

Introduction

The author

Wilhelm von Humboldt was born Baron Karl Wilhelm von Humboldt on June 22, 1767 in Potsdam, capital of the state of Brandenburg in the Kingdom of Prussia. He was born during the reign of Frederick the Great, who ruled from Potsdam in his quest to unite Prussia and turn it into a powerful state dedicated to the principles of the Enlightenment. Humboldt's younger brother by two years was the scientist Alexander von Humboldt, after whom was named the famous ocean current that heats the Pacific coast of North America. Wilhelm von Humboldt's most visible legacy is Berlin's Humboldt University. Its founding in 1809 as Friedrich Wilhelm University was primarily the result of his efforts and Humboldt is still remembered in Germany as a reformer who revamped the entire Prussian school system to make it arguably the most advanced educational system in Europe.

Humboldt's other legacy is his writings on language, particularly the present volume, which was first published in 1836, a year after his death. This book has been called "the first great book in general linguistics"¹ and it has been argued that it anticipates contemporary generative linguistics.² When and why Humboldt turned to the serious study of human language is a matter of spirited debate, but what is certain is that in December 1799 he writes to a friend:

I feel that from now on I will devote myself more exclusively to the study of language, and that a thorough and philosophically based comparison of

¹ L. Bloomfield (1933), *Language* (New York: Henry Holt), p.133.

² Noam Chomsky (1966), *Cartesian Linguistics: A Chapter in the History of Rationalist Thought* (New York: Harper and Row), p.2; Steven Pinker (1994), *The Language Instinct: How the Mind Creates Language* (New York: Morrow), p.84.

several languages is a task I might be able to shoulder after several years of serious study. (GW 5:214)³

This letter is written from Spain, where Humboldt returned a little over a year later to study Basque. It is characteristic of Humboldt's style of work that the results of this research are only published twenty years later in 1821. Humboldt had a very hard time completing projects, and much of what he wrote was not published. He kept starting projects over and over again, tearing up what he had written or placing it with other fragments (GS 15:451).⁴ The present volume, as we will see below, suffered a similar fate.

Before Humboldt turned to language in 1799 he was already well known throughout the German states. His first publication in 1787 was a translation of selections from Xenophon's account of Socrates and Plato's *Laws* for a reader used in Prussian schools. In the summer of 1789 Humboldt was one of the few Germans who visited Paris to witness the French Revolution and this was followed by a brief stint in the Prussian judicial system. These experiences inspired his next publications in 1792 on the new French constitution, which he criticized for being based on principles of reason alone, and several essays on the limits of state power.

The year he traveled to Paris was a milestone in Humboldt's life. In December he was engaged to Karoline von Dacheröden, with whom he was married from 1791 until her death in 1829. Through her Humboldt came to know Friedrich Schiller, and on Schiller's recommendation Humboldt traveled after the Christmas holidays to Erfurt to meet Goethe. Humboldt, Schiller, and Goethe became friends, but Humboldt's relationship with Schiller was especially close. In 1794 Humboldt moved to the city of Jena to be Schiller's neighbor and to help him edit his journal *Horen*. They met twice a day, sometimes late into the night, and discussed everything, including Humboldt's views on sex and gender, which Humboldt published in 1795 in two anonymous essays in *Horen*. Soon thereafter he turned to Goethe's epic poem *Hermann und Dorothea* and wrote a book-length study of it, which he completed in February 1798. Humboldt attempts to use Goethe's poem to work out models of masculinity and

³ GW: Wilhelm von Humboldt (1841), *Gesammelte Werke*, ed. Alexander von Humboldt and Carl Brandes (Berlin: G. Reimer; photomechanical reprint: Berlin: de Gruyter, 1988).

⁴ GS: Wilhelm von Humboldt (1903–36), *Gesammelte Schriften*, ed. Albert Leitzmann, 17 vols., Akademie Ausgabe (Berlin: Behr; photomechanical reprint: Berlin: de Gruyter, 1968).

femininity that are supposed to be useful not only in the study of art and literature, but also in the study of nature.

Humboldt completed this manuscript in Paris, where he returned from 1797 until 1801, except for two trips to Spain. In 1801 he returned to Berlin, where he was awarded a Prussian ministerial position at the Vatican in Rome, which he held until 1808. In the Vatican he had access to written accounts of native American languages by Spanish Jesuits and he developed an interest in American languages that continued throughout his life.⁵

After leaving the Vatican, Humboldt continued his government service for about ten years. In addition to his responsibility for the Prussian educational system in 1809–1810, he was Prussia's ambassador in Vienna from 1810 to 1813, and during 1813–1816 he devoted his time to the war against Napoleon. He convinced Austria to join the Russian, English, and Swedish alliance, he was Prussia's second-in-command delegate at the Congress of Vienna, and a signatory of the 1814 and 1815 Treaties of Paris. An assignment as ambassador in London followed in 1817–1818, but in 1819 he successfully sought to be relieved of government duties. The Prussian chancellor Hardenberg had come under the influence of Metternich, whose reactionary politics Humboldt rejected.

After his retirement in 1819, he was able to work full-time on "linguistic projects" (GS 15:258). In 1821 he was finally able to publish his book on Basque and he published numerous essays and reviews, usually in the *Proceeding of the Royal Prussian Academy of Science*. He focused on the linguistic form of diverse languages and the relation between linguistic and mental structure. He wrote about the structure of specific languages – Aztec, Greek, Sanskrit, Chinese, and the languages of the South Pacific – and he also wrote very general essays about grammatical and mental structure.

Much of this work remained in draft form. Humboldt struggled to find a language or language family that would best serve his interest in presenting his general views about linguistic and mental structure. In 1824–1826 he began to write a multi-volume work focusing on native American languages. In 1827–1829 his focus shifted to Sanskrit and South Pacific languages, and he finally settled on the Malayan languages. In 1829

⁵ Kurt Müller-Vollmer (1976), "Wilhelm von Humboldt und der Anfang der amerikanischen Sprachwissenschaft: Die Briefe an John Pickering," in Klaus Hammacher (ed.), *Universalismus und Wissenschaft im Werk und Wirken der Brüder Humboldt* (Frankfurt am Main: Klostermann), pp.259–334.

Karoline von Humboldt, who had battled with sickness throughout her life, died and from then to the end of his own life in 1835 Humboldt worked constantly on a multi-volume work on the Malayan languages, focusing on the ancient Javanese courtly language of Kawi. The introduction to this work, often referred to as the Kawi Introduction, is translated into English in this volume.

Humboldt's overall aim in *On the Kawi Language on the Island of Java* was to study "the transference of Indian languages, literature, myth and religious philosophy to Java," paying particular attention to the role language has in the transmission of culture (GS 7:8; 1836, p.10; 1988, p.16).⁶ In pursuing this aim, Humboldt examined the formal differences between the Indic language family and what today would be characterized as the Western and Central Austronesian languages, which include Malagasy, Malayan, and Kawi. Humboldt was interested in Kawi in part because it was not clear how to classify it due to the fact that it mixed elements of Sanskrit and Javanese, which belong to two distinct language families.

The Kawi Introduction itself is about "the connection between linguistic diversity . . . and the growth of human mental power, as a process that gradually develops in varying degrees and novel forms" (GS 7:15; 1836, p.18; 1988, p.22). Humboldt believes that such a discussion is necessary because his whole study of Kawi is about the diversity of languages and the underlying mental powers in the region that stretches from Madagascar in the west to the western coast of New Guinea in the east, and from the Philippines in the north to Java in the south, including Sumatra and the coast of the Malaysian peninsula.

The themes and arguments

Since writing did not come easy to Humboldt, it is often hard on the reader as well. The following synopsis of the themes and arguments of the Kawi Introduction aims to alert readers to major landmarks they can use to navigate through Humboldt's sometimes dense theoretical landscape. I recommend that readers use Section 22 (GS 7:250–253; 1836, pp.313–322; 1988, pp.214–219) of the Kawi Introduction as Humboldt's own short overview of what he is doing in this text.

⁶ 1836: Dümmler edition; 1988: Heath's translation; see "Note on the Text."

Language, action, and power

Central to Humboldt's thinking about human language is the idea that there is a mental power (*Geisteskraft*) that is responsible for language and the diversity of languages, as well as for culture and cultural diversity. For Humboldt, language is a kind of human action or a kind of human labor. As such, it is produced by states that are internal to the mind, for example feelings, desires, beliefs, thoughts, and decisions. These internal mental states are active powers or forces that bring about the external phenomena of culture, including human language.

The mental powers that are responsible for language or any other human activity are inexplicable. According to Humboldt, our attempts to explain cultural phenomena will "run from time to time . . . into knots, so to speak, which resist further resolution." These "untiable knots" are mental powers, which "can neither be wholly penetrated in [their] nature, nor calculated beforehand in [their effects]" (GS 7:15; 1836, p.19; 1988, p.23). For this reason, there will always be a dimension to language that escapes scientific understanding. Although Humboldt affirms that language is subject to scientific scrutiny, he believes that what is understood by science is a "dead contraption" or an "abstraction" (GS 7:46–7; 1836, pp.57–9; 1988, pp.49–50). What science understands is the finished product – the completed work – but language, in Humboldt's famous words, is "no product (*ergon*), but an activity (*energeia*)" (GS 7:46; 1836, p.57; 1988, p.49).

Although Humboldt conceives of language as an activity produced by inner mental powers, he denies that language is the product of voluntary human activity. Language is a product of human nature and thus strictly speaking it should not be regarded as a human artifact. Language is an "involuntary emanation of the mind, no work of nations, but a gift fallen to them by their inner destiny" (GS 7:17; 1836, p.21; 1988, p.24). It is involuntary because linguistic activity is not intentional: language does not emerge because people have some goal in mind for which language is a means (GS 7:127; 1836, p.158; 1988, p.115).

The reason "the bringing-forth of language is an inner need of human beings" and language is "a thing lying in their own nature" is that "language is indispensable for the development of their mental powers and the attainment of a world-view" (GS 7:20; 1836, pp. 25–6; 1988, p.27). Human beings by nature think, but "speech is a necessary condition for the thinking of the individual" (GS 7:55; 1836, p.69; 1988, p.56).

It follows that language is universal to all human beings. According to Humboldt, everyone possesses the urge to speak, and in this sense “language resides in every human being” (GS 7:57; 1836, p.70; 1988, p.57). What is universal is “the *use* made of [sounds] to designate objects and connect thoughts,” and the need to designate objects and connect thoughts is subject to certain general laws that are “the same in all human beings” (GS 7:52; 1836, p.65; 1988, p.54).

Freedom and autonomy

Although language is an involuntary activity, Humboldt nevertheless regards language as a creative activity because the mental power to speak is free and autonomous. It is free in the sense that, as Humboldt writes, it is sometimes an “independent and original *cause*” that is not “conditioned” by other causes. It is an “inner life-principle” that allows human beings to break the “quasi-mechanical advancement of human activity.” It can make “sudden and unforeseen intrusions” into an “evidently cause-and-effect governed path” (GS 7:18–19; 1836, pp.23–4; 1988, p.26).

Freedom is the reason why according to Humboldt human language cannot be fully understood by scientific means. When free, the mental power that generates language “creates of its own accord,” independent of prior causes. Thus “all possibility of explanation automatically ceases” (GS 7:26; 1836, p.32; 1988, p.31). Human language is always a “mental exhalation,” and so no matter how much “we may fix and embody, dismember and dissect, there always remains something unknown left over in it, and precisely this which escapes [scientific] treatment is that wherein the unity and breath” of language resides (GS 7:48; 1836, p.60; 1988, p.51). It is on account of the essential role of freedom in mental and linguistic matters that these cannot be explained “on merely physiological grounds” (GS 7:250; 1836, p.313; 1988, p.214).

Although mental power is free, it is not free of all compulsion. Humboldt writes that human mental power works “by its own laws and forms of intuition” or a “predominating . . . principle” that “forces” the individual down a “path” (GS 7:24; 1836, p.30; 1988, p.30). Human linguistic activity, like all human action, is “the successive outbursting of power . . . but channeled in a single direction.” This direction is determined by laws which, Humboldt writes, are “nothing but the paths on which *mental activity* moves in producing language, or to use another

metaphor, the *forms* in which it mints out the *sounds*" (GS 7:87; 1836, p.107; 1988, p.81). The mental power that generates language consists of "laws of procedure, or rather . . . directions and endeavors" (GS 7:97; 1836, p.121; 1988, p.90).

These laws that determine the development of a mental power (and constitute its autonomy) are its "individual form." In the case of the language-making power, it is "the form of language" (GS 7:47; 1896, pp.58–9; 1988, p.50). The form of language is "the original design of the language" that determines the language's structure and evolution of a language (GS 7:29; 1836, p.36; 1988, p.34). The form of language is a "single and alive" urge [*Drang*] that operates in a "constant and uniform way" in the generation of linguistic activity (GS 7:48; 1836, p.59; 1988, p.50).

Sound-form and inner form

Humboldt defines languages in terms of their form, and he analyzes the form of language into two components: an external part which is the sound-form and an internal or intellectual part (GS 7:52ff and 7:86ff; 1836, pp.65ff and 107ff; 1988, pp.54ff and 81ff). These two together, particularly their "mutual interpenetration, constitute the individual form of a language" (GS 7:52; 1836, p.65; 1988, p.54).

The sound-form, according to Humboldt, is "the truly constitutive and guiding principle of the diversity of languages" (*ibid.*). It consists of the way a language organizes sound into grammatical and meaningful units. The sound-form consists of root-words, the various classes that words fall into (nouns, pronouns, adjectives, verbs, etc.), the grammatical forms the language has (for example, person, number, gender, mood, case, etc.), how the classes of words and grammatical forms are marked out by sound, and how the basic and complex words are put together to form complete sentences. In short, the sound-form of a language consists of the language's phonology, morphology, and syntax.

The inner or intellectual part of language consists of two components. One component can be called "the inner conceptual form." This is not a label Humboldt uses, but it is a component he clearly distinguishes. The human mind is a rule-governed system, and the rules that order this system are "the laws of intuiting, thinking and feeling as such" or what he also describes as "the universal *forms of intuition* and the logical ordering of concepts" (GS 7:87 and 7:90; 1836, pp.107 and 112; 1988,

pp.81 and 84). Humboldt does not refer to these laws of intuition and thought in any systematic manner, but he does refer to diverse examples of laws concerning spatial and temporal relations, personhood and gender, predication or attribution, conjunction, and modality. These laws of intuition and thinking form the basis for all laws of language (GS 7:52; 1836, p.65; 1988, p.54).

The second component of the inner or intellectual part of language is what Humboldt calls the “inner linguistic form.” The inner linguistic form consists of laws for expressing in language the mind’s concepts and its inner conceptual form. They are, at least in their “original tendency,” shared by all human beings (GS 7:52; 1836, p.65; 1988, p.54) and they are powerful enough to make anything human beings can think expressible in language. “Nothing within a human being is so deep,” Humboldt writes, “so rare or so wide-ranging that it may not pass over into language and be recognizable there” (GS 7:86; 1836, p.107; 1988, p.81).

Universality and diversity

Since the inner conceptual and linguistic forms of language are universal, it seems to follow that all human languages should be the same. But human languages are diverse, and Humboldt accounts for this in terms of human freedom, different mental endowments, diverse mental developments, and the inexplicable role of feeling and imagination in language-making. As we just saw, the general internal laws are shared by all human beings only in their “original tendency.” The strength with which this tendency is exercised and the way it evolves, along with the influence of the imagination, is not uniform across the human species.

First, the freedom and the strength with which the tendency is exercised are responsible for the diversity of human language. The appearance of language at different times in different regions is a rupture, according to Humboldt, in the steady and predictable causal pattern of physical events, and the freedom of the language-making power is responsible for that. Moreover, although the language-making power is universal to human beings, it is exercised in varying degrees according to the greatness and confidence of individuals exercising their power. The appearance of language as well as linguistic change is due to “the unpredictable, immediately creative advance of human mental power.” Such advances are the “effects of genius, which is no less displayed at

particular moments in peoples than it is in individuals" (1836, p.33; 1988, p.32).

Second, mental endowments of individuals as well as nations (and nations at different stages of their history) can differ with respect to their degree of mental clarity and commitment. Since the degree of power of the inner linguistic form varies according to the clarity and commitment of one's concepts, the power of the inner form will also differ in degree even if its laws are the same across the human species. Moreover, the language-making power can differ in degrees apart from the clarity and firmness of a person's mental organization. For instance, speakers may have a clear distinction in mind between the subjunctive and future moods, but their language-making power may be too weak to mint out the corresponding sounds. So even if laws governing the language-making power are the same everywhere, they differ in "intensity, veracity, and regularity" (GS 7:252; 1836, p.315; 1988, p.215).

Third, development will differ on account of the interaction between the sound-form of language and the internal dimensions of mind. The sound-form has a "retro-active effect" on the intellectual capacities of speakers. The sound "modifies in its turn the outlook and procedure of the inner linguistic sense" (GS 7:250-2; 1836, pp.313-16; 1988, pp.214-15). Language changes the very "powers that engender it" (GS 7:99; 1896, p.122; 1988, p.91). For instance, words can further or impede the recognition of relationships among concepts. Conceptual nuances can be lost if a language doesn't reflect these nuances in its sound-form. On the other hand, within certain limits, an "ever-greater *refinement* of language" will enrich the mind and enhance the overall development of thoughts (GS 7:100 and 7:120; 1896, pp.124 and 149; 1988, pp.92 and 109).

Finally, for Humboldt, imagination and emotion will also contribute to diversity. "*Imagination and feeling*," he writes, "engender individual shapings, in which the individual character . . . emerges, and where, as in everything individual, the variety of ways in which the thing in question can be represented in ever-differing guises, extends to infinity" (GS 7:87; 1836, p.108; 1988, p.82). Language is rule-governed for Humboldt, but it is also like a work of art, and this dimension of language "cannot be measured by the understanding" and is "the deepest and inexplicable part" of language (GS 7:87 and 7:96; 1836, pp.108 and 119; 1988, pp.81 and 89). Humboldt is particularly struck by the rhythm and euphony of different languages, which he believes is not just an accidental feature

of the sound-form of a language, but represents features of inner mental organization.

Form and linguistic determinism

The “mutual interpenetration” of sound-form and inner-form is not only a source of linguistic diversity, but also a source of linguistic determinism. Humboldt believed not only that there are diverse linguistic forms, but also that language determines how human beings think. The idea that language determines human thought together with the view that languages are truly diverse in their form are at the heart of contemporary relativism. Relativism has typically been associated with the later writings of the philosopher Ludwig Wittgenstein and the anthropologists and linguists Edward Sapir and Benjamin Whorf, but it has also been correctly traced to the writings of Humboldt.

On account of the nature of this mutual interpenetration of the various aspects of individual linguistic form, Humboldt maintains that “language is the formative organ of thought” (GS 7:53; 1836, p.66; 1988, p.54) and that language is a necessary condition of human thinking (GS 7:55; 1836, p.69; 1988, p.56). The reason language is the formative organ of thought is that mind and language form a mutually dependent feedback loop.

The first leg of this loop is the mind’s externalization in sound. Without sound human thinking “cannot . . . achieve clarity, nor [can] representation (*Vorstellung*) become a concept (*Begriff*).” External sounds are needed by the mind to “compare, separate and combine” the objects in the “external nature” it experiences, and the mental activities of comparing, distinguishing, and combining or classifying objects are essential to clear conceptual thinking (GS 7:54; 1836, p.66; 1988, p.55).

The process is described by Humboldt as follows. The mind’s representations are a product of a synthesis of the passive reception of the senses and inner mental activity. From “this combination a representation tears itself away,” becomes an object for the mind, and “perceived anew as such, returns back” to the mind. The sound of language, Humboldt asserts, is needed to tear the representation away from the mind and turn it into an object. The active mental power emits a sound, which returns back to the speaker’s ear. In this manner, the mental representation, which is subjective, is “transformed into real objectivity” (GS 7:55; 1836, p.68; 1988, p.56).

The second leg of the loop involves the perception of the sound and completes the process of concept formation. A concept, in Humboldt's view, is the internal representation of a heard linguistic sound emitted by a speaker. This internal representation makes comparison, distinction and classification possible, which is necessary to "true thinking." Thinking requires "the collection of the *manifold into unity*" and articulation makes this possible for sounds (GS 7:66; 1836, p.83; 1988, p.66). So although there is mental activity without language, in Humboldt's view, what might be called cognitive thinking, or thinking involving judgment as well as awareness, depends on speech. Even the solitary or quiet human being relies on language to form concepts.

The sound that makes classification and the other mental activities central to human cognition possible is a sound that has been turned into a "designating impression" (GS 7:54; 1836, p.67; 1988, p.55). A designating impression is used in place of objects, and in this way the impression can be used to unify diverse objects. However, Humboldt emphasizes that although language designates objects, the designated objects are not simply given; the objects we experience are in some sense made possible by language. "Just as without language no concept is possible," Humboldt writes, "so also [without language] there can be no object for the mind" (GS 7:59; 1836, p.74; 1988, p.59). Human beings can become conscious of objects only with the help of concepts, and language, as we just saw, is necessary for the existence of concepts.

Since language is involved in structuring human cognition, and languages are diverse in their structure, "there resides in every language a characteristic world-view (*Weltansicht*)." Human beings represent the world around them conceptually through the public language they have acquired as children, and to learn a new language is "to acquire a new standpoint," although it is a new point of view still within the world-view of the old language (GS 7:60; 1836, p.74; 1988, p.60).

Although language structures a world-view, Humboldt does not believe that language falsifies or veils the world in which human beings live. Language, particularly the sound of spoken language, does "stand between" human beings and nature, but human beings surround themselves "with a world of sounds in order to take-up and process internally the world of objects" (GS 7:60; 1836, p.74; 1988, p.60). In other words, language makes cognition of the world possible, and consequently by surrounding ourselves by a world of linguistic sounds "we do not abandon the world that really

surrounds us” (GS 7:61; 1836, p.76; 1988, p.61). The law-governed structure of language is related to the regularity of nature, and the more human beings exercise their power of speech, the closer they come to understanding nature.

Community and alienation

The feedback loop of language, which has the inner mental power and the outer articulated sound for its two foci, is an example of what Humboldt takes to be a more “general law of human existence in the world,” namely that a human “can project nothing from himself that does not at once become a thing that reacts upon him and conditions his further creation” (GS 7:251; 1836, p.314; 1988, p.214).

Once language is externalized, it becomes “truly an alien power” (GS 7:63; 1836, p.78; 1988, p.62). Humboldt writes that “however internal language may altogether be, it yet has at the same time an independent outer existence that exerts power against humanity itself” (GS 7:21–2; 1836, p.27; 1988, p.28). The source of the independence of language is its external existence after articulation. “The representation,” he writes, “transformed into language is no longer the exclusive possession of a single subject” (GS 7:56; 1836, p.59; 1988, p.56). The articulated sound is “necessarily . . . a joint possession . . . and is in truth the property of the whole human species” (GS 7:63; 1836, p.78; 1988, p.62).

The alien dimension of language is not just a function of the fact that language is shared by a community of speakers, but also depends on the very fact that language involves sound. “The construction of language,” Humboldt writes, “must be seen as a production in which the inner idea, to manifest itself, has to overcome a difficulty” (GS 7:82, 1836, p.102; 1988, p.77). This obstacle is the very making of sound, a physical activity. The vocal chords have to be able to make sounds and the different kinds of sounds that are needed to express distinct concepts, and this can be done with varying degrees of success.

The sound-form is also alien when there is a conflict or tension between the thoughts the speaker is trying to express and the available phonological and syntactic structures of the speaker’s language. Speakers attempt to manifest their thoughts in language by using words and word complexes to designate their concepts, but this project can run into problems when the appropriate sounds are not available. For instance, speakers may in their

minds distinguish between future and subjunctive moods, but the sound-system of their language (e.g. Sanskrit, according to Humboldt) may lack a corresponding distinction. So when speakers are thinking that something might happen, they either need to modify the sound-system and somehow introduce a subjunctive mood or they must suppress the manifestation of this mental distinction. In the latter case, the sound-form becomes the master of a speaker's mind.

Holism

Another reason Humboldt has for believing that language changes internal structure is tied to his holism. Humboldt believes that "language resides in every human being in its whole range" (GS 7:57; 1836, p.70; 1988, p.57). In articulating a sound, Humboldt believes a speaker not only expresses the word's meaning, but presents the word as having a certain place in the whole language, which is infinitely large. Consequently, language is not built up atomistically out of individual words, where the totality of language is a product of the individual words compounded into a language, but "words, on the contrary, emerge from the totality of speech" (GS 7:72; 1836, pp.90-1; 1988, p.70).

As human beings communicate, they transform the sound-form, and thus hearers must develop their linguistic capacity to understand the newly transformed language. In order to do this, the "listener . . . is bidden, as it were . . . in his own mind to supply the missing element in harmony with what is given" (GS 7:180; 1836, p.225; 1988, p.159). The articulated word that is heard is characterized in terms of its place in a whole language, and the hearer must, upon understanding the word, incorporate the pattern that characterizes the word into her own linguistic structure.

An important consequence of Humboldt's holism is that languages are very fluid for him. Humboldt characterizes languages in terms of their forms, and each part of language is characterized in terms of the total language to which it belongs. But forms change as language develops in communication, each speaker and hearer imposing her own individuality on language. Consequently, language is in a constant flux, and, moreover, in a sense each language-user has her own language (GS 7:51; 1836, p.63; 1988, p.53). At the very same time he affirms that "we may say with equal correctness that the whole of human species has but one language" [*ibid.*]. Since the identity of languages rests on their form, and there is a universal

form for all languages, there is a sense in which there is only one language. The general laws of language are, at least in their general tendency, the same in all human beings; and in that sense all human beings have the same language even though their original tendency can subsequently develop in diverse ways.

Classification and quality

The classification of languages, Humboldt maintains, is very difficult given “the present state of . . . knowledge,” and it is not clear to Humboldt if the required knowledge can ever be attained (GS 7:278; 1836, p.346; 1988, p.235). Nevertheless, Humboldt does have an overall strategy for classifying languages.

Humboldt classifies languages in terms of how close they are to the ideal form of language. All languages aim to designate the mind’s universal inner conceptual form – the universal laws of intuition and thought. They also aim to do this without ambiguity, reserving distinct sound-forms for distinct conceptual relations. The goal of all languages is to have “the total structure of sound-form and inner shaping . . . fused together with equal firmness and simultaneity” (GS 7:94; 1836, p.118; 1988, p.88). Of course, languages achieve this goal only in varying degrees, but they all approximate this ideal, which constitutes the form of all languages (GS 7:252–3; 1836, pp.316–17; 1988, p.216).

He focuses on these syntactic categories: verbs, conjunctions, and relative pronouns. He pays particular attention to the verb, which in his view has the role of conjoining the subject and predicate into a complete thought expressible in a sentence. In Humboldt’s account, some languages have a clear syllable or sound change to mark out the verb in the sound form while others do not. For example, he believes that Burmese has no way of distinguishing by sound the syntactic difference between a noun and a verb. This difference, Humboldt maintains, is something Burmese speakers have in mind, and so it is preserved in the meanings of Burmese root words, but not reflected in the sound-form of Burmese. On the other hand, the sound-form of Sanskrit clearly demarcates nouns and verbs. None of the endings used to mark out the various moods, tenses, and conjugations of verbs is used to mark out noun-forms, and none of the sounds used to mark out noun-forms is used to express verb-forms, according to Humboldt.

He distinguishes three general ways in which the sound-form of a language can demarcate syntactic categories: isolation, inflection, and agglutination. Isolating languages do not have special sound units or sound changes to designate grammatical forms. Sentences consist of strings of words, and word order is used to mark out grammatical relationships. Humboldt highlights Chinese as a paradigm case of an isolating language, but English has many examples where word order and not inflection is used to designate relationships, for instance “Simba hits the ball” and “The ball hits Simba.” Agglutinating languages compound words to show grammatical form, for example Japanese, Swahili, and Finnish. English also has examples of agglutination: changing a noun into an adjective by compounding it with the word “like,” as in “lifelike.” Inflecting languages demarcate grammatical forms by changing words, either by changing the sound of the word itself, as in “flew,” which is the past tense of the verb “to fly,” or by adding prefixes or suffixes that by themselves are not words, as when “s” is added to form the plural of a noun. Indo-European languages as well as Semitic languages, including Hebrew and Arabic, are inflecting languages, but Humboldt’s favorite example of an inflecting language is Sanskrit.

Humboldt believes that there is a qualitative difference between these types of languages. The quality of a language is a function of how well it contributes to the mental development of people, and a language that fuses “sound-form and inner-shaping” the most contributes the most to mental development. Humboldt believes (along with most of his contemporaries) that in this respect inflectional languages are superior to non-inflectional ones. The reason inflecting languages better support mental development than isolating languages is that they exhibit grammatical form with sounds while isolating languages “consign all *grammatical form* . . . to the *work of the mind*.” This calls for “inner effort” to compensate for what is missing in the language (GS 7:271; 1836, p.338; 1988, p.230).

What is missing, Humboldt asserts, is a proper expression of a closed or completed thought that the speaker has in mind. A complete thought involves a concept that is the subject of the thought and a concept that is predicated of the subject. Moreover, in Humboldt’s view, this attribution involves a commitment about the way things are. In thinking that lightning is striking we are judging that lightning is really striking (GS 7:214; 1836, p.268; 1988, p.185). By not demarcating the parts of a completed thought and their relations to each other with special sounds – e.g. by not

distinguishing subjects and predicates with special sounds – isolating languages fail to exhibit the complete thought with clarity and vigor. Consequently, the isolating language, in and of itself, does not contribute to or reinforce strongly enough the development of thought.

Inflectional languages are better than agglutinating languages because they express and contribute to conceptual unity. According to Humboldt, when human beings think, they categorize or classify the concepts that constitute the thought. For example, when a person thinks of an object, she has a concept of that object in mind and at the same time this concept is classified, e.g. as a concept of a living creature or as a concept of a particular gender (GS 7:109–111; 1836, pp.135–8; 1988, pp.100–1). Although Humboldt does not address this issue in much detail, he clearly has the categories of both inner conceptual form and inner linguistic form in mind because he refers to categories of being animate, gender, person, pronoun, verb, causality, mood, among others.

This classification of concepts is not the compounding of two concepts. Instead, it involves placing the concept in “a class (*Classe*) whose concept runs through many things in nature” (GS 7:111; 1836, p.138; 1988, p.102). Consequently, the unity of the concept is not affected by this classification. Now, the function of a word is to *designate* a concept, *indicate* its classification, and to do this with a “sound-unity” that symbolizes the conceptual unity of its meaning (GS 7:111 and 7:121; 1836, pp.138 and 151; 1988, pp.102 and 110). Agglutination achieves this by compounding distinct words, while inflection achieves this by keeping one word, but not changing it. Thus, in Humboldt’s view, agglutination does not capture the conceptual unity as well as inflection does. Agglutination symbolizes one concept with two words compounded together, while inflection symbolizes one concept with just one word.

Although Humboldt believes that some languages are better than others, it is important to highlight two *caveats* that Humboldt offers. First, no matter what method a human language uses to designate concepts, indicate categories, and express thoughts, “every language is produced by the original tendency or ‘original talent’ shared by all human beings. Every language has a structure worthy of study and every language has the infinite resources to assimilate the richest and loftiest ideas” (GS 7:256; 1836, pp.320–1; 1988, p.218). Second, Humboldt is careful to distinguish the quality of a language from the quality of mind of its speakers (GS 7:163 and 7:255; 1836, pp.204–5 and 318; 1988, pp.145 and 217). An imperfect

language, by itself, is only evidence for the claim that less energy has been devoted to language and no language is “an absolute restraint” on the human capacity for mental development. Finally, no human language is perfect, according to Humboldt. Inflectional, isolating, and agglutinative languages are only abstract models, and human languages are always a mix of inflection, isolation, and agglutination, although some languages fit one model better than others.

Individuals and nations

Throughout most of his Kawi Introduction, it seems that Humboldt attributes language to something larger than individual human beings, particularly nations. “Languages,” he writes, are “bound and dependent on the nations to which they belong” (GS 7:17; 1836, p.21; 1988, p.24). The form of language is “the individual urge whereby a nation gives validity to thought and feeling in language,” and “language . . . is always the mental exhalation of a nationally individual life” (GS 7:47–8; 1836, pp.59–60; 1988, pp.50–1). This is not just a manner of speaking; for Humboldt, nations, as well as persons, must be regarded as a “human *individuality*, which pursues an inner spiritual path of its own” (GS 7:37; 1836, pp.46–7; 1988, p.41). This nationalist point of view appears to predominate throughout the text.

Nevertheless, in a section where Humboldt explicitly addresses the question about the relationship between individuals and nations he presents a more complex picture. Humboldt maintains that languages are “spiritual creations which in no way whatever pass out from a single individual to the remainder” (GS 7:38; 1836, p.48; 1988, p.42). He adds:

So although languages are thus the work of *nations* . . . they still remain the self-creations of *individuals*, in that they can be produced solely in each individual. (GS 7:40; 1836, p.50; 1988, p.44)

Part of his reason for believing this is his view that nothing can be in the human mind that wasn't put there “by its own activity” (GS 7:56; 1836, p.70; 1988, p.57).

How language can belong both to individuals and to nations is a “mystery.” Language is first an activity of an individual speaker; people begin to speak because they must co-operate, communicate, and, most

importantly, cultivate their own minds. But just as one person begins to speak because she must, so does everyone else and language then emerges from the “simultaneous self-activity of all.” In this process, the language of the individual is “broken off” from the individual and is united with the language of his group. How this happens is what Humboldt believes to be a mystery that inspires “reverential awe” (GS 7:33–8; 1836, pp.42–8; 1988, pp.38–42).

Influences and development

The debate about the influences on Humboldt’s philosophy of language has been spirited. The traditional view is that Humboldt is securely rooted in the post-Kantian and early romantic era of Germany.⁷ A competing view is that the assimilation of Humboldt to a German tradition is a historical error rooted in reaction to the French revolution.⁸ On this account, Humboldt’s philosophy of language is completely rooted in Condillac and the French *idéologues* who drew on Condillac and whom Humboldt met during his second visit to Paris in 1797. In fact, however, no single tradition has a privileged position in Humboldt’s thinking. Humboldt pursued ideas and problems, not schools and personalities, and his philosophy of language is a cross-current of diverse trends. It includes German trends, French thought, English grammatical studies, and still other influences.

That important features of Humboldt’s views are rooted in both French and German thought is not difficult to document. The German connection is obvious. Humboldt was educated by popular tutors of the Berlin enlightenment, including Johann Jakob Engel, who gave Humboldt a Leibnizian introduction to philosophy. Humboldt also attended the weekly meetings of the *Mittwochsgesellschaft*, which included important figures of the German enlightenment such as Moses Mendelssohn. He was also very close to the romantic reaction to Kant: Schiller and Jacobi were close friends and he personally knew Goethe and Herder.

Humboldt is particularly interested in the Kantian problem of the relation of reason and sensibility, and how they are combined in experience. Humboldt’s concern for this issue was most certainly nurtured by

⁷ Tilman Borsche (1990), *Wilhelm von Humboldt* (München: Beck); Kurt Müller-Vollmer (1976), “Von der Poetik zur Linguistik – Wilhelm von Humboldt und der romantische Sprachbegriff,” in Klaus Hammacher (ed.), *Universalismus*, pp.224–40.

⁸ Hans Aarsleff (1982), *From Locke to Saussure* (Minneapolis: University of Minnesota Press).

Friedrich Heinrich Jacobi, who was known for his critique that Kant did not properly understand the relation between reason and sensibility. Humboldt visited Jacobi in November 1788 and they spent a good part of this time discussing Kant, the relation between reason and sensibility, and the sources of certainty. Humboldt refers to this problem in a draft of an essay on religion written between August 1788 and July 1789, where he discusses the relation of reason and faith (GS 1:53–7).

In a draft of an essay on the education of human beings written in 1793 Humboldt returns to this problem. He contrasts the receptivity of sensibility and the spontaneity of human reason and worries about the need human beings have to unite these. He claims that what a human being needs is an object that will make this interaction of the mind's receptivity and spontaneity possible (GS 1:285). In 1795 he addresses this problem again and he offers a solution in the two essays published by Schiller. Humboldt extends his understanding of sex and gender differences to the relation between reason and sensibility: thought is an offspring of feminine sensibility and reason's masculine drive to create, namely reason's genius (GS 1:316 and 336). Schiller sent one of these essays to Kant who, needless to say, was not impressed.⁹

During this early period Humboldt also exhibits an interest in language. For example, in 1793 he drafts an essay that argues that language is evidence for the spirit and character of a people, or what he also describes as their individuality. Ancient Greek is a good source of evidence about the character and spirit of ancient Greeks because it contains very few deviations from the original, that is, it has few foreign words and foreign inflections and constructions. In this essay he explicitly ties "syntax and grammar" to the individuality of a speaker. He also uses the term "philosophy of language," arguing that philosophy of language appears very late in Greek culture, which is good because reflecting on the nature of language leads to deviations from ordinary formations (GS 1:263–5).

Although Humboldt knew about Herder's essay on the origins of language, what is missing in these essays from the period from 1788 to 1795, two years before his extended trip to Paris, is a unification of his interest in language and his Kantian concern for the nature of the unity between reason and sensibility. Humboldt comes to combine these two

⁹ Arnulf Zweig (1967), *Kant: Philosophical Correspondence 1759–99* (Chicago: University of Chicago Press), p.221.

concerns somewhere between 1795 and 1800 (GS 1:581).¹⁰ Since from 1797 to 1801 Humboldt's base of operation was Paris, it is reasonable to look to this sojourn for evidence that there he combines his Kantian and linguistic interests.

As a matter of fact, there is a French connection in Humboldt's development. In Paris Humboldt struggles to understand the differences between Kantian philosophy and the philosophy of the French *idéologues*, he is interested in uniting these two trends, and he is asked on several occasions to discuss and defend Kantian philosophy (GS 14:466–8). Humboldt's assessment of these discussions is usually negative because, he claims, his audience does not appreciate the role of mental activity in human cognition. This assessment is developed in Humboldt's reading notes on Condillac. Humboldt writes that Condillac wants to "pursue the production of concepts, but he does not even come close" because Condillac fails to separate what is received in our concepts and what is a product of "self-activity" or spontaneity (GS 14:445). He writes that Condillac does not understand true synthesis, that is, bringing something under a concept. "In a word," Humboldt adds, "he is missing the capstone of metaphysics, namely the feeling or better yet the activity of the I" (GS 14:479).

Nevertheless, his comments on Condillac's *Essay of the Origins of Human Knowledge* conclude with a list of "results," namely (i) that "in Condillac still lies the source of all contemporary metaphysics in France," (ii) that "they do not assume any innate ideas, and this with justification," and that "they discount everything *a priori*," and (iii) that "they place an infinite amount of weight on the relation between concepts and signs, and that is why universal grammar seems to them to be an essential part of metaphysics" (GS 14:449). It is not completely clear what Humboldt's attitude is toward the third result about concepts and signs, but it seems that he highlights this because he is struck by this aspect of French philosophy.

This suggests the hypothesis that in Paris Humboldt combines his linguistic interests and his concern for the Kantian problem on how reason and sensibility, or the mind's spontaneity and receptivity, are united in experience. Either the *idéologues'* emphasis on the connection between language and concepts suggested this to him for the first time or it confirmed something that he had already been thinking about.

¹⁰ See also S. Seidel (ed.) (1962), *Der Briefwechsel zwischen Friedrich Schiller und Wilhelm von Humboldt*, 2 vols. (Berlin: Aufbau), vol. II, pp.207–9.

This would mean that Humboldt's philosophy of language is neither a purely German nor a purely French offspring. It is a product of Kantian concerns about the proper unity of reason and sensibility in the constitution of experience and Condillac's and the *idéologues'* focus on the union of concepts and language. What Humboldt brings to Kantian philosophy is the idea that the external linguistic sign contributes to the synthesis of the manifold of intuition to produce a representation. What Humboldt brings to the perspectives of Condillac and the *idéologues* is the idea that the representation (or idea) is itself a product of mental activity as well as the mind's receptivity.

That Humboldt's stay in Paris played a role in the synthesis of his Kantian and linguistic interests is corroborated by Humboldt's little-studied relation to the *idéologue* Pierre Laromiguière. Laromiguière was the only *idéologue* about whom Humboldt wrote that their discussion arrived at "very good and pure results" (GS 14:551). Laromiguière, a student of Condillac, is remembered today for his critique that Condillac attributed too much passivity to the human mind and his view that ideas themselves are already the products of mental activity.

These critiques reached published form in 1805. In May 1798 when Humboldt and Laromiguière first met, Laromiguière still believed that the human mind is passive with respect to its representations (GS 14:485). A month later, however, Laromiguière was reading Kant in Latin and translating the Preface to the *Critique of Pure Reason*, where Kant writes about the mind's contribution to our knowledge of objects (GS 14:524). In July they have a long discussion about metaphysics and the difference between analytic and synthetic propositions, and so it is very likely that they discussed Kant's views about synthesis, mental activity, and the relation between concepts and intuitions or reason and sensibility. This is the discussion that Humboldt claims arrived at "good results."

It seems, then, that Laromiguière was encouraged by these encounters to focus on the role of mental activity in the production of ideas. Similarly, this suggests that these encounters encouraged Humboldt to look to language to resolve his Kantian concerns, or if he was already thinking about this strategy, he was encouraged to pursue it with greater intensity. Perhaps it is this new focus that Humboldt had in mind when in November 1798 he writes to a friend that "my stay in Paris is making a [new] epoch in my thinking" (1840, p.62).

Humboldt today

The reception of Humboldt's work in this century, particularly in English-speaking countries, is primarily defined by Noam Chomsky's reading of Humboldt and his critics. Although Humboldt's work has received some attention by linguistic relativists and determinists, this pales next to the attention generated by Chomsky particularly in *Cartesian Linguistics*, published in 1966. Chomsky, who was by then already recognized as an important linguist and as a progenitor of the cognitive revolution in psychology and linguistics, singles out Humboldt as the figure in the history of linguistics who comes closest to holding all the views that define the generative paradigm in linguistics.¹¹

Four ideas are central to the generative paradigm in psychology and linguistics. First, human language is generated by a finite set of rules or principles that are in some sense part of the human mind. This set of rules – the generative grammar of a language – is capable of generating, by means of repeated application, all of the language's well-formed sentences, questions, commands, and so on. Second, there is a set of rules of language that is shared by all human beings and that is responsible for all human languages. In other words, underlying all human languages there is one generative grammar, and it is in some sense part of every human mind. Third, this generative grammar for all human languages is innate, that is, this grammar is not learned, but it is part of the original endowments that human beings have simply by virtue of being human.

Finally, human beings have the capacity to use language creatively. What Chomsky has in mind when he discusses linguistic creativity includes three distinct features. First, it includes what has come to be called "productivity," namely that language users have the ability to produce and understand an infinite or unbounded number of sentences that substantially exceeds the finite number of sentences they actually understand or produce. Second, it includes novelty, that is, language users have the capacity to understand and produce completely new sentences that they have never encountered before. Third, language-use is creative in that it is stimulus-independent. Full knowledge of a language-user's environment does not allow you to predict what the next utterance or inscription will be.

Chomsky finds all of these claims in Humboldt's Kawi Introduction, and with some justification. As we saw in the synopsis, Humboldt did

¹¹ Chomsky, *Cartesian Linguistics*, p.2.

believe that language was shared by all human beings and that in some sense all human beings have the same language. Moreover, language is not a voluntary human creation but a capacity that human beings have by virtue of their nature. Moreover, it is not far-fetched to see the outlines of a generative grammar in Humboldt's discussion of the form of language and inner linguistic sense because for Humboldt these are structured forces that are responsible for the linguistic sounds human beings produce and understand. Humboldt's view that linguistic activity is free and unpredictable also looks very much like a claim about stimulus-independence. Humboldt seems to understand novelty because he discusses in some detail our capacity to produce and understand new terms that we have never heard or produced ourselves. Finally, it seems that Humboldt understands productivity, which Chomsky sometimes refers to as the "core idea about language,"¹² when Humboldt writes that language "must . . . make infinite employment of finite means" (GS 7:99; 1836, p.122; 1988, p.91).

This reading of Humboldt has been severely criticized, particularly by scholars influential in Germany. The major critiques can be summarized as follows.

(1) Generative grammar is part of a scientific project that treats language as a physical object amongst other objects that can be examined and explained by empirical means. Humboldt, however, believes that scientific analysis can only reach the linguistic product – language as *Ergon* – not the essence of language. Language is essentially a free and autonomous mental activity structured by internal mental powers that are not accessible to observation. What we can observe is only the external product of this activity, and thus empirical observation will miss what is essential to language.¹³

(2) Chomsky's reading of Humboldt ignores the importance Humboldt assigns to aesthetic factors in the construction of language. Humboldt, along with early romantic thinkers, saw a close tie between poetry and language construction and he emphasizes the role imagination and feeling play in the construction of the sound-form. Languages have diverse rhythms and euphonies, and for Humboldt these are not mere by-products

¹² *Ibid.*, p.8.

¹³ Tilman Borsche (1981), *Sprachansichten: Der Begriff der Menschlichen Rede in der Sprachphilosophie Wilhelm von Humboldts* (Stuttgart: Klett-Cotta); H.-W. Scharf (1993), *Das Verfahren der Sprache: Humboldt gegen Chomsky* (Paderborn: Schöningh).

of language construction, but they play a role in expressing internal mental states.¹⁴

(3) Chomsky and Humboldt differ sharply about what is infinite about language. A generative grammar is a finite system of rules that generates an infinite set of sentences. So, Chomsky's understanding of Humboldt's idea that language makes infinite uses of finite means entails that the means are the rules and the uses are the sentences that can be constructed on the basis of the rules. For Humboldt, however, the boundless or infinite domain is "the essence of all that can be thought," not sentences. So while for Chomsky the infinite domain is sentences, for Humboldt the infinite domain is what language is about or what it expresses.¹⁵

(4) A generative grammar cannot be identified with Humboldt's form of language. A generative grammar is fixed and does not develop. Moreover it is wholly internal and does not involve an essential interaction with the environment. Humboldt's form of language develops historically and it develops in response to the environment: the inner form is part of a feedback loop that includes the external sound-form of a language.¹⁶

These four critiques highlight central features of Humboldt's theory of language that Chomsky ignores, but I do not think that these features are incompatible with the generative model in linguistics, and, more broadly, in psychology.

Science, freedom, and art

Chomsky also worried about the role of observation in linguistics. He, like Humboldt, believed that an adequate explanation of observable linguistic phenomena required reference to unobservable mental structures and processes. But unlike Humboldt, he did not conclude from this that linguistics had to transcend the bounds of science. Chomsky worked with a richer conception of good science, namely one that would allow for unobservable mental entities if they were needed to explain observable phenomena. So, I suggest that what Humboldt took to be foreign to science and at home in philosophy is precisely the domain of unobservable and

¹⁴ Müller-Vollmer, "Von der Poetik zur Linguistik," pp.224–40.

¹⁵ Eugenio Coseriu (1971), "Semantik, Innere Sprachform, und Tiefenstruktur," in *Sprache: Strukturen und Funktionen* (2nd edn; Tübingen: Tübinger Beiträge zur Linguistik); Harald Weydt (1972), "Unendlicher Gebrauch von endlichen Mitteln," in *Poetica* 5:249–67.

¹⁶ Borsche, *Sprachansichten*; Hans-Heinrich Baumann (1971), "Die Generative Grammatik und Wilhelm von Humboldt," in *Poetica* 4:1–12; Coseriu, "Semantik."

theoretical mental entities that generative linguistics defended against behaviorism.

This is supported by Humboldt's claim that the linguist's task is to work out the hypothesis that language is "one of the fields whence the general mental power of human being emerges in constantly active operation" (GS 7:20; 1836, p.26; 1988, p.27). Humboldt compares the linguist's task to that of a historian. The events that a historian studies are driven by ideas that cannot be perceived directly, but they can be recognized by the events they bring about. For this reason, the historian cannot limit himself to matter in his explanations; he must leave a place for the role of unobservable inner or mental ideas (GS 4:56).

The role Humboldt assigns to freedom also does not threaten generativist treatments of language. First, a generative grammar is not a set of causal laws of nature. It is a set of rules that guide the production and understanding of language, but these rules can be violated. What actually happens on any particular occasion – how a speaker in fact performs a linguistic act – is a function of many factors, not all of them linguistic.¹⁷ Chomsky and other generative linguists do not discuss these factors in any detail because they believe linguistic performances are too irregular and unpredictable to be the subject of a proper science.

Moreover, there is no doubt that for Humboldt the aesthetic dimension of language is essential to it, and he ties the rhythm and other aesthetic features of the sound of a language to inner mental activity. They are the product of imagination in much the same way that a work of art is the product of imagination. It is equally certain that Chomsky says very little about this dimension of language. His primary concern is syntax, and he cares about phonological issues only insofar as they are relevant to syntax.

However, this does not mean that aesthetic concerns are alien to generative approaches to language. As we just saw, linguistic performance is a function of many factors, and one of these may very well be aesthetic features of the sound-structure of language. Music itself has been given generativist treatments,¹⁸ and it may very well be that Humboldt was onto something when he explained that the emergence of diverse sound-forms is in part a function of the influence of inner musical forms.

¹⁷ Noam Chomsky (1965), *Aspects of a Theory of Syntax* (Cambridge, MA: MIT Press), pp.3–4.

¹⁸ Fred Lerdahl and Ray Jackendoff (1982), *A Generative Theory of Tonal Music* (Cambridge, MA: MIT Press).

Finite means and infinite uses

It is true that Humboldt does not mention sentences in the famous passage about language making infinite employment of finite means, but it is equally clear that Humboldt is saying that something about language has to be infinite. The context of this passage is a discussion of the role language has in the constitution of thought. He writes that language plays this role and thought is in principle boundless, language “must therefore make infinite employment of finite means” (GS 7:98–9; 1836, p.122; 1988, p.91). In other words, from the fact that language confronts a truly boundless domain, Humboldt concludes that language must make infinite use of finite means.

What Humboldt writes here is a legitimate introduction to the idea of linguistic productivity. When generativists refer to Humboldt when discussing productivity, their primary focus is not that there is an infinite number of sentences that can be generated by language.¹⁹ The first and main point is that although language users have finite linguistic means, they are able to use them in potentially infinite ways in the production and comprehension of language. This is exactly what Humboldt had in mind.

Of course, this does not settle the question about exactly what it is that is infinite about language. Humboldt does not mention sentences, but it is also true that his comment does not exclude sentences. The fundamental issue here is what the basic units of linguistic analysis are for Humboldt. Much of the Kawi Introduction is devoted to words and word-formation, which suggests that Humboldt takes the word to be the basic unit of analysis. Chomsky’s focus is the sentence, and so this appears to be an important point of divergence.

Although in the Kawi Introduction Humboldt devotes more space to words than to sentences, he also writes that “speech is not compounded out of words . . . the words on the contrary, emerge from the totality of speech” (GS 7:72; 1836, pp.90–1; 1988, p.70). According to Humboldt, it is more correct to begin analysis with the sentence because every utterance of a speaker is really tied to a closed or complete thought (GS 7:143; 1836, p.179; 1988, p.128). So it seems that, if pressed, Humboldt would point to sentences as the linguistic items that have the task of confronting and constituting the boundless domain of thoughts human beings can think.

¹⁹ Chomsky, *Cartesian Linguistics*, pp.20, 19; Pinker, *The Language Instinct*, p.84.

Development and environment

It is an essential feature of Humboldt's view that the inner linguistic form and the external sound-form are part of a feedback loop that allows the inner form to develop in response to changes in the sound-form. Humboldt refers to this loop in the famous passage about the infinite employment of finite means. After he states that language must make an infinite employment of finite means, he writes that language has an effect both on the outward utterance and on the mental power that engenders language in the first place (GS 7:98-9; 1836, p.122; 1988, p.91).

Is this perspective compatible with generativism? Generativists distinguish between a universal generative grammar that underlies all languages and a particular generative grammar for a language.²⁰ A universal generative grammar is the form that any particular grammar must satisfy, although particular grammars can satisfy universal grammars in diverse ways.²¹ This leaves room for diverse grammars that can evolve in diverse ways as long as they satisfy the universal grammar. Similarly, Humboldt's inner linguistic form is universal in its "original tendency" and this tendency remains fixed throughout a language's development. Every language is patterned after this inner form, and the original tendency continues throughout development to strive to "uniformity in language" and to keep the language on the "right course" (GS 7:252; 1836, p.315; 1988, p.215). Although there are changes that can occur in the inner form, this "intellectual part of language does, indeed, preserve a large degree of uniformity" (GS 7:86; 1836, p.107; 1988, p.81).

Humboldt's idea that language forms a feedback loop between external and internal structures is also compatible with generativism. Generative approaches to various intelligent tasks and processes have evolved over the past two decades to accommodate various insights that previously seemed incompatible with the generativist paradigm. For instance, various attempts to develop generativism involve the idea that the production of intelligent activities such as speaking or counting essentially involves internal mental structures interacting with external structures. It has been suggested that external symbol structures are produced as aides to internal processing, and that these external structures are

²⁰ Chomsky, *Aspects of a Theory of Syntax*, pp.5-7.

²¹ *Ibid.*, p.25.

represented internally and this contributes to the development of internal symbolic structures.²²

In sum, Humboldt's view that there is a feedback loop between internal and external forms is indeed an essential part of his theory of language, and it anticipates current developmental perspectives within cognitive science.

Thus Humboldt's Kawi Introduction continues to anticipate important developments in our scientific and philosophical thinking about natural human language, and I think that it will continue to do so in the future. Humboldt – informed by a critical mass of empirical evidence about the diversity of human languages but still unfettered by specialization – aimed to work out an integrated account that is true to all of language's significant and striking features. He aimed to capture its unity and diversity, its position between mind and environment, its apparent structures and its underlying forms, its logic and its aesthetic, its synchronic and diachronic dimensions, its powers and limits, as well as its ties to the individual speaker and to society and culture. As we come to know more about human language, we typically focus on the rich details of its various aspects and lose sight of the larger, integrated phenomenon. However, from time to time, progress is made by focusing on what had been ignored or integrating previously fragmented knowledge. Humboldt will always appear to anticipate these new developments because at these junctures we are trying to see the whole panorama that he struggled to represent in his Kawi Introduction.

²² Andy Clark (1989), *Microcognition: Philosophy, Cognitive Science and Parallel Distributed Processing* (Cambridge, MA: MIT Press), pp. 131–6; Andy Clark (1997), *Being There: Putting Brain, Body and World Together Again* (Cambridge, MA: MIT Press); Jill F. Lehman, A. Newell, T. Polk, and R. L. Lewis, "The Role of Language in Cognition: A Computational Inquiry," in H. Geirsson and M. Lososky (eds.) (1996), *Readings in Language and Mind* (Oxford: Blackwell), pp. 489–507; Annette Karmiloff-Smith (1992), *Beyond Modularity: A Developmental Perspective on Cognitive Science* (Cambridge, MA: MIT Press); Michael Lososky (1995), "Individualism vs. Embedded Systems," in *Minds and Machines* 5: 357–71; J. C. Rutkowska (1993), *The Computational Infant: Looking for Developmental Cognitive Science* (London: Harvester Wheatsheaf).

Chronology

- 1767 Born Baron Karl Wilhelm von Humboldt on June 22, 1767 in Potsdam, Prussia
- 1779 Father, Alexander Georg von Humboldt, dies in Berlin
- 1785 Studies philosophy with private tutor Johann Jakob Engel
- 1787–8 Studies law at University of Frankfurt/Oder
- 1787 Publishes translations of Xenophon and Plato for Prussian school reader
- 1788–9 Studies classical philology at University of Göttingen
- 1788 Visits Friedrich Heinrich Jacobi in November
- 1789 Visits Paris for three weeks in August to witness French Revolution
- December: engaged to Karoline von Dacheröden, Friedrich Schiller's sister-in-law; meets Schiller, Goethe, and Herder
- 1790–1 Law clerk in Prussian supreme court
- 1791 June 29: marriage to Karoline von Dacheröden
- 1792 Publishes critical essays on new French constitution and the limits of state power
- 1794 Moves to Jena to work with Schiller
- 1795 “Über den Geschlechtsunterschied und den Einfluss auf die organische Natur” and “Über männliche und weibliche Form” published anonymously in Schiller's *Horen*
- 1797 Mother, Maria Elisabeth von Humboldt (née von Colomb), dies
- 1797–1801 Lives in Paris
- 1798 *Aesthetische Versuche: Über Goethes Hermann und Dorothea*