
The Birth of the Two Cultures

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Alexander von Humboldt presents a paradox for Americans: at once ubiquitous in American culture of his own day, soon after his death in 1859 he sank out of sight. By the twentieth century, outside of specialist studies he generally appears only in the occasional footnote, where he is not infrequently confused with his brother Wilhelm. Thus scholars who wish today to write of Humboldt to an American audience must begin by establishing, first, who he was, and second, that despite his “obscurity” he was in fact important enough to deserve rediscovery and reconsideration; that, indeed, any study of nineteenth-century American literature and culture, let alone of science, is radically incomplete if it fails to include an understanding of Humboldt’s centrality to the self-fashioning of the United States. The fact that he has so largely disappeared from scholarly and popular memory in a country that once claimed him so fervently appears as a puzzle. His absolute absence suggests more an active excision than a mere lapse—not merely a forgetting but an erasure. This essay suggests one part of the answer: Humboldt championed aesthetic forms that emerged from the particulars of nature, and scientific forms that embraced, rather than excluded, the subjectivity of the observer. This put him on a collision course with the emergent concept of “objectivity,” such that Humboldt’s bold, experimental texts were absorbed, reshaped, and in large part silenced by the split we have come to know as “the Two Cultures.”

The boundary between what could and could not count as science was erected by Immanuel Kant in 1786, in his *Metaphysical Foundations of Natural Science*. Doctrines of nature could count as science only if their underlying natural laws were cognized a priori, and were not simply generalizations after the fact, “not mere laws of experience.” (4) Kant’s difficulty lay with the word “nature,” that is, the manifold of existing things. To erect his boundary,

Kant separated natural science from natural history, saying of the latter that whether it consisted of a description of nature (eg. taxonomy) or a history of nature (ie. “a systematic presentation of natural things in different times and in different places”), neither could be derived according to the internal principle by which the manifold objects of nature cohere into a whole (3-4). Since it could not be derived according to an internal principle, natural history did not make the cut. Newton’s *Principia* exemplified science; Humboldt’s *Cosmos* did not.

In *Cosmos*, Humboldt defends himself from this judgment by stating, a bit sarcastically, that his purpose is not “to reduce all sensible phenomena to a small number of abstract principles, based on reason only.” His “physical history of the universe” does not “pretend to rise to the perilous abstraction of a purely rational science of nature” – rather, “devoid” of such “profoundness,” he attempts only a “rational empiricism, a contemplation of the universe” based “upon the results of the facts registered by science, and tested by the operations of the intellect” (*Cosmos* I: 49). Deprived of the unity provided by Kant’s required “internal principle,” Humboldt points instead to the unity of “historical composition”: accidental individualities and essential variations simply cannot be “deduced from ideas alone” (*Cosmos* I:49-50). In short, one can’t sit in a Königsburg salon and deduce what tropical South America looks like: one must get up and go there. So Kant can have his principles; Humboldt will take everything left over, which is, pretty much, everything: and he will comprehend it in his (ahem) “*science of the Cosmos*” (*Cosmos* I: 55).

Humboldt thus insists that his enterprise is historical: both civil history and the description of the universe must be derived empirically, from facts on the ground, with an eye to understanding the physical and moral forces that interconnect nature into “one great whole...animated by the breath of life” (*Cosmos* I: 24). Humboldt’s assumption that civil and natural history are cognate has two interesting consequences: first, nature describes a narrative. Its present appearance cannot be understood “without pursuing, through countless ages, the history of the past,” for present and past are “reciprocally incorporated, as it were, with one another,” just like languages, whose present-day idioms developed slowly over time. Even so do volcanic domes and lava flows excite our imagination by awakening an association with the past: “Their form is their history” (*Cosmos* I: 72). Second, just as an etymologist is needed to read the history of language, so does the history of nature need to be actively read, interpreted. Nature’s text has been open to all humanity across all human time, available for the reading, but the work of learning to read that text has taken eons, and will never exhaust itself. This is the work “of observation and intellect” (*Cosmos* 1:23), of eye and mind, in which Humboldt will be a participant observer.

Humboldt tried to indicate both the scope and history of that work in *Cosmos*. The title was carefully chosen: Humboldt knew it was audacious, but encouraged by his friends, he stuck with it. Briefly put, “*Cosmos*” referred to the universe as a “harmoniously ordered whole” (*Cosmos* I: 24). Key to Humboldt’s use of the ancient Greek word was its double references, both to what Henry David Thoreau (a close reader of Humboldt) called “hard matter and rocks in place,” or the physical universe as it exists apart from humanity, and to the beauty and order of that universe, which are ideas intrinsic to humanity.¹ In short, the universe exists without us, but it exists as a *Cosmos* only through our minds. Humboldt acknowledges that most “cultivated languages” reflect a contrast between nature and mind, but insists that we must not therefore be led to separate the two, lest doing so reduce science to “a mere aggregation of empirical specialties.” Humboldt’s point is key: our only access to the world is through the mind, and so “does the external world blend almost unconsciously to ourselves with our ideas and feelings” (*Cosmos* I: 76). The world is known to us only through our mind, and our mind is known to us only as we engage the world: the two form a phenomenal unity. Only in the dance of world and mind, object and subject, does the Cosmos come into being.

In presenting the Cosmos, then, Humboldt writes a two-volume introduction reflecting what he calls this “two-fold aspect.”² The first part, volume I, describes nature “objectively, as an actual phenomenon” (*Cosmos* II: 62): following a lengthy prolegomena on the nature of science, Humboldt surveys the heavens and the earth, all things from stars and nebula to the earth as a planetary body, its geography and meteorology, and life forms from plants and animals to the races of man. Once he reaches the threshold of mind, Humboldt concludes Volume I and begins Volume II, where he takes up nature “subjectively, as it is reflected in the feelings of mankind” (*Cosmos* II:

1. Thoreau’s deep debt to Humboldt is detailed in Walls, *Seeing New World: Henry David Thoreau and Nineteenth-Century Natural Science* (Madison, Wisconsin: University of Wisconsin Press, 1995), 94-166. In this text I propose that Thoreau’s interest in natural science led him to an emergent form of romanticism, “empirical holism,” that approached the great whole of nature not as a transcendent unity best apprehended by thought (as in mainstream romanticism, or “rational holism”), nor as a gigantic mechanism best understood by predictive law, but as a “republic of particulars” best approached through study of the interconnections of its individual, constituent parts—an approach pioneered by Humboldt. I argue that the character of Thoreau’s involvement in science distinguished him as “a Humboldtian empirical naturalist” who sought to join poetry, philosophy, science and society into a harmonized, emergent whole (4). Through this study I have come to see Humboldt as of particular importance to nineteenth-century American culture more widely, a crucial element in the wider picture of America’s coming to be.

2. *Cosmos* was published in German in 5 volumes from 1845-1862, and immediately translated into English; the standard translation is by Elise Otté, published in London (1849-58) and republished in New York (1850-70). The first two volumes were of broad popular interest, and were international bestsellers; the following volumes were much more technical. The final German volume has never been translated into English.

62): from modes of representing nature in poetry, painting, and gardening, to a history of feeling for nature from the ancients Greeks, Hebrews, and Indians through Goethe, to a history of the aids to comprehending the Cosmos provided by science, exploration, and instrumentation. These volumes climaxed Humboldt's long lifetime of work, in which, as Mary Louise Pratt has argued, he sought "to reframe bourgeois subjectivity, heading off its sundering of objectivist and subjectivist strategies, science and sentiment, information and experience." (119) So one could say, as has often been said, that Humboldt's two-fold attention joined poetry and science, championing aesthetic forms that were attentive to the particulars of nature, and scientific forms that would embrace rather than exclude the subjectivity of the scientist.

I would suggest, further, that Humboldt's project was aesthetic before it was scientific – but his was an aesthetic that, uniquely, was completed in science. For Humboldt, human experience of nature ideally inscribed a sort of hermeneutic spiral: the initiating move is pleasure in Nature's beauty, an openness to sensual delight that in turn opens the creative imagination. Rather than passive enjoyment, the creative imagination seeks active connection, reaching from the particulars to ever-higher generalizations, initiating the quest for knowledge. Rather than quelling pleasure, knowledge actually enhances it, and so the spiral is engaged. Poetry plays into science which plays "reciprocally" into poetry; "austere reason" (*Cosmos I*: 78) investigates, creative imagination prompts new discoveries, and in their concert the Cosmos grows ever larger.

As for society, Humboldt's spiral implies, and requires, a free play of the human faculties, a play easily discouraged by oppressive governments. In his optimistic viewpoint, while such governments may prevail for a time, the course of the Cosmos is ultimately against them, since freedom is the ultimate condition of nature. Hence Humboldt's aesthetic science has a deep moral and political direction: "The principle of individual and political freedom is implanted in the ineradicable conviction of the equal rights of one sole human race. Thus...mankind presents itself to our contemplation as one great fraternity and as one independent unity, striving for the attainment of one aim – the free development of moral vigor." His narrative of the Cosmos becomes a narrative of the advances and setbacks experienced across history by this "powerful progressive movement" which "elevates and animates cosmical life," for despotic governments, though they may prevail temporarily, must finally give way to liberty, equality, and the "fraternity" of humankind (*Cosmos II*: 199). Humboldt's attempt to write the *Cosmos* as a popular book witnesses his conviction that the knowledge gained by science "is the common property of mankind" (*Cosmos I*: 77), not of a cultured elite.

Three consequences follow from Humboldt's populist aesthetic of knowledge: first, science is above all else an act of writing: everything Humboldt did in South America would have lost to the *Cosmos* if his notes and collections had failed to arrive in Europe and if he had failed in his heroic feat of publishing the thirty volumes of his results. Second, Humboldt's subjectivity is always present in the text as a shaping intelligence, the active "reader" and interpreter who is distilling from the universe the order and beauty of the *Cosmos*. Third, Humboldt's science is, therefore, a form of literature, present in and responsive to the literary demands of its time. These consequences seem straightforward enough, but they do make of Humboldt something of an anomaly, since science writing has only recently, and controversially, been accepted as a literary form. Critical treatments of Humboldt reflect his anomalous position. He is said to combine French Enlightenment materialism with German Romantic idealism (see Dettelbach), to be a "transitional" figure from the Enlightenment to Romanticism, or to have "fallen between the two stools" of literature and science, neither literary nor scientific enough to claim a part in mainstream traditions. Critics particularly note that Humboldt's narrative clarity was compromised by the weight of his factual knowledge. Scott Slovic remarks that his prose is "smothered" under floods of information; Nigel Leask also notes that Humboldt's *Personal Narrative* is choked by his so-called "general considerations," "like some virulent tropical parasite smothering its host" (Leask 295). Judged as a literary figure, Humboldt has been found wanting.

The fact that Humboldt does not fit our categories has had the unfortunate effect of marginalizing him. His potential British and American readers today are inheritors of the very Romantic tradition Humboldt resisted, and by reading him from within that tradition, he can be called, at best, only a limited success. For this is the very tradition that definitively split literature from science, subjective from objective, the lonely, soul-searching artist from the self-effacing collectivity of science. As Lorraine Daston has written, by the mid-nineteenth century, "subjectivity became synonymous with the individual and solitude; objectivity, with the collective and conviviality" (118). Is Humboldt, then, a hybrid? Does he destabilize the conventional categories? Or is he simply a failed writer and an obsolete scientist?

Framing the question in these terms foregrounds the role played by "objectivity" in Humboldt's work. As both Daston and Peter Galison have written, "objectivity" is now a fighting word, hopelessly confused, meaning, variously, the empirical, the rational, the "really real," and/or the merely bloodless (Daston 110, Galison, "Judgment" 327). Both these historians of science write helpfully about the historical formation of objectivity, and while I will have a little more to say about Daston in a few moments, here I

would like to concentrate on Galison's thumbnail genealogy. Galison identifies three stages in the history of objectivity from Goethe's day to our own. Pre-1800, the concept of "truth to nature" existed, but it had little to do with objectivity in its modern sense, a sense that was first articulated by Coleridge. Rather, it called for "a set of practices" performed by a natural philosopher who idealized and corrected "the unreliable appearances of the given"--who revealed the essence behind appearance. The most familiar example would be Goethe, chasing his Ur-plant across Italy, certain that behind each and every particular plant must be one essential plant that enfolded them all. For as Goethe wrote in 1792:

[A]n anatomical archetype [Typus] will be suggested here, a general picture containing the forms of all animals as potential, one which will guide us to an orderly description of each animal. . . . The mere idea of an archetype in general implies that no particular animal can be used as our point of comparison; the particular can never serve as a pattern [*Muster*] for the whole. (quoted in Galison, *Objectivity* 17).

Such knowledge required massive intervention by a very active mind. Goethe understood that in learning to see objects, he was really learning to see himself by grasping the idea that subtended all appearances, including his own. Herein, however, lay the great and obvious danger that such a mind would, in fact, reveal only itself. According to Galison, to counter such a temptation a second set of practices arose around 1830 that valued, instead, self-abnegation, self-denial. "Instead of truth to nature, these scientists aspired to let nature 'speak for itself' through a set of instruments that minimized intervention, hamstringed interpretation, and blocked artistic license" (Galison, *Judgment* 328). As Galison documents, such practitioners aspired to be as transparent and as replaceable as the machines they employed. This "mechanical" objectivity, after dominating scientific representation for a century, was displaced around the 1920s by a third view, a "judgmental" objectivity, which employed the expert judgment of trained and skilled practitioners to interpret phenomena under the belief that "the expertly trained eye can often sort phenomena more quickly and effectively than the rote application of a mechanical protocol" (*Objectivity* 20). This is the regime we are still in, though Galison cautions against the belief that earlier generations were "mistaken" and we have finally and permanently got it right; our practices, too, may be rooted in the conventions of academic science.

Where, in this well-documented scheme, might Humboldt fit? A writer like Joan Steigerwald sees him in the Goethean metaphysical tradition, reading behind "the myriad species of plants" to a few groups of "Urformen or original forms" (317). Yet she acknowledges that Humboldt "developed his studies in a unique way," seeking not essential forms but collective impres-

sions produced by vegetation in interaction with physical environment and registered by the discerning eye of the landscape painter. By emphasizing the role of perception, Humboldt opens the possibility that the same materials might take different inquiries in different directions (319). While I would agree that Humboldt bears traces of his Weimar classicism, I would argue that his emphasis on the multiple interactions among the triad of subject, object, and environment fractures and disperses the pre-Romantic ideal of “truth to nature.” Humboldt is not a younger Goethe seeking the metaphysical “Real” in the jungles of South America.

Yet neither does Humboldt fit entirely comfortably with the dominant regime of his maturity, what Galison, as we have seen, calls “mechanical” objectivity. The hallmark of this viewpoint was the death of the viewer, that “willing, desiring, intending, and schematizing self”; since the self was implicated, the solution was, first, to rigorously exclude the self, and then to silence it. Both Galison and Daston quote Coleridge, whose statement in his 1817 *Biographia Literaria* was foundational:

Now the sum of all that is merely objective we will henceforth call nature, confining the term to its passive and material sense, as comprising all the phenomena by which its existence is made known to us. On the other hand the sum of all that is SUBJECTIVE, we may comprehend in the name SELF or INTELLIGENCE. Both conceptions are in necessary antithesis. Intelligence is conceived of as exclusively representative, nature as exclusively represented; the one conscious, the other as without consciousness. (Quoted in Daston 113).

These words, of course, were a creative misunderstanding of Kant, cheerfully plagiarized from Schelling. At a stroke they separate objective from subjective in order to restore them to each other through the Transcendental caveat that the objective world was available to us only through our subjectivity. Thus far Humboldt has already taken us, but he hesitated to take the next step, which demanded that the active, shaping self must be repressed “for us to be open to knowledge” (Galison, *Objectivity* 27). In this condition, the desire to know forces upon us the responsibility to be “objective,” to get out of the way and let the facts speak for themselves. It is true that Humboldt will pointedly recommend an apparently similar move, as when, in *Cosmos*, he suggests the reader lay aside his “subjective,” terrestrial interests to see the universe from a stellar point of view (I: 83); but Humboldt does so in the spirit of old-fashioned disinterestedness, the necessary capacity to set aside personal involvement to make fair-minded aesthetic or moral judgments. Rather than ventriloquizing nature, his nature speaks through many layers of instruments and interpreters. By contrast, the true Romantic goes farther and demands more: the utter death of the self. No mediation can be allowed lest it

distort the voice of nature. George Levine, in his cleverly-titled *Dying to Know*, quotes the Victorian physicist John Tyndall's popular essay on the lofty virtue of self-renunciation, "this loyal surrender of himself to Nature and to fact": "When prejudice is put under foot and the stains of personal bias have been washed away -- when a man consents to lay aside his vanity and to become Nature's organ -- his elevation is the instant consequence of his humility" (4). Where Tyndall speaks of an elevating self-denial, the metaphor is stronger in a writer like Thomas Carlyle, who recommends "Selbst-Tödtung" in a religious fable of death and resurrection. As Levine writes, "Except it die, it cannot know." (5)

I have not read every word Humboldt wrote, but I dare say that nowhere in Humboldt will one find anything like Tyndall's paean to humility. Yes, one does find an insistence on the necessary role of objectivity to the work of the scientist, as when Humboldt cautions that the astronomer "who measures patiently, year after year, the meridian altitude and the relative distance of stars," or "the botanist who counts the divisions of the calyx, or the number of stamens in a flower," do not feel their imaginations warmed by their tedious and laborious work--that, in fact, "is the very guarantee of the precision" of their labors. Yet the measurements of the one and the detail of the other "alike aid in preparing the way for the attainment of higher views of the laws of the universe" (*Cosmos* I: 39). The imagination may give us wings, but as Bacon long ago had stressed, without the weight of labor, the imagination soars only into empty and fruitless space. That is the necessity of our knowing anything real, and Humboldt scoffs at those who foster the "prejudice" that the exacting labor of science "must necessarily chill the feelings" and dull the pleasure of the student of nature. Every step in the journey toward knowledge has its pleasures; even the tedium of measurement has its savor of keen anticipation (*Cosmos* I: 40-41). The way upward may be prepared by cool reason, but it is completed by passionate imagination. This is not a self "washed away," but a self invoked.

As science works upwards from fact to joy, so poetry and painting must work downwards from the spontaneous joy we feel in nature to the analysis of Nature's individual objects and forces (*Cosmos* I: 27). Pastoral romance, opines Humboldt the literary critic, is "cold and wearisome": "individuality of observation can alone lead to a truthful representation of nature" (*Cosmos* II: 68). This is the basis for Humboldt's entire aesthetic, what I have called his "empirical holism:" "Descriptions of nature," he reiterates, "may be defined with sufficient sharpness and scientific accuracy, without on that account being deprived of the vivifying breath of imagination." The poet familiar with the resources of poetic tradition and his native language, who uses those resources to describe his own first-hand impressions, will not fail

to impress his readers: “for, in describing the boundlessness of nature, and not the limited circuit of his own mind, he is enabled to leave to others unfettered freedom of feeling” (*Cosmos* II:81). While the goal might be unfettered freedom, that goal cannot be confused with the process, which demands hard and disciplined work whether one works with language, paint, or scientific instruments. I

I believe that Humboldt’s attention to the “busy-ness” of scientific labor – the astronomer measuring, the botanist counting – pervades all his writing and undercuts the kind of Romantic or mechanical objectivity that demands the death of the author. The descriptive, scientific sections of *Cosmos* are permeated with the language of comparison and measurement, of “aspects” and impressions. Observations are tied to specific observers and studded with footnotes. I would argue, though I don’t have the space to demonstrate this here, that this is characteristic of all of Humboldt’s popular writing. In this sense he is, perhaps surprisingly, not writing a narrative of nature after all, but a narrative of science, to use terms adopted from the linguist Greg Myers. That is, science writing deploys two basic strategies: in the “narrative of nature,” the plant or animal or phenomenon is the subject, the narrative is chronological, and the syntax and vocabulary emphasize Nature’s externality to scientific process. On the other hand, the narrative of science follows the argument of the scientist, arranging time into a series of parallel events all supporting the claim, and emphasizing in “syntax and vocabulary the structure of the discipline” (Myers 142). What’s striking here is that today the narrative of science characterizes professional science writing, while the narrative of nature is the common popular form of science writing--in which, in other words, following the ideology of objectivity, the agency of the working scientist is suppressed so that nature appears to speak directly to us. Humboldt, therefore, defies the generic division between popular and professional science writing. I would speculate that by foregrounding the agency of the scientist, including himself, Humboldt is experimenting with a genre of popular science writing that defied the emerging ideology of scientific authority, including the demand that the scientist himself “die” out of the text, and so, at least in Anglo-America, came to be widely rejected as unscientific.

If my suggestion is correct, it complicates the frequent assertion that Humboldt’s writing is “disembodied” or, in Lorraine Daston’s terms, “aperspectival,” taking this to mean the ideal which by eliminating all personal idiosyncracies created Thomas Nagel’s oxymoronic “view from nowhere.” Yes, Humboldt does wish to set aside his personal idiosyncracies. Critics often complain about the impersonality of his so-called *Personal Narrative*. And yes, he does aspire to the view from the mountaintop--literally so, if there are any mountains in the neighborhood. (So, by the way, did Goethe.)

However, Humboldt's reluctance to structure his argument chronologically would be appropriate if he aspired to a narrative of science rather than nature; furthermore, while he may not chatter on about his autobiography, he does constantly refer to particular incidents in his experience and, whenever he deems it relevant, doesn't hesitate to insert his personal impressions about a region or a phenomenon. For example, Humboldt completes his scientific account of earthquakes by describing how they feel. "A moment destroys the illusion of a whole life," he writes; "we no longer trust the ground on which we stand." Animals feel anxious too: Orinoco crocodiles "leave the trembling bed of the river, and run with loud cries into the adjacent forests" (*Cosmos* I: 215-16). Since the impression nature makes on the human being is part of Humboldt's *Cosmos*, his account of the *Cosmos* would be incomplete without recording, as points of relevant data, his own impressions. Sometimes these "impressions" even interfere with the process of science, as when his patient stellar measurements cannot be completed because the ferocious attacks of Orinoco insects make it impossible to steady the instruments.

Taken as science writing, then, Humboldt's popular works, while they do repress his personal ego, consistently value the impressionistic and call attention to the agency of the active, measuring, noticing, collecting scientist. When he consciously attempts to move that agency into the background, as in *Views of Nature*, the resulting prose, as critics have remarked, is dizzying, dramatic, hyper-kinetic (see Slovik, and Pratt 121-25). It leaps across scale levels from a bee on the hand to a view of the world, across continents and oceans and centuries. Instead of a view from nowhere, his gymnastic prose offers a view from everywhere: Humboldt paints a view of Nature "in the universality of her relations," lest by isolating facts he gives currency to "false ideas." The ties which unite the most varied phenomena – plants, animals, soil, rocks, air, mankind – can be discovered "only when we have acquired the habit of viewing the globe as a great whole," such that the least thing or the greatest is visible as a nexus of natural forces (PN I: 104-5). The result, as Pratt remarks, is a prose that can be exhausting to read: as Humboldt works hard, so does he expect his reader to work too.

Another result, ironically, undercuts one of his most important goals: that his vision and his working methods be shared. Humboldt does not, that is, claim that his is a transcendent genius, caught in rare visionary moments and available only to the privileged few. (Compare nineteenth-century stereotypes of Newton, and in our own time, of Einstein.) Contemplation of the *Cosmos* is "the property of all mankind," and he strives to write for both his fellow elite and for those who will never measure a meridian altitude. This means he must worry about how best to "remove the scaffolding" of observation, experiments, and calculations so that general views may be made avail-

able to all (*Cosmos* I: 46-48). In effect, he must teach the reader how to read not only Nature, but Humboldt: “to recognize unity in the vast diversity of phenomena, and by the exercise of thought and the combination of observations, to discern the constancy of phenomena in the midst of apparent changes.” Descents to “very special facts” are occasionally necessary, he warns, but only thus can actual connections be traced and the whole of nature be approached (*Cosmos* I: 61). In part, of course, Humboldt succeeded brilliantly. In the United States, some of his readers went on to change the face of American landscape painting, American literature, and the North American continent itself. Yet in adopting his methodology, the great man himself disappeared. His signature was not his own unique organizing consciousness, but the power of any organizing consciousness. Thus Humboldt could never point to a flock of disciples all claiming allegiance to their famous leader, a fact noted by one of his most famous protégés, Louis Agassiz, in his memorial address of 1869: “Every school-boy is familiar with his methods now, but he does not know that Humboldt is his teacher. The fertilizing power of a great mind is truly wonderful; but as we travel farther from the source, it is hidden from us by the very abundance and productiveness it has caused” (Agassiz 5-6).

Yet for a while at least, everyone knew Humboldt’s name, and here lies the irony. His planetary consciousness was predicated on the hope that everyone could participate. His was a collectivist, populist vision that can be traced right back to his enthusiasm for the French Revolution. As he showed, creating the *Cosmos* was a project of the whole human race. Yet even as democratic, populist America absorbed his ideals and celebrated his name, it became a truism that Humboldt was so great, so expansive, such a virtuoso of all knowledge, that no one could ever replace him. In seeking to avoid transcendence, Humboldt brought it on himself, and so made himself curiously irrelevant to later generations. Who could follow in such footsteps? His program was fragmented, bureaucratized, mechanized, professionalized, and as Agassiz remarked, the new armies that grew up using his maps and his methods forgot his very name.

To summarize and conclude: objectivity was born out of the cauldron of German-Anglo idealism, and with it, the disciplined disarticulation of objective and subjective that led to the crystallization of science and literature as antithetical intellectual realms. We know this and brand it with our own truism, the “Two Cultures,” the unforgettable term coined in a forgettable lecture by C.P. Snow that ever since has named both a fact and, for some, a discontent. Recently, more and more voices have called for a consilience of the humanities and the sciences, for while the disciplinary limits they designate have been powerfully productive, the realities of the 21st century defy

those limits, and we are still groping for a language and a methodology by which mind can be restored to nature. Two hundred years ago, Humboldt was working out a different trajectory, a bold and experimental form of discourse that articulated subject and object together and that bound the arts and sciences in a mutual spiral of beauty and knowledge, discipline and freedom. Yet modernism, as it developed, absorbed and reshaped Humboldt's project into its own, and in its terms, Humboldt appears to us as a curiosity, a fascinating, larger-than-life figure who fits poorly into our historiographies and so, despite his evident importance, seems marginal to all but the most specialized scholarly inquiries. For those of us who seek consilience today, the question might be: Is some version of Humboldt's aesthetic science retrievable? Or is he simply an anomaly, an intellectual platypus? It would be still another irony if the man who rejected mere curiosities, who saw every object and every phenomenon as a nexus in the web of being, should become no more than a curiosity himself.

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