

SANDRA REBOK

Enlightened Correspondents

The Transatlantic Dialogue of Thomas Jefferson and Alexander von Humboldt

The Prussian traveler and scientist Alexander von Humboldt (1769–1859) and the American Thomas Jefferson (1743–1826) were two among many intermediaries participating in the transfer of ideas, impressions, and knowledge between the Old and the New World. Because the two men held prominent positions in society, their respective ideas of Europe and America have had a particularly far-reaching historical effect.¹ These two cosmopolitan thinkers demonstrated the importance of transatlantic communication in the open exchange of political as well as scientific ideas and information. As leading minds of the Enlightenment, they saw clearly the deficiencies of European society, and for them the United States served as a hopeful experiment for the application of their ideas to create a new form of society.² In order to effect these social improvements and promote scientific progress, both Humboldt and Jefferson recognized the importance of an international network, whereby extensive correspondence could serve as a forum for discussion of respective works and the predominant questions of the time.

Who was this Prussian, and what circumstances led to his personal acquaintance with the third president of the United States? Alexander von Humboldt was born in Berlin in 1769 to an aristocratic family.³ He became famous for his scientific expedition through the Spanish colonies of South America from 1799 to 1804, undertaken in the company of his French colleague Aimé Goujand Bonpland and for which he had been given special

Sandra Rebok holds a research position at Consejo Superior de Investigaciones Científicas, Instituto de Historia at Madrid, Spain.

permission by the Spanish king, Carlos IV.⁴ Humboldt received no financial support for this journey, paying all expenses himself, an important detail that must be recognized both for its uniqueness and as evidence that no European government with possible imperialistic interests stood behind his enterprise. Thus, Humboldt could pursue his own scientific objective to try to understand the nature of and, according to enlightened precepts, take measurements about every component of the New World, such as plants, animals, minerals, and climate. As a result, his contribution to science was not focused on one particular field but rather on the method he used to find the interconnections among the different branches of science.

After his expedition through Spanish America, Humboldt, accompanied by Bonpland, visited the United States from 20 May to 30 June 1804, where he met several times with President Jefferson and members of his cabinet.⁵ Even before their first personal encounter, Humboldt had introduced himself in a letter to Jefferson as an authority on the president's writings and had expressed admiration and respect for his enlightened intellect, his work, and his liberal ideas.⁶ Influenced by his identification with the ideals of the American independence movement, as well as the early goals of the French Revolution, Humboldt was impressed by the democratic form of American society, which he saw as a model for other parts of the Western Hemisphere as well as for European nations.

Jefferson, too, believed that Humboldt had something of particular interest to him. By the time the two men met in 1804, Jefferson had reached the pinnacle of his career. As author of the Declaration of Independence, he stood out as one of the essential Founding Fathers. Then as wartime governor and emissary to France, he helped give concrete form to the ideals set forth in the Declaration. Now he served as third president of the new American nation. Throughout all the political tumult of the republic's early years, however, Jefferson had not abandoned his curiosity for the natural world. He therefore welcomed the Prussian visitor as a kindred spirit in the quest for discovery of new scientific knowledge. Moreover, Humboldt's travels and discoveries would prove useful to Jefferson as his nation expanded rapidly to the west. Humboldt's materials and maps from the Spanish colonial archives contained hitherto unknown data on the disputed establishment of borders between the United States and New Spain, and this infor-

mation would prove especially valuable, given the recent purchase of the Louisiana Territory. He very generously complied with Jefferson's desire to view these materials, giving him the latest geographical and statistical information on New Spain.⁷ From this brief meeting, a lifelong friendship developed between the two men, marked by a lively exchange of ideas in their correspondence, as well as in the continuing exchange of their writings.⁸

Upon his return to Europe, Humboldt lived in Paris for twenty-two years, where, working with French scientists, he published the results of his research. His time in the French capital came to an end in 1827, however, when his funds were almost completely exhausted. Unable to maintain his financial independence, he returned to Berlin, where the Prussian king, Frederick William III, demanded his presence at court.

In 1829 Humboldt undertook a second major expedition, this time through large regions of Russia. Spanning eight months, this exploration also led to interesting scientific discoveries, but it never reached the importance and fame of the Spanish American expedition. Until a few years before his death, Humboldt served as a tutor to the crown prince, as a member of the Privy Council, and as a court chamberlain. While still working on the fifth volume of his final publication, the *Kosmos*, with hardly diminished vitality and enthusiasm and with an unimpaired memory, Humboldt died in 1859 at age eighty-nine. He left behind an abundant assortment of geological, zoological, botanical, and ethnographic specimens; several maps; and numerous publications that reflected the results of his work. He also left evidence of his personal opinions and convictions with regard to many aspects of life in the New World, as well as his perceptions of the progress of scientific research in general. The majority of these works have been translated into several languages and have been used as references by countless subsequent travelers and scientists.⁹

This article will analyze both the personal and ideological links between Humboldt and Jefferson, contextualizing them in the realm of intellectual history and its broader significance for transatlantic political and scientific dialogue. Examining these men side by side allows us to gauge the importance of transatlantic travel in shaping an individual's perception of different forms of societies and political structures. By studying their relationship and their individual observations and impressions of world events, an important

period in history can be reconstructed. To do this, particular attention will be paid to several key points. First, the extent to which Humboldt and Jefferson were influenced by their transatlantic experiences will be traced. An analysis of these experiences reveals Jefferson's ambivalence toward the Old World and the complexity of Humboldt's views of the New World.¹⁰ The primary purpose of this investigation is not to contrast these two men and their ideas—though at some points their differences in interest and perspective will be mentioned—but rather to show how their time on each other's continent molded their convictions and as a consequence shaped their personal and national identities. This will be followed by an examination of the personal correspondence of these two famous personalities and committed representatives of the Enlightenment, which will allow for the exploration of their scientific and ideological exchanges—beginning with their first meeting and continuing throughout their lengthy correspondence.



Humboldt and Jefferson had each traveled across the Atlantic only once before meeting, and each showed an interest in extending his stay. They remained in their respective “other worlds” for a period of about five years, thus allowing for deeper observation. By becoming familiar with another world and by contrasting it with their own, they saw clearly the problems that existed. Because Jefferson and Humboldt were living during this age of inquiry and at a time when new definitions of European and American identity were being formulated, they attempted to use their accumulated knowledge to try and solve those problems and thus improve their societies. Their transatlantic experiences, therefore, contributed decisively to the formation of their own thoughts and convictions, which they sought to turn into reality for the rest of their lives.

Both men viewed their respective “other world” with ambivalence, and their perceptions and impressions were complex. Jefferson's European experiences inspired him as he pursued the creation of a new society in America. He stated in a letter to Edward Rutledge, “the best schools for republicanism are London, Versailles, Madrid, Vienna, Berlin etc.”¹¹ For Humboldt, the model that the United States provided helped him to envision a new politi-

cal and economic one for Europe and the Spanish colonies in America. As a cosmopolitan representative of the Enlightenment, Humboldt believed this model was especially interesting because it brought to reality many of the theories of this movement.¹² He expressed this belief in a letter he wrote to Jefferson before leaving America. In Humboldt's opinion, Europe presented an immoral and melancholic picture, whereas the population of the United States could expect major improvements brought forth by its newly developing order of society.¹³

Humboldt maintained high expectations for the realization of his liberal ideals in the United States and followed the political and social developments there with interest throughout his entire life. He appreciated the new nation's progress in the sciences, in education, and in all aspects of cultural interest and planned to return to explore the country. Unfortunately for Humboldt, it was a project that, like many others, would never be undertaken.

To understand better his expectations for the United States as a free society, it is important to know Humboldt's general attitude toward colonialism.¹⁴ In an extract from an essay on colonies, found in one of his travel diaries, Humboldt expressed his sharp criticism of colonialism—an opinion not included in the published diaries.¹⁵ He condemned the very concept of colonialism—the idea that one country must pay tribute to another and that the expansion of prosperity, industry, and the ideas of the Enlightenment would remain under that dominating country's control. Humboldt believed that a colonial government could not be trusted because it exercised its authority not for the sake of the happiness of its inhabitants but instead to further the interests of the metropolis. This resulted in a lack of morality and an uneasiness that could be felt in these regions by visitors. This private document is particularly revealing because it suggests that his personal convictions were based on moral considerations and that the well-being and happiness of the people were foremost in his mind.¹⁶

As a result of his admiration for the United States and his identification with many of its ideals, Humboldt referred to himself on several occasions as “half an American.”¹⁷ This expression permits a double interpretation because in addition to its most obvious, bi-cultural meaning, Humboldt may also have been referring to only that half of the American identity that

he agreed with, leaving out the developments that he regarded as inhuman, such as the spread of slavery.

Indeed, one of the most memorable experiences of Humboldt's transatlantic journey was his contact with the institution of slavery, which he considered "the greatest of all the evils that afflict humanity" and the very antithesis of his personal convictions.¹⁸ He made this clear on many occasions, most notably in his work *Kosmos*. In it he asserted his fervent belief in the unity of the human race, emphatically rejecting the assumed existence of superior and inferior peoples. He believed that some people could be considered more highly educated and ennobled by intellectual culture, but he denied that some races were naturally more noble than others. This led Humboldt to conclude that all people were entitled equally to freedom and that in civilized societies that freedom must be ensured by political institutions.¹⁹

The institution of slavery held Humboldt's attention over the course of his entire lifetime, and on countless occasions he expressed in no uncertain terms his aversion to it. In his *Essay on Cuba*, he dedicated a whole chapter to this institution and stated the following:

We can never sufficiently praise the legislative wisdom of the new republics of Spanish America, which since their birth, has been seriously occupied with the total extinction of slavery. That vast portion of the earth has, in this respect, an immense advantage over the southern part of the United States, where the whites, during the struggle with England, established liberty for their own profit.²⁰

In 1856, John Sidney Thrasher, a proslavery southerner, published his translation of this work, under the title *The Island of Cuba by Alexander von Humboldt*, and simply omitted the chapter on slavery, thereby silencing Humboldt's criticism of it.²¹ Humboldt protested immediately and angrily, firmly opposing this textual mutilation in a letter to the *Spenersche Zeitung* in Berlin. This letter was translated and published in the *New York Times*, *New York Tribune*, and the *New York Herald*.²² In it he pointed out that he gave to this part of his work "greater importance than to any astronomical

observations, experiments of magnetic intensity, or statistical statements” and concluded by declaring that he thought he was “entitled to demand that in the Free States of the Continent of America, people should be allowed to read what has been permitted to circulate, from the first year of its appearance, in a Spanish translation.”²³ This assertion simultaneously drew attacks on Humboldt from angry defenders of slavery in the United States, as well as approval from abolitionists, who welcomed the writings and actions of this famous Prussian. Thus it is not surprising that Humboldt also offered an opinion on the presidential campaign of 1856, in which he supported John C. Frémont against James Buchanan.²⁴ Humboldt wrote this bitter remark about the victory of the latter: “And that shameful party which sells Negro children of fifty pounds, that distributes canes of honor just as the Russian Tsar distributes swords of honor . . . which demands that free workers should rather be slaves than free men, has won. What a crime!”²⁵

Because slavery conflicted with his image of the United States as the model of a liberal society, Humboldt hoped—and to some degree was even convinced—that with further social progress the institution would soon disappear. As early as 1825, he clearly saw that the slavery issue had the potential to tear the country apart, as he observed in a letter to his publisher Heinrich Berghaus: “Should the question of slavery break out one day, I entirely share your opinion that the maintenance of the North American Union as a state is in danger. I do not wish to see this happen. I think highly, very highly of the United States because it is the shelter for a reasonable freedom.”²⁶

In Humboldt’s extensive correspondence concerning this topic, it is apparent that—because he realized that slavery indeed was not vanishing but in fact thriving—he no longer saw any reason to conceal his opinions and therefore plainly expressed his disappointment. In letters to his friend Karl August Varnhagen von Ense he admitted regretfully that in America “freedom was nothing but a mechanism in the element of utility and thus not ennobling the people.”²⁷ Humboldt felt betrayed because he believed this proved that Americans did not share his opinion on freedom, an idea at the core of his enlightened convictions.

Here, his differing views of the United States in comparison to colonial America are also evident. The institution of slavery was particularly horrible

for Humboldt because he hoped that the new form of society developing in America would serve as an example for other parts of the world. In Spanish America, especially in Cuba, the existence of slavery also troubled him, but he considered it a part of all the evils of a colonial society, which would disappear with that society's independence from the mother country. Thus, for him it was inconceivable that this inhumane system could persist in an enlightened society whose own emergence was in response to the social injustices exhibited in Europe.

As evidence of Humboldt's preoccupation with the contradictory nature of slavery existing in an enlightened society, one needs to look no further than at a Prussian law passed at Humboldt's instigation on 9 March 1857. It stated that the moment an enslaved person stepped into Prussian territory, the master's ownership ceased and that slave was free.²⁸ Perhaps there was no need for such a law in Prussia, but its creation serves more as evidence that Humboldt's views on slavery were such that he did not hesitate to act against it when and where he had the authority to do so.

A comparison can be made between the above law and the Dred Scott case in America, which coincided with Prussian emancipation. In this pivotal case the U.S. Supreme Court decided in March 1857 that people of African descent, whether they were enslaved or not, could never be citizens of the United States and that Congress had no authority to prohibit slavery in federal territories. Furthermore, the court ruled that slaves could not legally sue, and that being private property, slaves could not be taken away from their owners without due process. This decision was based on the case of the slave Dred Scott and his wife Harriet who, while enslaved, had lived in the free state and territory of Illinois and Wisconsin. In April 1846, Scott sued for his freedom, arguing that because he had lived in free territory he had become legally free. The Supreme Court, however, ruled that Scott's sojourn there did not affect his status as a slave, and therefore he remained the property of his owner.

Alexander von Humboldt learned about the case and the court's final decision from the Prussian minister Friedrich von Gerolt.²⁹ As a consequence, Humboldt openly expressed his anger about the fugitive slave law in a letter to John Matthews:

I have the warmest attachment to your beautiful and liberal city, New York, but have earnestly and deeply regretted that Webster, whom I long respected, more than favoured that *shameful* law which still persecuted colored men after they had regained by flight their natural inborn liberty, of which they had been robbed by Christians.³⁰

Much like Humboldt's, Jefferson's impressions of the other continent were also very complex. His many letters, wherein he discussed his contact with the European world, especially pre-revolutionary France, illustrate just how decisively those experiences shaped his ideas and convictions about the formation of a new society. Herein we see clearly Jefferson's beliefs about liberty, the structure and obligations of government, and the importance of the ownership of land and property for the prosperity of society. His stay in Europe also had a lasting effect on his personal life, his manner of living, his artistic and literary tastes and ambitions, and his ideas on virtuous behavior.³¹

Upon his arrival in Europe, Thomas Jefferson carried with him a belief in and a love of republicanism, the virtue of the common man, and the classical ideals of austerity, frugality, and practicality. He was, therefore, repulsed by the French government, which appeared to share none of these same ideals. During his stay, he never ceased to be alternately shocked and yet attracted by French society. But in spite of his abundant negative comments about the habits of this society, Jefferson's account book reveals that almost immediately after his arrival in Paris, he made many extravagant and costly purchases. These appear to be more than just the necessary expenditures of a foreign diplomat. They also suggest that in terms of fashion and habits he wanted to be part of that world.³²

In a lengthy letter written to Charles Bellini, Jefferson included a detailed portrait of the daily life of the upper-class, pre-revolutionary French and contrasted their society with the values he saw in America.³³ As this letter shows, one thing Jefferson clearly disapproved of was the daily routine of the European aristocratic class, particularly in Paris, which was filled with what he considered to be boredom and nonsense. In America, he argued, the days were filled with healthy and useful activity, leisure time shared with real friends, and not only amusement but also the promise of future prosperity.

In a letter to John Banister, Jefferson, reflecting on what he perceived to be a lack of moral virtue in European society, saw the bad influence or even danger that exposure to this society might have on the youth of America. He concluded his letter by suggesting “that an American, coming to Europe for education, loses in his knowledge, in his morals, in his health, in his habits, and in his happiness.”³⁴

In a letter to James Monroe written only a few months earlier, Jefferson revealed that his European experience nourished a certain patriotic attitude. He explained that traveling to the Old World helped him to appreciate America even more: “It will make you adore your own country, its soil, its climate, its equality, liberty, laws, people, and manners.”³⁵

One year later Jefferson wrote to his former mentor George Wythe, referring to what he believed were the sources of the evils in Europe. “If anybody thinks that kings, nobles, or priests are good conservators of the public happiness,” Jefferson explained, “send them here. It is the best school in the universe to cure him of that folly.”³⁶

Despite these dire warnings, Jefferson pointed out in other letters that the Old World also had much to offer. At the end of his five years in France, he returned home with an appreciation for a lifestyle that was refined and elegant. What Jefferson admired most about Europe was without doubt the architecture. There are numerous examples of how the classical forms influenced his designs for buildings in his own country. He also developed a taste for European art, which led him to seek out the French sculptor Jean-Antoine Houdon to create a statue of George Washington. In addition, Jefferson held European literature in high esteem, and he developed a fondness for French food and wine.

A significant part of his European experience was his presence at the beginning of the French Revolution.³⁷ It is not easy to pinpoint his reaction to this major historical event; it appeared to be a complex construction of ideals, personal interests, political convictions, and personal experience with the recent American Revolution. Furthermore, his attitude changed with the passing years, not only as a result of subsequent political developments, but also because of his personal experiences.

Finally, the much-debated issue of Thomas Jefferson’s attitude toward slavery is worthy of note. With regard to this institution, it can be said that

in many ways his true opinions were ambiguous, having several apparent contradictions and inconsistencies that will probably never be completely resolved by historians.³⁸ His attitude toward this subject evolved over time, which he made clear in many of his letters, in his *Notes on the State of Virginia*, and in his autobiography. In addition to his early calls for the manumission of slaves and his later conviction that this would solve problems for future generations, Jefferson's writings also include many statements that can be interpreted as proslavery. Finally, he owned more slaves than most Virginians, and rather than prohibiting the institution, he later supported its expansion into Missouri and other states. Jefferson commented on the complexity and difficulty of this matter in his autobiography written in 1821: "Nothing is more certainly written in the book of fate, than that these people are to be free; nor is it less certain that the two races, equally free, cannot live in the same government. Nature, habit, opinion have drawn indelible lines of distinction between them."³⁹

To what extent did Jefferson's European experience influence his attitude toward the institution of slavery? What is clear is that Jefferson expressed remarkable concern about the socioeconomic situation and the working conditions of the rural population in the different parts of Europe he traveled through.⁴⁰ In a letter to Thomas Cooper, he stated his disapproval of the use of women and children in the work force:

But I observe women and children carrying heavy loads and laboring with the hoe. This is an unequivocal indication of extreme poverty. Men in a civilized country never expose their wives and children to labor above their forces and sex, as long as their own labor can protect them from it.⁴¹

Nevertheless, although Jefferson was shocked at the sight of French and German women driving plows and hoeing fields, apparently he did not draw the connection to the labor of his female slaves back in the United States. In a letter to Thomas Cooper in 1814, though, he wrote explicitly about the similarities between the working conditions of poor laborers in Europe and those of enslaved persons in America. In Jefferson's opinion, slaves were

better fed in these States, warmer clothed, and labor less than the journeymen or day-laborers of England. They have the comfort, too, of numerous

families, in the midst of whom they live without want, or the fear of it; a solace which few of the laborers of England possess. They are subject, it is true, to bodily coercion; but are not the hundreds of thousands of British soldiers and seamen subject to the same, without seeing, at the end of their career, when age and accident shall have rendered them unequal to labor, the certainty, which the other has, that he will never want? And has not the British seaman, as much as the African, been reduced to this bondage by force, in flagrant violation of his own consent, and of his natural right in his own person? And with the laborers of England generally, does not the moral coercion of want subject their will as despotically to that of their employer, as the physical constraint does the soldier, the seaman, or the slave? But do not mistake me. I am not advocating slavery. I am not justifying the wrongs we have committed on a foreign people, by the example of another nation committing equal wrongs on their own subjects. . . . I am at present comparing the condition and degree of suffering to which oppression has reduced the man of one color, with the condition and degree of suffering to which oppression has reduced the man of another color; equally condemning both.⁴²

This long and revealing quotation indicates that Jefferson consciously compared the working conditions of the European laboring classes with those endured by enslaved Americans. This statement appeared relatively late in Jefferson's life, and though it would be interesting to follow the evolution of his opinion on this issue over time, no earlier comment survives.



It is obvious that for both of these men, their transatlantic experiences were very important to the shaping of their personal and political convictions. Examining their correspondence reveals what effect each other's world had on them. For Humboldt these boiled down to personal, political, and economic freedoms, with all the social institutions linked to them, such as colonialism and slavery. For Jefferson, his observations stimulated a desire to create a government that would provide an environment in which his fellow countrymen could engage in the pursuit of happiness. In Europe, Jefferson saw the consequences of a political system that he rejected profoundly. Thus for him the challenge was to analyze not only the possibilities that would

help to avoid the deplorable state of affairs he experienced during his time there but also to turn those hypothetical ideas into realities for Americans.

The inspiration for Humboldt's visit to the United States came from the American consul in Cuba, Vincent F. Gray. While Humboldt was staying in Havana, Gray learned that the Prussian possessed important documents containing information about the region of New Spain that was still to a large extent unknown to his government. Therefore, on 28 April 1804, Gray sent two dispatches to Secretary of State James Madison, introducing and recommending Humboldt. In a letter written on 8 May, Gray explicitly commented on the importance of the Prussian explorer for the United States by stating that

you will find some Remarks about (?) Baron Humboldt, who I lately recommended to your attention and protection, who can not be otherwise than interesting at that moment; particularly as he is now on his route to the city of Washington, and will have it in his power to give you much useful information relative to the country adjoining.⁴³

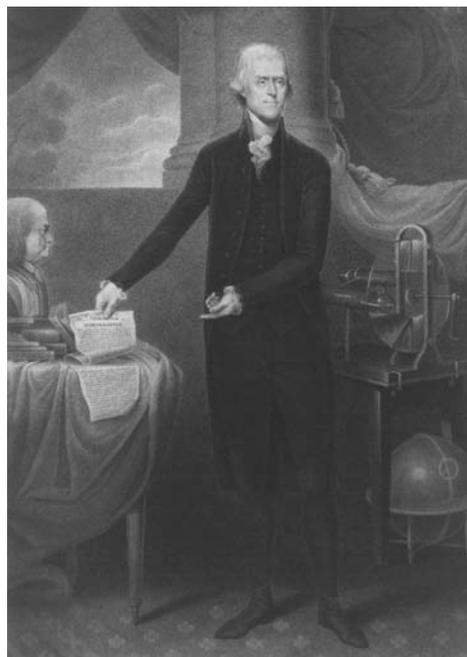
Humboldt, for his part, had several reasons to visit the country. As mentioned, he wanted to meet Thomas Jefferson, the famous American scientist and philosopher. The fact that Jefferson at that time was also president meant that he would be an even more important contact for the Prussian traveler. In general, Humboldt was active in matters of diplomacy, so he also might have taken into consideration the advantages of such a significant political and intellectual patronage for his future career. Another crucial point was that after traveling for years through the Spanish colonies of the New World and observing their various societies, many of which had characteristics he criticized, Humboldt was intrigued by the opportunity to familiarize himself with the newly independent America nation.⁴⁴ Finally, additional motives for his travel to the United States appear in his private diaries, which he recorded during the stormy journey from Havana to Philadelphia:

I felt deeply moved. To see me perish on the eve of such delight, to see perish with me the fruits of my work, to be the reason of the death of two persons who accompany me, to perish during a voyage to Philadelphia that did

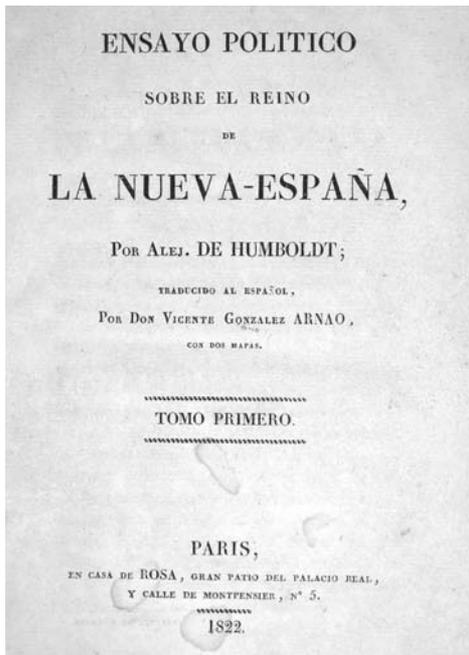
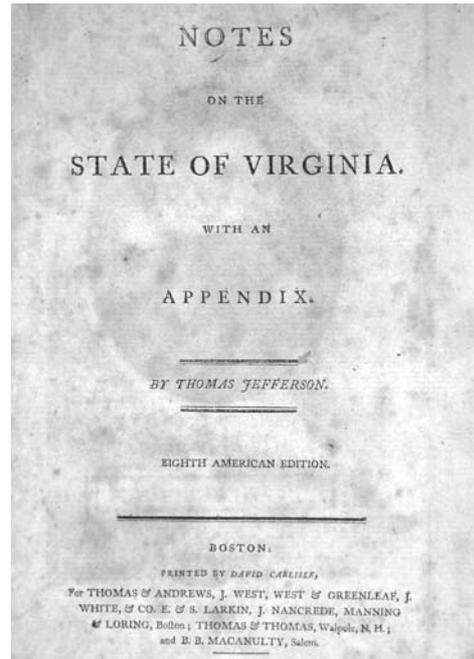


Prussian traveler and scientist Alexander von Humboldt (1769–1859) was most famous for his exploration of the Spanish colonies of South America. His interest in political philosophy along with his scientific studies brought him into contact with Thomas Jefferson, and the two men carried on a friendly correspondence that exemplified the importance of transatlantic communication in the open exchange of political as well as scientific ideas and information. (*Miller Collection, Richmond Academy of Medicine, in the collections of the Virginia Historical Society*)

Thomas Jefferson (1743–1826) met Alexander von Humboldt in 1804 when Jefferson, then third president of the United States, had reached the pinnacle of his career as a Founding Father and a symbol of the political ideals of the late Enlightenment. The two men were kindred spirits who shared not only a deep interest in the discovery of new scientific knowledge but also a concern for the political and social development of the young American nation. (*Library of Congress, Prints and Photographs Division, Reproduction no. LC-DIG-ppmsca-15715*)



After Jefferson and Humboldt began their correspondence in which they mostly discussed their political ideas and convictions, the two men also exchanged other writings on topics of mutual interest, such as the natural world. Over time, Humboldt sent Jefferson copies of his various scientific works on plants, astronomy, and his exploration of Spanish America. In return, Jefferson sent Humboldt a copy of his only published book, *Notes on the State of Virginia* (1781), in which he described in scientific fashion the state's geography, population, and culture. (*Virginia Historical Society*)

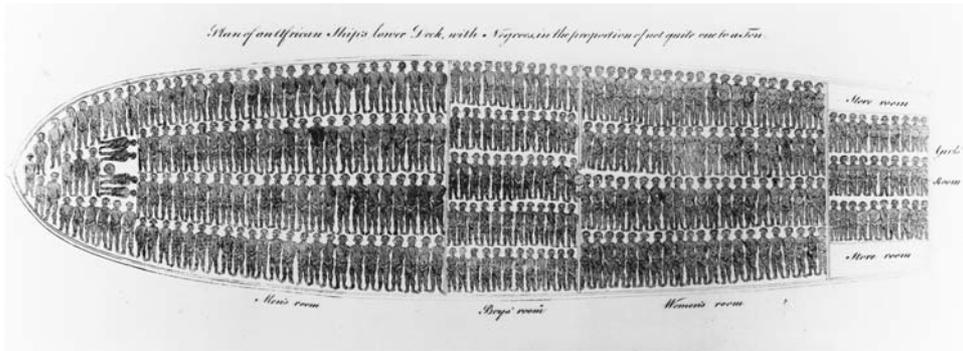


Humboldt followed his expedition to the Spanish colonies of South America with the publication of his two-volume work *Essai Politique sur le Royaume de la Nouvelle-Espagne* (1808–11). In addition to his correspondence with Jefferson, Humboldt broadened their intellectual exchange by sending the American president copies of his various scientific works on the natural world. These studies appealed to Jefferson's personal interest in science and exploration. Pictured at left is the title page of a later Spanish edition of Humboldt's study of New Spain. (*Virginia Historical Society*)

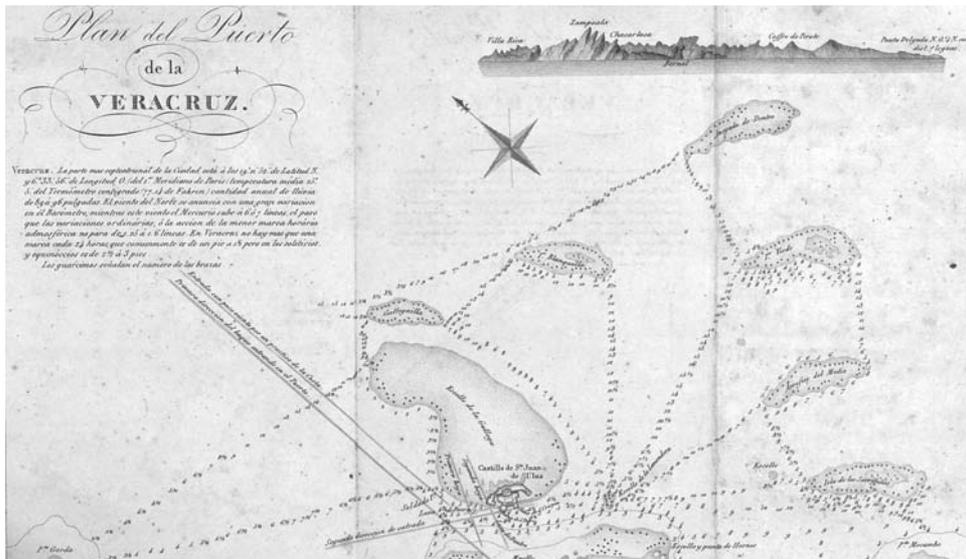


Before his expedition to Spanish America in 1798, Humboldt spent a few months in Paris (above) preparing for the journey. He later returned to that city to publish an account of his exploration. When Humboldt visited Jefferson in 1804, the third president was presiding over the young American nation at its new capital, Washington, D.C. (below). By the time of Humboldt's visit, both men had traveled to each other's side of the Atlantic Ocean and shared their impressions in their correspondence, which represented an intellectual exchange between old established Europe and the new evolving America. (Both: *Virginia Historical Society*)

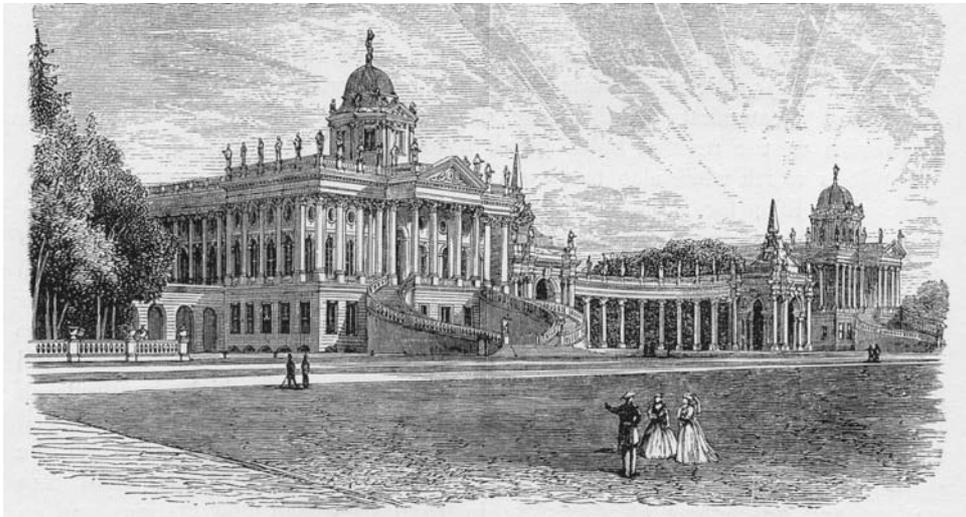




Although Humboldt and Jefferson never explicitly discussed the topic of slavery in their correspondence, Humboldt nevertheless did mention it in letters to other correspondents and in his work on Cuba. He found the American slave trade (represented in the above image) to be an abominable and disgraceful practice in what he believed was an otherwise enlightened society. The Supreme Court case involving Dred Scott (left), which ruled in March 1857 that slaves were not U.S. citizens and thus could not sue for their freedom, further angered Humboldt, who had supported a law that same month that granted freedom to any enslaved person who entered Prussian territory. (Above: *Virginia Historical Society*; left: *Library of Congress, Prints and Photographs Division, Reproduction no. LC-USZ62-5092*)



The above map of Veracruz, Mexico, appeared in the second volume of Humboldt's work *Essai Politique sur le Royaume de la Nouvelle-Espagne*, which documented his most famous expedition to the Spanish colonies of South America, undertaken between 1799 and 1804. In 1827, after visiting America and living in Paris, the Prussian traveler/scientist returned to his native Berlin. For the remaining years of his life, he served the royal court of King Frederick William III at Potsdam (below) as a tutor to the crown prince, as a member of the Privy Council, and as court chamberlain. Humboldt died in Berlin in 1859 at the age of eighty-nine. (Both: *Virginia Historical Society*)



not at all seem to be necessary (though undertaken to save our manuscripts and collections from the perfidity of Spanish politics).⁴⁵

Humboldt piqued Jefferson's interest in both himself and the details of his expedition through Spanish America in his letter of introduction of 24 May 1804.⁴⁶ Jefferson responded the next day, stating that "the countries you have visited are of those least known and most interesting, and a lively desire will be felt generally to receive information you will be able to give."⁴⁷

A few days after their first meeting, Jefferson composed a letter expressing his interest in information Humboldt could provide him. The president needed to ascertain if the western border of the Louisiana Territory was the Sabine River as the Spanish claimed or the Rio Grande, which Jefferson called the North River:

[W]e claim to the North river from it's mouth to the source either of it's Eastern or Western branch, thence to the head of Red river & so on. Can the Baron inform me what population may be between these lines, of white, red or black people? And whether any & what mines are within them? [T]he information will be thankfully received.⁴⁸

Jefferson seemed content with the information he had obtained from Humboldt. "I have omitted to state above the extreme satisfaction I have received from Baron Humboldt's communications," he remarked in a letter to Caspar Wistar. "The treasures of information which he possesses are inestimable and fill us with impatience for their appearance in print."⁴⁹

It is obvious from this initial correspondence that Jefferson the scientist was intrigued by Humboldt the explorer; but Jefferson the president was particularly interested in the information that Humboldt possessed about the Spanish American colonies. In addition, Humboldt shared with Jefferson scientific research he had compiled while in France in 1798 preparing for his expedition.

But the acquaintance of the two men would be mutually beneficial. As president of the *American Philosophical Society*, Jefferson had for many years maintained an active correspondence with scientists all over the world.⁵⁰ Furthermore, as president of the United States, Jefferson was responsible for the role of scientific research in the government. Finally, over the years he

had created one of the most important libraries of scientific materials in the country. Thus Jefferson would be a valuable contact for Humboldt.

Another important topic discussed in their correspondence was the determination of the border between Mexico and the United States. Humboldt translated parts of his early work on Mexico, *Tablas Geográfico-Política*, into French, added a two-page summary on the Mexican border region of the Louisiana Territory, and gave it to Jefferson.⁵¹ Humboldt considered these documents of limited value, and he did not believe that they included confidential material.⁵² Nevertheless, this sharing of information provoked a debate that continues to this day. Some, particularly those who have considered it from the Mexican point of view, wonder if the Prussian should be considered a spy for the Spanish empire.⁵³ To understand Humboldt's generosity, it is important to know that he was convinced that the sciences should be above national interests and that access to scientific information should be open to all. In this spirit of free exchange, Humboldt not only shared materials with the American president but also received recent statistical data on the United States from Secretary of the Treasury Albert Gallatin. Humboldt clearly referenced this information in his works *Essai Politique sur le Royaume de la Nouvelle-Espagne* and *Voyage aux Régions Équinoxiales*.⁵⁴

When they met in 1804, Jefferson was sixty-one years old and Humboldt only thirty-five. Jefferson had already reached the highest political position in his country and was a leading member of the American scientific community. Humboldt had just concluded his long Spanish American expedition, which in subsequent years brought him international acclaim. But, in spite of his relative youth at the moment of their meeting, the Prussian already had an advanced scientific career. He had become an expert on mines after his studies at the Academy of Freiberg, had been working for the Prussian state as a government official for five years, and had already published several books on scientific subjects.⁵⁵ In addition, Humboldt had previously been invited to participate in the circumnavigation of the globe directed by Thomas Nicolas Baudin and organized by the French government in 1798, and he had been working in the Paris scientific community while he was waiting for that expedition to commence.⁵⁶ In 1799, Humboldt's intellect as well as these numerous accomplishments

impressed the Spanish king, Carlos IV, and influenced his decision to grant Humboldt unprecedented and unrestricted permission to lead an expedition in Spain and to the Spanish colonies to conduct whatever investigations Humboldt personally considered necessary.⁵⁷ Thus Humboldt not only provided specific geographical material for Jefferson but also served as a link that reconnected the president to the European scientific community.

Over time Humboldt kept Jefferson—and through him, the New World—informed about the progress of his research and the writings he published about his American expedition. At the same time, through his correspondence with Jefferson, he kept abreast of opinions, observations, and ideas from the United States. Thus their personal meeting marked the beginning of a mutually enriching scientific and political transatlantic dialogue between the rising new country and the evolving old Europe.

This correspondence consisted of fourteen known letters between the European and the American.⁵⁸ Their exchange of letters continued nearly to the end of Jefferson's life; the last one from Humboldt arrived in 1825.⁵⁹ In their correspondence they continued to express their mutual appreciation for each other as well as for each other's works. Humboldt, having returned to Europe and after again seeing all the problems of the Old World, mentioned in his first letter to Jefferson that he still saw the president as a hope for the future of Europe.⁶⁰

Jefferson wrote in a similar manner, expressing “those sentiments of high admiration and esteem, which, altho long silent, have never slept.”⁶¹ In another letter, he assured Humboldt that Albert Gallatin would give him “from time to time, the details of the progress of a country in whose prosperity you are so good as to feel an interest, and in which your name is revered among those of the great worthies of the world.”⁶² The topics they discussed indicate that their correspondence extended beyond mere politeness and originated instead from a sincere, mutual interest in an exchange of knowledge and ideas that continued over many years.

The political future of Spanish America was of great concern to both men, especially the applicability of democratic models in the region. Therefore each was interested in knowing the opinion of the other about the independence movement, from the point of view of the New World versus the Old. Profound reflections about this matter show clearly the convictions

of each, as well as the differences between them. Referring to the works describing Humboldt's American expedition that the Prussian had sent him previously, Jefferson expressed his personal doubts in a letter written on 14 April 1811:

[W]hat kind of government will they establish? [H]ow much liberty can they bear without intoxication? [A]re their chiefs sufficiently enlightened to form a well-guarded government, and their people to watch their chiefs? [H]ave they mind enough to place their domesticated Indians on a footing with the whites? [A]ll these questions you can answer better than any other.

Jefferson provided a few of his own answers to some of these questions to get a sense of Humboldt's opinions:

I imagine they will copy our outlines of confederation and elective government, abolish distinction of ranks, bow the neck to their priests, and persevere in intolerantism. Their greatest difficulty will be in construction of their executive. I suspect that, regardless of the experiment of France, and of that of the United States in 1784, they will begin with a directory, and when the unavoidable schisms in that kind of executive shall drive them to something else, their great question will come on whether to substitute an executive elective for years, for life, or an hereditary one. But unless instruction can be spread among them more rapidly than experience promises, despotism may come upon them before they are qualified to save the ground they will have gained.⁶³

In his answer written several months later, Humboldt shared his own concerns about these matters and responded to Jefferson's reflections. Nevertheless, though the letter itself was quite long, his comments on these issues were much less detailed. He pointed out his keen interest in the struggle in Spanish America and predicted that a violent conflict would leave its imprint on the social order, because three centuries of European colonization had created a reservoir of resentment and animosity among subjugated native peoples.⁶⁴

Two years passed before Jefferson replied.⁶⁵ In his response, he revealed the progress of his thoughts and took a rather skeptical view of the situation and the practicability of the movement. Particularly remarkable in this

many-faceted analysis were his political predictions as well as his critical reflections on the role of religion in the process:

[H]istory, I believe, furnishes no example of a priest-ridden people maintaining a free civil government. [T]his marks the lowest grade of ignorance, of which their civil as well as religious leaders will always avail themselves for their own purposes. [T]he vicinity of the New Spain to the [United States], and their consequent intercourse may furnish schools for the higher, and example for the lower classes of their citizens. [A]nd Mexico, where we learn from you that men of science are not wanting, may revolutionize itself under better auspices than the Southern provinces. [T]hese last, I fear, must end in military despotisms. [T]he different cast of their inhabitants, their mutual hatreds and jealousies, their profound ignorance and bigotry, will be played off by cunning leaders, and each be made the instrument of enslaving others. [B]ut of all this you can best judge, for in truth we have little knowledge of them to be dependent on, but through you.⁶⁶

Apparently Jefferson knew about Humboldt's political influence among intellectuals in the French capital. This explains Jefferson's extensive discussion of the future of Spanish America and his comments on the role of the United States, on which he pressed Humboldt to express his point of view. But, as usual, Humboldt was rather cautious and reserved with his own political opinions. In the midst of the War of 1812, and years before the Monroe Doctrine, Jefferson provided Humboldt with a brief commentary on the relationship between America and Europe and the emerging idea of American isolationism:

The European nations constitute a separate division of the globe; their localities make them part of a distinct system; they have a set of interests of their own in which it is our business never to engage ourselves. America has a hemisphere to itself: It must have its separate system of interests, which must not be subordinated to those of Europe.⁶⁷

Humboldt did not share this conviction because it conflicted directly with his vision of an interconnected world. In his view, international trade and the peaceful exchange of ideas and goods was a high priority, and so in his next letter he was silent on this issue. What this exchange best illustrates

is that both men had different ideas in mind, largely because of their own personal endeavors.

Other topics filled their correspondence. In one letter, Jefferson shared his thoughts on another controversial subject—political policy toward Native Americans.⁶⁸ The president asserted the following:

You know, my friend, the benevolent plan we are pursuing here for the happiness of the Aboriginal inhabitants in our vicinities. [W]e spared nothing to keep them at peace with one another, to teach them agriculture and the rudiments of the most necessary arts, and to encourage industry by establishing among them separate property. [I]n this way they would have been enabled to subsist and multiply on a moderate scale of landed possession; they would have mixed their blood with ours, and been amalgamated and identified with us within no distant period of time. [O]n the commencement of our present war, we pressed on them the observance of peace and neutrality. But the interested and unprincipled policy of England has defeated all our labours for the salvation of these unfortunate people.⁶⁹

Given the fact that Humboldt did address the situation of the Indian population in Spanish America in several of his publications, the lack of any comments concerning the status of Native Americans—a topic typically of great concern to Humboldt in other regions of the Americas—is another interesting omission.⁷⁰ That none of Humboldt's reflections on political policies regarding Native Americans appear in his texts can be explained by his limited exposure to North American society.

In later years the Lewis and Clark expedition continued to be a topic of mutual interest as well. Jefferson knew of Humboldt's curiosity about their scientific discoveries and informed him about the impending publication of the expedition notebooks:

You will find it inconceivable that Lewis's journey to the Pacific should not yet have appeared, nor is it in my power to tell you the reason. [T]he measures taken by his surviving companion Clarke, for the publication, have not answered our wishes in point of dispatch. I think however, from what I have heard, that the main journal will be out within a few weeks in 2 vols. 8°. [T]hese I will take care to send you with the tobacco seed you desired, if it

will be possible to escape the thousand ships of our enemies spread over the ocean.⁷¹

And finally, in their correspondence, Jefferson and Humboldt furthered the cause of scientific exploration by recommending other travelers/scientists to each other and, in Humboldt's case, by contributing financially to their expeditions.⁷²

Having touched upon the main subjects that Humboldt and Jefferson pondered in their correspondence over the years, one very important topic seems to be missing—that of slavery. The fact that both men were engaged in a long-lasting exchange of opinions on several interesting issues during the later years of the Enlightenment, and given that slavery was an important and often divisive topic of transatlantic dialogues at that time, one wonders what role this institution might have played in their relationship. The question becomes even more interesting and complex when consideration is given to their different political and personal backgrounds. Unfortunately, there is little material available to construct a definitive answer to this question, but some insight can be deduced from the existing documents.

Although there are no extant records of personal conversations, it is probably safe to assume that slavery was not a subject they would have discussed. It is likely Humboldt was aware, because of their different circumstances, that this would be a very complex topic to address. Given his diplomatic character, he undoubtedly realized that it would not be in his best interest to broach such a controversial issue during his meeting with the American president. But perhaps it was simply that there were so many other subjects to discuss of greater priority for both men, such as the information Jefferson needed concerning the Louisiana Territory.

Regarding their later correspondence, there is no direct evidence that Humboldt or Jefferson ever actually discussed slavery. Nevertheless, in a few letters, the Prussian made allusions to the institution and to his comments about it in *Essai Politique sur le Royaume de la Nouvelle Espagne*, his work on New Spain. In a letter dated 30 May 1808, which Humboldt sent to Jefferson along with the first volume of *Essai Politique*, he told the president that he would find his name cited with the kind of enthusiasm that would inspire those interested in the progress of humanity.⁷³ In *Essai Politique*,

Humboldt wrote about the slave population in America and how it had increased considerably in size after the Louisiana Purchase. He also mentioned the slave trade specifically. “It is not yet in the power of Congress, nor [President Jefferson],” Humboldt reflected, “to oppose this augmentation, and to spare by that means much distress to the generations to come.” In the same paragraph, Humboldt referred to Jefferson as “a magistrate whose name is dear to the true friends of humanity.” He also added a footnote that provided further information about the president, introducing him as the author of an excellent work on Virginia, without mentioning that at the time of the Louisiana Purchase Jefferson was still president.⁷⁴

This May 1808 letter reveals two points. First, that the Prussian was interested in and well informed about the legal status of slavery in America and that he was particularly aware of Jefferson’s role in the preservation of the institution. Second, that Humboldt discussed publically only those aspects of Jefferson’s actions that were clearly in favor of abolition. In other words, Humboldt was apparently interested in presenting an image of the American president that mirrored his own convictions on the institution of slavery.

Furthermore, it is significant that Humboldt did not confirm these details with Jefferson directly but instead consulted the American diplomat David Bailie Warden.⁷⁵ In a letter written by Warden to Jefferson, Warden mentioned that Humboldt asked whether he had committed an error supposing “that the importation of slaves into the united states is not totally interdicted, and also whether there be any facts or observations, concerning the united states, in the Statistical part of his work, which ought to be corrected in the second edition.”⁷⁶ A few months later Jefferson replied to Warden, confirming that “the importation of Slaves into the United States is totally & rigorously prohibited.”⁷⁷

Humboldt was driven by his desire to publish the latest legislation in America on slavery and to do so without giving a negative impression about that country or its president. In June 1809, Humboldt finally addressed the topic of slavery directly to Jefferson, telling him that he greatly regretted what he wrote in a passage of his work on Mexico because he knew that after its publication Congress had taken serious steps toward total abolition. He

promised to repair the injustice in further editions with a special note and an appendix at the end of his work.⁷⁸

Jefferson, however, remained silent on this subject. It would seem that neither Humboldt nor Jefferson wanted to discuss slavery in their correspondence, though for both of them the debate continued throughout their lifetimes and had a significant place in many of their writings. The reasons for this omission can only be speculated. Perhaps Humboldt's sense of diplomacy, his respect for Jefferson, and his wish to see the Virginian as an ally concerning this matter kept him from pressing the issue openly. Possibly Jefferson knew of Humboldt's position from the beginning and was more interested in exchanging information and opinions on subjects that were more urgent or less controversial. Thus, their different perspectives on this much-debated institution did affect their relationship.

With his other American correspondents, Humboldt handled this issue differently. While still in America, he addressed the topic of slavery specifically in a letter to the architect William Thornton, whom Humboldt thought had the same opinions on the issue. Thus Humboldt was unguarded, writing openly and emotionally in a manner he never would have in correspondence with Jefferson. He stated his position clearly, avoiding ambiguous, cautious, or diplomatic language. He declared the legislation that permitted the importation of slaves to South Carolina to be abominable and disgraceful, particularly in a country where he believed many enlightened people lived. Humboldt recognized that an end to this inhumane practice might lead initially to a reduction in cotton production, but, as he clearly pointed out, he strongly detested the politics that measured and evaluated public welfare simply according to the value of its exports. Finally, he saw the wealth of nations in terms of the wealth of individuals and concluded his letter stating unequivocally that before one was free, one had to be just, and that without justice there was no lasting prosperity.⁷⁹

The exchange between the two enlightened scientists, however, was not limited to the discussion of their ideas and convictions. They also forwarded their writings to each other.⁸⁰ As their letters reveal, Humboldt sent Jefferson a complete, first-edition set of his *Essai Politique sur le Royaume de la Nouvelle-Espagne*, as well as his study of plants, *Distributio Geographica Plantarum*, his astronomical collections, *Recueil d'Observation Astro-*

nomiques, and the *Tableaux de la Nature*. In return, he asked for a copy of Jefferson's *Notes on the State of Virginia*.⁸¹ Through this interchange of scientific works, they contributed actively to a transfer of knowledge between America and Europe.

Another subject of common interest—though also apparently not discussed in their letters—concerned the assumed inferiority of species found in America, an idea put forward by the Count de Buffon, William Robertson, and Guillaume-Thomas Raynal. Jefferson undertook the task of responding to their theory directly in his *Notes on the State of Virginia*, particularly in Query VI, where he contrasted the size of various animals of the North American continent with those of Europe in order to provide scientific evidence challenging the theory.⁸²

Humboldt, whose enthusiastic description of America included comments upon the marvelous nature, capacity, and spirit of its native inhabitants, declared himself in firm opposition to this European conviction as well. He challenged the writings and statements of Buffon and his successors, Raynal and Robertson. In Humboldt's works on Mexico, he frequently referred to the writings of these men and revealed their obvious lack of knowledge, pointing out their mistakes in a deliberate and detailed manner. In several instances, he also referred to the refutation of Buffon in Jefferson's *Notes on the State of Virginia*. Even before meeting the American personally, Humboldt had read Jefferson's work and therefore understood his position. Humboldt's letter of introduction to the president demonstrated this understanding, particularly where Humboldt mentioned finding the teeth of a mammoth in the Andes.⁸³ He was aware that this was just the type of information that would capture Jefferson's attention, and he hoped that it would promote enough curiosity that Jefferson would want to get to know the European scientist personally. In a letter to Albert Gallatin, Humboldt made a revealing and unambiguous comment. He pointed out that he preferred the American climate to all others because "there one could breathe more freely."⁸⁴ With this pun, Humboldt may have been referring not only to the climate, possibly in relation to the debate about the assumed inferiority of the climate on the American continent, but also to the country's status as a free nation.

Obviously, there may have been different motivations behind the refutations of these inferiority theories. For Jefferson, certainly, there was an element of personal pride as an American as well as a man of science. He may also have wanted to disprove these misconceptions and argue against what he considered European arrogance. Furthermore, as a diplomat he was charged with promoting the growth of his young nation. Thus he needed to promote a positive national image that would encourage immigration and commerce.

Unlike Jefferson, Humboldt was not personally touched by this debate. For him, it seemed to be more a response to a provocation on an academic level. His enlightened scientific interest and desire to understand the world empirically meant that the assumed inferiority of America was easy to refute on the basis of his own research. In spite of these differences in motivations, the important point is that the debate about and refutations of Buffon's assertions was a transatlantic enterprise. Jefferson's and Humboldt's writings on this subject constitute important documents in this polemic and had obvious repercussions for Europe and the United States.

When considering both Humboldt and Jefferson, it is possible to see how the contrasts they saw between the two continents and their lifelong interest in the political and social events of their respective "other worlds" contributed to the formation of their own identities. They understood that events in their own worlds were intrinsically connected to developments across the Atlantic. And perhaps most importantly, both Humboldt and Jefferson hoped to see their visions of a better world made into reality, not only in a national context but also spanning large parts of the known world.

Both men benefited from this relationship. Jefferson profited from contact with one of the leading authorities on Spanish America living in Europe, a friend to some of the most famous scholars in Paris, and a member of prestigious learned societies. Humboldt saw his prestige and influence in the French capital increase considerably by virtue of his friendship with Jefferson.⁸⁵

Looking at how their perceptions of each other developed over the years, unlike Jefferson, Humboldt appeared to be relatively unchanged. At the time of their first meeting, the American president found the Prussian explorer interesting because of the timely information he possessed about Mexico.

Years later, Humboldt's reputation as a scientist had grown, and this had an effect on Jefferson's behavior toward him. In a letter accompanying a copy of his *Notes on the State of Virginia*, Jefferson remarked, "[T]hey must appear chetif enough to the author of the great work on South America."⁸⁶ The fact that Jefferson was twenty-six years older than Humboldt undoubtedly contributed to this evolution of his view.



Alexander von Humboldt and Thomas Jefferson were connected by their mutual interest in both science and politics, and their relationship had scientific and political implications. As previously noted, they were first introduced by the consul in Cuba for obviously political reasons. Jefferson's early expressions toward the Prussian were also marked by his wish to use Humboldt's scientific data in support of his own country's political interests. In later correspondence, Jefferson's interest in the exchange of political points of view continued, and his desire to explore scientific questions increased as well.

He also sought to promote the image of the United States as a free country and shared with Humboldt press clippings that contained severe personal and political critiques of Jefferson as evidence of the freedom that the press enjoyed in America.⁸⁷ This suggests that Jefferson not only saw the Prussian as a source of information but also as a transmitter of these ideas to Europe. Humboldt's political interest in getting to know the independent American republic was obvious, but he also focused on the interchange of scientific ideas with Jefferson. Thus the strong political implications of the relationship are clear, particularly during Jefferson's presidency.

Examining the differences in their understanding of the function of science provides a greater understanding of this political dimension. Given his position as a statesman, Jefferson's interest was more pragmatic, and he viewed scientific advances in terms of their level of practicality in the building of a new nation, rather than as a means simply to enrich the spirit.⁸⁸ Humboldt was interested in the applied sciences and their uses toward the improvement of living and working conditions, but he also took part in controversial theoretical dialogues—for example, the neptunism and vulcanism

phenomena.⁸⁹ Both men had an interest in the progress of science as well as the improvement of society. On several occasions, however, Jefferson had to subordinate his interests to his political ambitions, whereas Humboldt focused first on science and to a certain extent subordinated his political convictions. This leads to the impression that although Humboldt saw Jefferson as a representative of the Enlightenment and one who turned ideas into reality, Jefferson's interest in Humboldt in the beginning was mainly shaped by his role as the American president and the requirements related to that position.⁹⁰

In examining the interactions between Humboldt and Jefferson, it must be asked, to what extent did their correspondence lead to changes in their individual opinions on any given subject? Their relationship was definitely affected by their transatlantic experience. Both knew the world of the other, and for the most part they agreed on what needed to be changed and on the basic means for those changes. Though their opinions may have differed, often reflecting their different perspectives, they shared a general enthusiasm for the construction of a better society in the New World. Jefferson's and Humboldt's transatlantic experiences not only helped them to understand each other but also the problems and perspectives of each other's world. Nevertheless, it is very difficult to know to what extent they were able to reinforce or modify each other's perceptions and points of view. It is certain that Humboldt's comments on the miserable situation of the Old World reinforced Jefferson's motivation to create a better one in America. On the other hand, Jefferson's reflections on the future of Spanish America might have contributed significantly to the Prussian's knowledge, especially because those reflections came from an American who was intimately familiar with independence movements. But there are other topics where their mutual influence is too difficult to evaluate, and regretfully regarding other points where an exchange could have been fruitful—such as slavery—it unfortunately appears not to have taken place. Nonetheless, the exchange of ideas evident in the transatlantic correspondence of these two minds of the Enlightenment offers a window through which to glimpse not only the ideas themselves but also their place in the evolution of a young America in the world of the early nineteenth century.

NOTES

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1. See particularly Robert O. Mead, *Atlantic Legacy: Essays in American-European Cultural History* (New York, 1969).
2. According to most historians the Enlightenment ended when the French Revolution began in 1789. I use the term in this context to refer to the spirit and ideas of this period that still persisted afterward.
3. For information about Humboldt, see Helmut de Terra, *Humboldt: The Life and Times of Alexander von Humboldt, 1769–1859* (New York, 1955); Douglas Botting, *Humboldt and the Cosmos* (New York, 1973); Lotte Kellner, *Alexander von Humboldt* (London, 1963); and Hanno Beck, *Alexander von Humboldt* (Wiesbaden, 1959–61). See also the conference proceedings of the Humboldt Bicentennial, “Alexander von Humboldt: From the Americas to the Cosmos,” New York, 14–16 Oct. 2004, <http://web.gc.cuny.edu/dept/bildn/publications/humboldt.pdf> (accessed 12 Feb. 2008). Another good source for the latest research is the *International Review for Humboldtian Studies, Humboldt im Netz* (hereafter cited as *HiN*), <http://www.uni-potsdam.de/u/romanistik/humboldt/hin> (accessed 12 Feb. 2008).
4. Aimé Goujand Bonpland (1773–1858) was a French botanist and medical doctor.
5. General articles about Alexander von Humboldt and his visit to the United States include Peter Schoenwaldt, “Alexander von Humboldt und die Vereinigten Staaten von Amerika,” in Heinrich Pfeiffer, ed., *Alexander von Humboldt: Werk und Weltgeltung* (München, 1969), pp. 431–82; Ingo Schwarz, “Alexander von Humboldt’s Visit to Washington and Philadelphia, His Friendship with Jefferson, and His Fascination with the United States,” *Proceedings: Alexander von Humboldt’s Natural History Legacy and Its Relevance for Today, Northeastern Naturalist*, Special Issue 1 (2001): 43–56; Helmut de Terra, “Motives and Consequences of Alexander von Humboldt’s Visit to the United States (1804),” *Proceedings of the American Philosophical Society* (hereafter cited as *PAPS*) 104 (1960): 314–16; Helmut de Terra, “Studies of Documentation of Alexander von Humboldt,” *PAPS* 102 (1958): 136–41, 560–68; Hermann R. Friis, “Alexander von Humboldts Besuch in den Vereinigten Staaten von Amerika vom 20 Mai bis zum 30 Juni 1804,” in Joachim H. Schultze, ed., *Alexander von Humboldt: Studien zu Seiner Universalen Geisteshaltung* (Berlin, 1959), pp. 142–95; and Hermann R. Friis, “Baron Alexander von Humboldt’s Visit to Washington,” *Records of the Columbia Historical Society* 44 (1982): 1–35.
6. Here he refers to Jefferson’s *Notes on the State of Virginia*. A recent edition is Frank Shuffelton, ed., *Thomas Jefferson: Notes on the State of Virginia* (New York, 1999). Humboldt to Jefferson, 24 May 1804, in Ingo Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten von Amerika: Briefwechsel* (Berlin, 2004), pp. 88–90. The letters Humboldt wrote to Jefferson were in French; Jefferson’s letters were in English. Ingo Schwarz edited all the letters in their original language without translations. I have not translated Humboldt’s letters into English but paraphrased them, giving the original French quotation in the footnotes. See also different comments about this

encounter at <http://www2.ku.edu/~germanic/humboldt/main.htm> (accessed 12 Feb. 2008).

7. See document 2 in Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*, pp. 484–95. Detailed information about the exchanged documents appears in Jaime Labastida, “Humboldt, México y Estados Unidos. Historia de una intriga,” in Jaime Labastida, ed., *Atlas Geográfico y Físico del Reino de la Nueva España* (Mexico, 2003), pp. 131–47; and Ingo Schwarz, “‘Shelter for a Reasonable Freedom’ or Cartesian Vortex,” in Miguel Ángel Puig-Samper, ed., *Debate y perspectivas: Alejandro de Humboldt y el mundo hispánico*, 1 (Madrid, 2000), pp. 176–82.

8. The correspondence between Humboldt and Jefferson is published in Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*; Ulrike Moheit, ed., *Humboldt: Briefe aus Amerika, 1799–1804* (Berlin, 1993); Ingo Schwarz, “From Alexander von Humboldt’s Correspondence with Thomas Jefferson and Albert Gallatin,” *Berliner Manuskripte zur Alexander-von-Humboldt-Forschung* 2 (1991): 1–20; Felix M. Wassermann, “Six Unpublished Letters of Alexander von Humboldt to Thomas Jefferson,” *Germanic Review* 29 (1954): 191–200; and Eugénie Lange, “Aus dem Briefwechsel Alexander von Humboldts (1769–1859) mit Thomas Jefferson (1743–1826),” *Société Suisse des Americanistes* 18 (Sept. 1959): 32–45. An English translation of Humboldt’s letters (originally written in French) is presented in Helmut de Terra, “Alexander von Humboldt’s Correspondence with Thomas Jefferson, Madison, and Gallatin,” *PAPS* 103 (1959): 783–806.

9. An excellent overview of the content of Humboldt’s opus as well as the different editions and translations can be found in Horst Fiedler and Ulrike Leitner, *Alexander von Humboldts Schriften: Bibliographie der Selbstständig Erschienenen Werke* (Berlin, 2000).

10. In order to limit the material presented for this argument, I will focus on Jefferson’s ideas regarding Europe as reflected in his opinions and experiences in France, whereas only Humboldt’s ideas of the United States will be included here, though in some aspects his judgments can also be extended to Spanish America.

11. Jefferson to Rutledge, 6 Aug. 1787, in Julian P. Boyd, ed., *Papers of Thomas Jefferson*, 11 (Princeton, 1955–), p. 701.

12. In his era and in his working method, Humboldt must be situated between two different epochs: the Enlightenment and the Romantic movement. On one hand, his scientific concept can be characterized as marked by the Enlightenment, such as the use of his measurement instruments in order to understand foreign reality or his method to establish separate analysis. His integrative and global vision of American reality on the other hand, which led him to more general considerations, has to be understood as an anticipation of the practices of perception of the Romantic movement. Also regarding Humboldt’s approach to nature in this context, it can be seen that he moved between these two conceptions: he put into practice the concerns of the Enlightenment—to organize and measure nature to understand how each part functions—and he included the focus of the Romantic movement on the subjective element of perception in the description of nature. For more information on this issue, see Michael Dettelbach, “Alexander von Humboldt zwischen Aufklärung und Romantik,” in Ottmar Erte, Ute Hermanns, Bernd M. Scherer, and Christian Suckow, eds., *Alexander von Humboldt—Aufbruch in die Moderne* (Berlin, 2001), pp. 137–49; Kristian Köchy, “Das Ganze der Natur—Alexander von Humboldt und das romantische Forschungsprogramm,” *HiN* 5 (2002), <http://www.uni-potsdam.de/u/romanistik/humboldt/hin> (accessed 25 Aug. 2008); and Marta Monreal Sanz and Luis Álvarez Falcón, “Del racionalismo ilustrado a la sensibilidad romántica: La concepción singular del cambio de paradigma

en la ciencia de Alexander von Humboldt,” in Mari Alvarez Lires et al., eds., *Estudios de Historia das Ciências e das Técnicas: VII Congreso de la Sociedad Española de Historia de las Ciencias y de las Técnicas*, vol. 1 (Pontevedra, 2001), pp. 349–57.

13. Humboldt to Jefferson, 27 June 1804, in Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*, p. 101. (French original: “Je parts parce que ma position l’exige, mais j’emporte avec moi la Consolation, que tandis que l’Europe présente un spectacle imorale et mélancholique, le peuple de ce Continent marche à grands pas vers la perfection de l’état social. Je me flatte que je jouirai un jour de nouveau de cet aspect consolant, je simpathise avec Vous dans l’espérance . . . que l’humanité peut s’attendre à une grande amélioration par le nouvel Ordre des choses qui règne ici.”)

14. Several articles have been written about this subject; among the latest are Frank Holl, “El científico independiente y su crítica al colonialismo,” in Miguel Ángel Puig-Samper, ed., *Debate y Perspectivas. Alejandro de Humboldt y el mundo hispánico*, 1 (Madrid, 2000), pp. 101–23; and Frank Holl, “Humboldt y el Colonialismo,” *HiN*, http://www.uni-potsdam.de/u/romanistik/humboldt/hin/hin4/holl_1.htm, III, 4 (accessed 19 Aug. 2008).

15. In this context, it should be mentioned that during his expedition Humboldt noted in his travel diaries which parts should not be published. He was concerned that if he did not survive the expedition the travel diaries would be published by someone else and all his private annotations and reflections would be included. But in spite of this self-censorship, in his published works numerous critical comments on colonialism, slavery, oppression of the Indians, and many more sensitive topics can be found. Besides his work on Cuba (Alexandre de Humboldt, *Essai Politique sur l’île de Cuba*, 2 vols. [Paris, 1826]), these can be found particularly in his essay on New Spain (Alexander von Humboldt, *Essai Politique sur le Royaume de la Nouvelle-Espagne* [Paris, 1808–11]), which contains, for example, comparisons between production and export figures for Mexico and the United States, where Humboldt was eager to prove that the production of a free society could increase faster than in a society under colonial oppression.

16. Margot Faak, ed., *Lateinamerika am Vorabend der Unabhängigkeitsrevolution: Eine Anthologie von Impressionen und Urteilen aus den Reisetagebüchern* (Berlin, 1982), 5:63–64. (French original: “D’où vient ce manque de moralité, d’où viennent ces souffrances, ce malaise dans lequel tout homme sensible se trouve dans les Colonies européennes? C’est que l’idée de la Colonie même est une idée immorale, c’est l’idée d’un pays qu’on rend tributaire à une autre, d’un pays dans lequel on ne doit parvenir qu’à un certain degré de prospérité, dans lequel l’industrie, les lumières ne doivent se répandre que jusqu’à un certain point. . . . Tout Gouvernement Colonial est un gouvernement de méfiance. On y distribue l’autorité non selon que la félicité publique des habitants l’exige, mais selon le soupçon que cette autorité peut s’unir, s’attacher trop au bien de la Colonie, devenir dangereux aux intérêts de la mère patrie.”)

17. For example, in one letter to Jefferson Davis, dated on 24 March 1857, Humboldt wrote: “I can only offer you on my part the frank and lively gratitude of an old man of 88 years who considers himself half an American” (Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*, p. 418). See also Joseph Albert Wright on a session of the Geographical Society, Berlin, 7 May 1859, *Zeitschrift für Allgemeine Erdkunde* 6, new ser., (1859): 415. For more information about this issue, see Kurt Biermann and Ingo Schwarz, “Alexander von Humboldt—half an American,” *Alexander-von-Humboldt-Magazin* 67 (1996): 43–50.

18. Alexander von Humboldt and Aimé Bonpland, *Personal Narrative of Travels to the Equinoctial Regions of the New Continent During the Years 1799–1804* (New York, 1972), 7:263. This subject is treated in Philip S. Foner, *Alexander von Humboldt on Slavery in the United States* (Berlin, 1984); Schwarz, “Shelter for a Reasonable Freedom”; Ingo Schwarz, “Alexander von Humboldt—Sociopolitical Views of the Americas,” in Ottmar Erte and Walther L. Bernecker, eds., *Ansichten Amerikas: Neuere Studien zu Alexander von Humboldt* (Frankfurt am Main, 2001), pp. 105–15; and Michael Zeuske, “Alexander von Humboldt y la comparación de las esclavitudes en las Américas,” *HiN*, VII, 11 (2005), http://www.uni-potsdam.de/u/romanistik/humboldt/hin/hin11/inh_zeuske_1.htm (accessed 13 Sept. 2008).
19. Alexander von Humboldt, *Kosmos: Entwurf einer physischen Weltbeschreibung* (Frankfurt am Main, 2004), p. 187 (German original: “Indem wir die Einheit des Menschengeschlechtes behaupten, widerstreben wir auch jener unerfreulichen Annahme von höheren und niederen Menschenrassen. Es giebt bildsamere, höhere gebildete, durch geistige Cultur veredelte, aber keine edleren Volksstämme. Alle sind gleichmäßig zur Freiheit bestimmt; zur Freiheit, welche in roheren Zuständen dem Einzelnen, in dem Staatenleben bei dem Genuß politischer Institutionen der Gesamtheit als Berechtigung zukommt.”)
20. Humboldt and Bonpland, *Personal Narrative of Travels to the Equinoctial Regions*, 3:276–77.
21. For more information on that polemic, see Foner, *Alexander von Humboldt on Slavery*, pp. 18–37; and Schwarz, “Shelter for a Reasonable Freedom,” pp. 170–73.
22. These documents are also published in Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*, docs. 36 and 37, pp. 560–62.
23. *New York Daily Times*, 16 Aug. 1856, p. 2, in Schwarz, “Shelter for a Reasonable Freedom,” pp. 171–72.
24. Detailed information in Schwarz, “Shelter for a Reasonable Freedom,” pp. 173–75; and Foner, *Alexander von Humboldt on Slavery in the United States*, pp. 21–24.
25. Ludmilla Assing, ed., *Briefe von Alexander von Humboldt an Varnhagen von Ense aus den Jahren 1827 bis 1858* (Leipzig, 1860), p. 332 (translated from German by Ingo Schwarz).
26. Heinrich Berghaus, ed., *Briefwechsel Alexander von Humboldts mit Heinrich Berghaus aus den Jahren 1825 bis 1858* (Jena, 1869), 1:16–17 (translated from German by Ingo Schwarz).
27. Translated into English and cited in Schwarz, “Shelter for a Reasonable Freedom,” p. 182.
28. Schoenwaldt, “Alexander von Humboldt und die Vereinigten Staaten von Amerika,” p. 481n123.
29. See letter dated 17 May 1857 in Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*, p. 422.
30. Humboldt to John Matthews, 12 Oct. 1858, in *ibid.*, p. 462.
31. See William Howard Adams, *The Paris Years of Thomas Jefferson* (New Haven, 1997); Mary Elisabeth Barlow Callen, “Thomas Jefferson and France, 1784–89: Can Virtue Exist in a Luxurious World?” (M.A. thesis, University of Virginia, 1983); Lawrence S. Kaplan, *Jefferson and France: An Essay on Politics and Political Ideas* (New Haven, 1967); and James McGrath Morris and Persephone Weene, eds., *Thomas Jefferson’s European Travel Diaries* (Ithaca, N.Y., 1987).

32. Callen, "Thomas Jefferson and France, 1784–89," pp. 7–9.
33. Jefferson to Bellini, 30 Sept. 1785, in Boyd, ed., *Papers of Thomas Jefferson*, 8:568–69.
34. Jefferson to Banister, 15 Oct. 1785, in Adrienne Koch and William Peden, *The Life and Selected Writings of Thomas Jefferson* (New York, 1993), pp. 359–60.
35. Jefferson to Monroe, 17 June 1785, in *ibid.*, pp. 341–42.
36. Jefferson to George Wythe, 13 Aug. 1786, in *ibid.*, p. 366. Other letters that offer revealing comments on his views of Europe include Jefferson to Anne W. Bingham, 7 Feb. 1787, in Boyd, ed., *Papers of Thomas Jefferson*, 11:122–23 and Jefferson to George Washington, 2 May 1788, in Boyd, ed., *Papers of Thomas Jefferson*, 13:128.
37. See Merrill D. Peterson, "Thomas Jefferson and the French Revolution," *The Tocqueville Review* 9 (1987/88): 15–25.
38. See for example John C. Miller, *The Wolf by the Ears: Thomas Jefferson and Slavery* (Charlottesville, 1991); Lucia C. Stanton, "'Those who Labor for My Happiness': Thomas Jefferson and his Slaves," in Peter S. Onuf, ed., *Jeffersonian Legacies* (Charlottesville, 1993), pp. 147–80; Paul Finkelman, "Jefferson and Slavery: Treason against the Hopes of the World," *ibid.*, pp. 181–221; Hartmut Wasser, "Zwischen Herrenrecht und Menschenrecht: Thomas Jefferson und das 'amerikanische Dilemma,'" Hartmut Wasser, ed., *Thomas Jefferson. Historische Bedeutung und politische Aktualität* (Paderborn, München, Wien, Zürich, 1995), pp. 173–201; and Bernard Bailyn, "Jefferson and the Ambiguities of Freedom," *PAPS* 137 (1993): 498–515.
39. Koch and Peden, eds., *Selected Writings of Thomas Jefferson*, p. 49.
40. See Morris and Persephone, eds., *Thomas Jefferson's European Travel Diaries*.
41. *Ibid.*, p. 42.
42. Jefferson to Thomas Cooper, 10 Sept. 1814, in Albert Ellery Bergh, ed., *The Writings of Thomas Jefferson* (Washington, D.C., 1907), 14:183–84.
43. Vincent F. Gray to James Madison, 8 May 1804, in Friis, "Alexander von Humboldts Besuch in den Vereinigten Staaten," p. 146.
44. Regarding his comparative view of these American regions, see Ingo Schwarz, "Alexander von Humboldts Bild von Latein- und Angloamerika im Vergleich," in Wolfgang Reinhard and Peter Waldmann, eds., *Nord u. Süd in Amerika: Gegensätze. Gemeinsamkeiten. Europäischer Hintergrund* (Freiburg, 1992), 2:1,142–54.
45. Faak, Margot, ed., *Alexander von Humboldt: Reise auf dem Rio Magdalena, durch die Anden und durch Mexiko* (Berlin, 1986), 8: 397–98 (French original: "Je me sentais très ému. Me voir périr à la veille de tant de jouissance, voir périr avec moi tous les fruits de mes travaux, être la cause de la mort des deux personnes qui m'accompagnaient, périr dans un voyage de Philadelphie qui ne paraissait pas de toute nécessité [quoique entrepris pour sauver nos manuscrits et collections contre la perfide politique espagnole].")
46. Humboldt to Jefferson, 24 May 1804, in Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*, pp. 88–90. In the letter, Humboldt wrote, "Arrived since Mexico on the soil of this happy Republic whose executive power was entrusted to Your lights, it is a sweet duty for me to present You my respects and the homage of my high admirations that Your writings, Your

actions, and the liberty that Your ideas inspired in me since my most tender youth. . . . In spite of the ardent desire that I have to see Paris once again, where I have long worked with C. C. Vauquelin and Chaptal, and where we plan to publish our works (Fruits of this Expedition) I could not resist the moral interest of seeing the United States and to delight in the consoling aspect of a people, who know to appreciate the precious gift of Liberty.” (French original: “Arrivé depuis le Mexique sur le sol heureux de cette République dont le Pouvoir exécutif à été confié à Vos lumières, c’est un doux devoir pour moi de Vous présenter mes respects et l’hommage de la haute admirations que Vos écrits, Vos actions et la liberté de Vos idées m’ont inspiré dès ma plus tendre jeunesse. . . . Malgré le désir ardent que j’ai de revoir Paris, où j’ai travaillé longtemps avec les C. C. Vauquelin et Chaptal, et où nous comptons publier nos travaux [Fruits de cette Expédition] je n’ai pas pu résister à l’intérêt moral de voir les États unis et de jouir de l’aspect consolant d’un peuple, qui sait apprécier le don précieux de la Liberté”). A good analysis of the correspondence between Jefferson and Humboldt, and particularly this letter, is found in Schwarz, “From Alexander von Humboldt’s Correspondence.”

47. Jefferson to Humboldt, 28 May 1804, in Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*, p. 92.

48. Jefferson to Humboldt, 9 June 1804, in *ibid.*, pp. 92–93.

49. Jefferson to Wistar, 7 June 1804, cited in Friis, “Baron Alexander von Humboldt’s Visit to Washington,” pp. 26–27.

50. See Gilbert Chinard, “Jefferson and the American Philosophical Society,” *PAPS* 87 (1943): 263–76.

51. Alexander von Humboldt, “Tablas Geográfico-Políticas del Reino de Nueva-España, en el Año de 1803, que Manifiestan su Superficie, Población, Agricultura, Fábricas, Comercio, Minas, Rentas y Fuerza Militar. Por el Baron de Humboldt. Presentadas al Señor Virey del Mismo Reino en Enero de 1804,” *Boletín de Geografía y Estadística de la Republica Mexicana* (Mexico, 1869), 1:635–57.

52. See letter from Humboldt to Jefferson, written between 9 June and 27 June 1804, in Moheit, ed., *Humboldt: Briefe aus Amerika*, pp. 307–8.

53. A good article about this controversy is Labastida, “Humboldt, México y Estados Unidos,” pp. 131–47. Labastida uses many documents together with supporting information to argue that Humboldt cannot be considered as working on behalf of either Spanish or Mexican interests, as has been claimed by others such as Juan A. Ortega y Medina.

54. Humboldt, *Essai Politique sur le Royaume de la Nouvelle-Espagne*; Alexander von Humboldt and Aimé Bonpland, *Voyage aux Régions Équinoxiales du Nouveau Continent, fait en 1799, 1800, 1801, 1802, 1803 et 1804*, 12 vols. (Paris, 1816–26).

55. Alexander von Humboldt, *Mineralogische Beobachtungen über einige Basalte am Rhein* (Braunschweig, 1790); Alexander von Humboldt, *Florae fribergensis specimen* (Berolini, 1793); Friedrich Alexander von Humboldt, *Versuche über die gereizte Muskel- und Nervenfasern nebst Vermuthungen über den chemischen Process des Lebens in der Thier- und Pflanzenwelt*, 2 vols. (Posen, 1797); Alexander von Humboldt, *Ueber die unterirdischen Gasarten und die Mittel ihren Nachtheil zu vermindern: Ein Beitrag zur Physik der praktischen Bergbaukunde* (Braunschweig, 1799); Alexander von Humboldt, *Versuche über die chemische Zerlegung des Luftkreises und über einige andere Gegenstände der Naturlehre* (Braunschweig, 1799).

56. Unfortunately, the expedition never took place. This led Humboldt and Aimé Bonpland to initiate their own scientific exploration, which took them first to Spain and then to the Spanish colonies in America.
57. For a description of Humboldt's scientific activities, which he presented at the Spanish court, see Miguel Ángel Puig-Samper, "Humboldt, un Prusiano en la Corte del Rey Carlos IV," *Revista de Indias* 216 (1999): 353–55.
58. It must be mentioned that Humboldt maintained correspondence with other American politicians and scientists, most notably Albert Gallatin, James Madison, David Bailie Warden, Washington Irving, Louis Agassiz, Matthew Fontaine Maury, John C. Frémont, George Catlin, George Ticknor, and many others. See detailed information about this correspondence and the published letters in Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*; and Schwarz, "Alexander von Humboldt's Correspondence—An Example of International Scientific Communication in the 19th Century." My thanks go to Ingo Schwarz for allowing me to see the manuscript before its publication.
59. Not all of these letters have survived, particularly for the period from 11 November 1783 to 25 June 1826 ("Summary Journal of Letters," Thomas Jefferson Papers, Library of Congress, Washington, D.C.).
60. Humboldt to Jefferson, 30 May 1808, in Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*, p. 109. (French original: "Au milieu des malheurs auxquels a succombé ma patrie j'ai tâché de Vous exprimer de tems en tems les sentiments de reconnaissance et d'admiration dont je suis pénétré pour Vous.")
61. Jefferson to Humboldt, 13 June 1817, in *ibid.*, p. 145.
62. *Ibid.*, p. 146.
63. Jefferson to Humboldt, 14 Apr. 1811, in *ibid.*, p. 120.
64. Humboldt to Jefferson, 20 Dec. 1811, in *ibid.*, p. 122. Humboldt wrote to Jefferson, "I am deeply interested as are You at the grand conflict of Spanish America. One should not be surprised to find that the struggle may be bloody, when one thinks that men carry with them everywhere the imprint of the imperfection of their social institutions, and that the peoples of Europe have, for the last three centuries, sought their own security in mutual resentments and the hatred of castes." (French original: "Je suis vivement intéressé comme Vous à la grande lutte de l'Amérique espagnole. Il faut pas s'étonner que la lutte soit sanglante, lorsqu'on pense que les hommes portent par tout l'empreinte de l'imperfection des institutions sociales et que les peuples d'Europe depuis trois siècles ont cherché leurs sécurité dans le ressentiments mutuel et la haine des Castes.")
65. Because of war with England, getting correspondence to and from the Continent could take several months, even a year or more. Humboldt's two letters of December 1811 traveled by a rather circuitous route through a chain of different messengers and did not arrive until well over a year after they were written. See Jefferson's "Summary Journal of Letters."
66. Jefferson to Humboldt, 6 Dec. 1813, in Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*, p. 130.
67. *Ibid.*, p. 131.
68. More information about Jefferson's attitude towards Native Americans can be found in

Anthony F. C. Wallace, "Jefferson and the Indians: The Tragic Fate of the First Americans" (Cambridge, Mass., 1999); Johansen, Bruce Elliott, "Franklin, Jefferson and American Indians: A Study in the Cross-Cultural Communication of Ideas" (Ph.D. diss., University of Washington, 1979); Roger G. Kennedy, "Jefferson and the Indians," *Winterthur Portfolio* 27 (1992): 105–21; and Stephen G. Bragaw, "Thomas Jefferson and the American Indian Nations: Native American Sovereignty and the Marshall Court," *Journal of Supreme Court History* 31 (2006): 155–80.

69. Jefferson to Humboldt, 6 Dec. 1813, in Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*, p. 131.

70. See particularly his travel narrative *Voyage aux Régions Équinoxiales du Nouveau Continent* and also his work on Mexico *Essai Politique sur le Royaume de la Nouvelle-Espagne*. His extensive comments on Native Americans can be found in his travel diaries published by Margot Faak (1982). For detailed information about his perception of the different societies of colonial Spanish America, see also Sandra Rebok, "A New Approach: Alexander von Humboldt's Perception of Colonial Spanish America as Reflected in His Travel Diaries," *Itinerario* 31 (2007): 61–88.

71. Jefferson to Humboldt, 6 Dec. 1813, in Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*, p. 132.

72. See Humboldt to Jefferson 22 Feb. 1825, Thomas Jefferson Papers, MHi, where he recommended to his protection the Italian traveler and author Carlo Comte de Vidua (1785–1830), *ibid.*, p. 170.

73. Humboldt to Jefferson, 30 May 1808, in Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*, p. 109.

74. Humboldt, *Essai Politique sur le Royaume de la Nouvelle-Espagne*, 1:9–10. The English translation may be found in Humboldt, *Political Essay on the Kingdom of New Spain* (New York, 1811), 1:12–13. The original French quotation is as follows: "Enfin, par un acte national, également motivé par la justice et la prudence, la traite des nègres a été abolie: elle l'auroit été long-temps avant, si la loi avoit permis au président des Etats-Unis [magistrat dont le nom est cher aux vrais amis de l'humanité] s'opposer à l'introduction des esclaves, et d'épargner par là de grands malheurs aux races futures."

75. For more information about David Bailie Warden and his relationship with Humboldt, see Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*, pp. 22–23.

76. Warden to Jefferson, 24 July 1808, in E. Millicent Sowerby, ed., *Catalogue of the Library of Thomas Jefferson* (Charlottesville, 1983), 4: 291.

77. Jefferson to Warden, 25 Feb. 1809, in *ibid.*

78. Humboldt to Jefferson, 12 June 1809, in Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*, pp. 112–13.

79. Humboldt to Thornton, 20 June 1804, in *ibid.*, pp. 96–97. "This abominable law which permits the importation of Negroes into southern Carolina is an opprobrium for a State in which I know there exists very well-organized minds," Humboldt remarked. "In following the only step that dictates humanity, we would undoubtedly export in the beginning less Cotton. But alas! how I detest this Policy that measures and evaluates public happiness simply according to the value of Exportations! It is the wealth of Nations like those of the individuals. It is but the property of our

happiness. Before being free, one must be just, and without justice, there is no durable prosperity.” (French original: “Cette abominable loi qui permet l’importation des Nègres dans la Caroline méridionale est un opprobre pour un État, dans lequel je sais qu’ils existent des têtes très bien organisés. En suivant la seule marche qui dicte l’humanité, on exporterait sans doute au commencement moins de Coton. Mais hélas! que je déteste cette Politique qui mesure et évalue la félicité publique simplement d’après la valeur des Exportations! Il est la richesse des Nations comme celle des Individus. Elle n’est que l’accessoire de notre félicité. Avant d’être libre, il faut être juste, et sans justice il n’y a pas prospérité durable.”)

80. For detailed information about Humboldt’s works in Jefferson’s library, see *ibid.*, p. 21.

81. Jefferson to Humboldt, 14 Apr. 1811, in *ibid.*, p. 120.

82. See Lawrence Lane, “An Enlightened Controversy—Jefferson and Buffon,” *Enlightenment Essays* 3 (1972): 37–40 and Gaye Wilson, “Jefferson, Buffon, and the Mighty American Moose,” *Monticello Newsletter* 13 (Spring 2002).

83. Humboldt to Jefferson, 24 May 1804, in Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*, p. 89.

84. Humboldt to Gallatin, 20 June 1804, in *ibid.*, p. 95. (French original: “. . . je préfère Votre Climat à tout autre. Car l’air le plus sain est celui où l’on respire le plus librement.”)

85. Schwarz, “Alexander von Humboldt’s Visit to Washington and Philadelphia,” p. 52.

86. Chétif is a French word that means weak, frail, miserable. Jefferson to Humboldt, 14 Apr. 1811, in Schwarz, ed., *Alexander von Humboldt und die Vereinigten Staaten*, p. 120.

87. See Margaret Bayard Smith, *The First Forty Years of Washington Society*, ed. Gaillard Hunt (New York, 1906), pp. 395–97.

88. Harlow Shapley, “Notes on Thomas Jefferson as a Natural Philosopher,” *PAPS* 87 (1943): 234–37.

89. Especially regarding the workers in the mines, he developed several useful inventions such as special lamps.

90. For more information about the differences between these two personalities, see Sandra Rebok, “Two Exponents of the Enlightenment: Transatlantic Communication by Thomas Jefferson and Alexander von Humboldt,” *Southern Quarterly, Imagining the Atlantic World* 43 (2006): 126–52.

