander [East India Company]. Vol. 2. London, Printed by G. Bigg, 1791-1797, here 1793, 497-514.


Walton, William. Present state of the Spanish colonies: including a particular report of Hispaniola, or the Spanish part of Santo Domingo; with a general survey of the settlements on the south continent of America, as relates to history, trade, population, customs, manners, &c., with a concise statement of the sentiments of the people on their relative situation to the mother country, &c. London: Printed for Longman, Hurst, Rees, Orme, and Brown, 1810.

Walton, William. “The Isthmus of Panama. Considered as Affording a Passage to Unite the Pacific with the Atlantic or Western Ocean; and this Passage (if Practicable) Compared with the Land Route, over the Buenos Ayres Plains.” The Colonial Journal, No. V (March 1817): 86-101.


How to cite