

**Forward to the Past:
Modernizing Linguistic Typology by Returning to its Roots**

Randy J. LaPolla

0. Introduction

There is often an assumption that the comparative study of unrelated languages, i.e. linguistic typology, began with Joseph Greenberg in the 1960's, but in reality it began more than 150 years earlier in Europe with scholars of the Romanticist movement, particularly followers of Johann Gottfried von Herder (1744-1803). The most prominent of these scholars was the Prussian scholar Wilhelm von Humboldt (1767-1835), whose goal in studying 75 different languages was to understand the construal of the world (*Weltansicht*) of the speakers of the different languages, what we now think of as the cognitive categories manifested by the languages of the speakers, as each language manifests a unique set of cognitive categories.

Until Humboldt's time, most comparison was just of lexical items, but Humboldt argued for more comprehensive language documentation, including the writing of full grammars based on the collection of extensive natural texts. Only after full documentation of individual languages could they be compared. He argued that each language manifests a unique world view, and the goal of linguistics should be to understand these world views and the differences between cultures in this regard. As he argued that it is only in connected discourse that the cognitive categories can be discovered, he saw language documentation and typology as intimately connected.

The Grimm brothers (Jacob Grimm, 1785-1863, and Wilhelm Grimm, 1786-1859) were also influenced by Herder and became interested in understanding the world view of the German-speaking people, and so collected a large amount of folk poetry and texts and began serious comparison of the varieties. *Grimm's Fairytales (Kinder und Haus Märchen; published 1812-1858)* was a product of this effort.

Following in this tradition later in the 19th century we have Georg von der Gabelentz and Franz Boas, and in the early 20th century, Boas' student Edward Sapir,¹ and Sapir's students Benjamin Lee Whorf, Fang-Kuei Li, Mary Haas, Stanley Newman, George Trager, Charles Voegelin, and Morris Swadesh, and their students, e.g. Dell Hymes and James A. Matisoff, and so on up to today. This tradition has continued to develop the practice of text collection advocated by Humboldt and carried out by the Brothers Grimm to use as the data for understanding the world view of the speakers.² But due to political and philosophical fads,

¹ Boas and Sapir were also directly influenced by Herder's work as well as Humboldt's (the latter to some extent through Heymann Steinthal (1823-1899), who had edited some of Humboldt's work after Humboldt's death). Sapir's 1905 MA thesis was on Herder's *Ursprung der Sprache*.

² See for example Li 1951[2013] on the need for *in situ* fieldwork and for understanding the cognitive categories manifested in the languages on their own terms, not applying categories from one language on another.

particularly the dominance of Structuralism, this approach was not only largely neglected for many years, but unfairly denigrated after the deaths of Sapir and Whorf in the 1930's and 40's.³

A Structuralist approach to language comparison was championed by Joseph Greenberg in the mid 1960's (e.g. 1963), reigniting interest in linguistic typology, though one with a focus only on structural patterns out of context.

What I would like to argue in this paper is that we should revive interest in the cognitive categories underlying the linguistic structures used by speakers of different languages, in order to understand the construal of the world of the speakers. This not only has implications for how we do linguistic typology, but how we understand the nature of language. As Tobin (2006: 171) has argued, "it is the definition of language espoused by a theory that actually creates the object of study." I will argue for this by looking back at what the Romanticist tradition thought about language, and how that is consonant with the most advanced thinking in linguistics currently, and arguing that we need to go back to this understanding of language and how to analyse language to make linguistic typology (and linguistics more generally, as typology is the basis of all linguistics) more modern, more empirical, and more explanatory.

1. Wilhelm von Humboldt (1767-1835)

Wilhelm von Humboldt was a Prussian baron, and for a time a diplomat, but also a political philosopher, educationist, and extraordinary linguist. As part of his work as an educationist he founded Berlin University and standardized education in Prussia in all grades. As a political philosopher he wrote a defense of liberty that later influenced John S. Mill's book *On Liberty*. But he later left work in the government and focused entirely on linguistic work. In his publications he mentioned 75 different languages, but is best known for his work on Basque and Kavi (Old Javanese).

Humboldt's conception of language and cognition differed from the traditional view commonly held in the early 19th century, but is very much in line with what we have recently rediscovered since the "cognitive turn" and "empirical turn" in 21st century linguistics. Until Humboldt, people mostly followed Aristotle (1962) in thinking that concepts are the same for all people, but can be associated with different words in different languages. Humboldt instead recognized that the concepts are not the same:

“. . . languages are not so much the means to represent the truth already recognized but rather to discover the truth previously unknown. Their diversity is not one of sounds and signs but a diversity of world views (*Weltansicht*).” (Humboldt 1903-1936, IV: 27, translation from Trabant 2016: 135)

³ The "Sapir-Whorf Hypothesis" that is talked about in many textbooks, and usually refuted, was not created by Sapir or Whorf; it is a straw man misrepresentation of their views created by scholars supporting the Aristotelian view that all people think the same way, even if they speak different languages, particularly Eric Lenneberg, in order to discredit Sapir and Whorf's views (see for example Brown and Lenneberg 1954). Those who parrot the pronouncements about "determinism" or the "strong version of the theory" to show how incorrect it is are following Lenneberg, and have not actually read Sapir or Whorf.

“. . . the word . . . does not, like a substance, purvey something already produced, nor does it contain an already closed concept; it merely provokes the user to form such a concept under his own power, . . . (Humboldt 1836[1988]: 151)

“. . . the words of various languages are never true synonyms, even when they designate, on the whole, the same concepts.” (Humboldt 1836[1988]: 166-7)

Humboldt understood what happens when someone learns a second language which is structurally very different from their native language: the habits of thought of the native language are used to speak the other language, and so the result is something unlike the patterns of the native speakers of that language (cf. LaPolla 2009).

And contra the later Structuralists, Humboldt did not see communication as a matter of exchanging signs:⁴

“Men do not understand one another by actually exchanging signs for things, nor by mutually occasioning one another to produce exactly and completely the same concept; they do it by touching in one another the same link in the chain of their sensory ideas and internal conceptualizations, by striking the same note on their mental instrument, whereupon matching but not identical concepts are engendered in each . . . In naming the commonest of objects, such as a horse, they all mean the same animal, but each attaches to the word a different idea . . .” (Humboldt 1836[1988]: 151-2)

And also unlike the later Structuralists, but much like modern Interactional Linguistics (e.g. Hopper 2011, 2012), Humboldt understood the nature of language as emergent out of interaction: “the very possibility of speech is determined by address and reply” (Humboldt 1997: 132). He understood the dynamic nature of language, both as an activity rather than as an object, and historically as something that is constantly changing, and in a prescient criticism of the later Structuralist “building block” approach divorced from context, he argued that the totality must be looked at together, in connected discourse:

“Language, regarded in its real nature, is an enduring thing, and at every moment a transitory one. Even its maintenance by writing is always just an incomplete, mummy-like preservation, only needed again in attempting thereby to picture the living utterance. In itself it is no product (Ergon), but an activity (Energeia) . . . we can also regard . . . only the totality of this speaking as the language. For in the scattered chaos of words and rules that we are, indeed, accustomed to call a language, there is present only the particular brought forth by this speaking, and this never completely . . . It is precisely the highest and most refined aspect that cannot be discerned from these disparate elements, and can only be perceived or divined in connected discourse; which is all the more proof that language proper lies in the act of its real production . . . The break-up into words and rules is only a dead makeshift of scientific analysis.” (Humboldt 1836[1988]: 146)

⁴ Cf. LaPolla 2015 on how communication is based on abductive inference, not coding and decoding.

He understood the importance of context, and he argued for something very much in tune with the modern constructionist approach:

“ . . . even with regard to the validity of its particular elements . . . speech contains an infinity of what can no longer be observed there, once it is broken down into these elements. A word, for the most part, acquires its full validity only by the context in which it appears.” (Humboldt 1836[1988]: 154)

Humboldt’s (1827) discussion of Classical Chinese was very insightful not only for the time but even today (cf. Swiggers 1986), more so than that of the famous Sinologist on whose work he based his analysis, Jean-Pierre Abel-Rémusat (1788-1832), and to whom he was writing in that work. He argued for analyzing Chinese and other non-Indo-European languages on their own terms and not imposing Indo-European categories on them, as he saw grammatical categories as language-specific, and languages may or may not have similar categories. As Joseph (1999: 103) points out, “Humboldt maintains repeatedly that the use of Western grammatical categories, combined with the use of *translation* as the basis of the analysis of non-Western languages, conspire to keep us from seeing how they really operate.” These two problematic practices are still unfortunately all too common in linguistics even today. Because he was not assuming Western grammatical categories, Humboldt was able to recognize that Chinese did not manifest grammatical relations of the type found in Indo-European languages and did not operate in terms of fixed word classes; he argued that one has to evaluate the function of the word in the context in which it appears, facts that had to be rediscovered independently.⁵ Humboldt recognized that communication requires inference aside from the linguistic forms, and languages differ in terms of the extent to which the inferences are constrained using obligatory bound morphology (see LaPolla 2003, 2015 for a similar but independently arrived at view), and he saw Classical Chinese as a language that left much to inference (cf. Serruys 1981, Wang Li 1985, Wang Kezhong 1986, and Herforth 1987 for similar views on this point), but this does not negatively affect communication. This was part of what he talked about as the “excellence” of Chinese, as it allowed for a straightforward and concise style of expressing ideas (similar to mathematical equations), though it also provided particles that the author could use if needed to constrain the interpretation of the relations between words. He also recognized the role that conventionalized fixed expressions (*chéngyǔ* 成語) can play in such a language.

2. Georg von der Gabelentz (1840-1893)

Georg von der Gabelentz was a follower of Wilhelm von Humboldt and Hermann Steinthal. Like Humboldt, Gabelentz saw language as an expression of how the speakers’ conceive of the world: “It represents a world that is the totality of the conceptions in which and over which the thinking of a people moves; and it is the most immediate and concise expression of the manner

⁵ Compare Li Jinxi’s view [1924, 1953] that Chinese doesn’t have word classes, that a word only has a function within a particular sentence, and the arguments in LaPolla 2013 arguing for a constructionist solution to the question of form classes in Mandarin Chinese. See also LaPolla 1993 on the question of grammatical relations in Mandarin Chinese.

in which this world is understood, in terms of the forms, order and relationships in which the totality of their objects are thought about” (von der Gabelentz 1891[1901]: 76). And he understood language as a dynamic phenomenon; he saw language history as being driven by the balance between the “drive to comfort” (*Bequemlichkeitstrieb*) and the “drive to distinctness” (*Deutlichkeitstrieb*). This leads to a cyclical process of gain and loss, from isolating to fusional and back again to isolating, which he compared to a spiral (von der Gabelentz 1891[1901]:251).⁶ He is also seen as a founding father of typology because of his comparative work, and because he coined the word “typology”. He is also sometimes seen as an early Structuralist because of his view of language as a system: ‘Every language . . . is a system all of whose parts interrelate and interact organically’ (von der Gabelentz 1891[1901]: 481). Yet his practice was not like that of the later Structuralists. For example, he wrote a reference grammar of Classical Chinese (1881), and argued, much like Humboldt, that you can only tell the form class of a word in Chinese by how it is used.⁷ Gabelentz also developed the concepts of “psychological subject” and “psychological predicate” distinct from grammatical subject and predicate. These concepts were later developed into the ideas of topic-comment and theme-rheme. He also presaged Halliday’s (1994) concept of paradigmatic (in contrast to syntagmatic) grammar and my own view (2015) of the role of abductive inference in communication in arguing for his concept of grammatical synonymy, the idea that you cannot understand fully what someone has said or written unless you know what other phrases the person might have chosen instead for that purpose and why the person chose the one they did (von der Gabelentz 1881: 353-354).

3. Franz Boas (1858-1942)

Franz Boas was a German physicist and geographer who migrated to North America due to prejudice against Jews in Germany. He first worked in Canada mapping remote areas, but became fascinated with the culture of the native people there (Inuits; 1883-84). He then switched to doing ethnology and anthropology. In 1887 he moved to the US and (starting 1897) taught at Columbia University and the American Museum of Natural History. He is considered the father of modern professional anthropology and ethnology. He structured anthropology as four fields: cultural (ethnology/sociocultural anthropology), physical (biological), linguistic, and archeological studies.

Boas advocated linguistic and cultural (psychological) analysis based on texts collected from *in-situ* fieldwork, as he argued that the culture and the way of thinking is revealed through natural texts (cf. Humboldt’s requirement for “connected discourse”). Boas emphasized the importance of “the native point of view”, as each language is unique in its world view, and he argued that all languages are equally valuable due to their different world views. Because he understood that each language is unique, he argued for analyzing the languages of the Americas on their own terms, not on Indo-European terms, working inductively from the texts collected

⁶ Both Humboldt (1827) and Gabelentz (1891[1901]) understood what we now talk about as grammaticalization.

⁷ See Bisang 2013 for an interesting discussion of the theoretical structure and insights of Gabelentz’s *Chinesische Grammatik*. There is no English translation of this work, but there is a Chinese translation by Yao Xiaoping (2015), a Chinese PhD thesis by Bo Hanxi (2013), and a Chinese MA thesis by Li Baoping (2010) on this work.

(1911). This is still our main methodology today in language documentation. What we call the “Boasian trilogy” (reference grammar, texts, and dictionary; first advocated by Humboldt) is also the standard for language documentation.

4. Why Boas and Sapir made such a point about languages being equal

Early efforts in typology in the 19th century inspired some typologists, such as Burnouf (1825), Heymann Steinthal (1850, 1860), Ernest Renan (1858), Arthur de Gobineau (1854–1855) and John Beames (1868), to not only divide languages into types based on how much morphology they had, but to add value judgments to this in terms of evolution, and so they ranked languages in terms of how far up the evolutionary ladder they were, and this was also supposed to reflect the culture and intellectual abilities of the speakers. Chinese and the other “monosyllabic” languages with little inflectional and fusional morphology ostensibly mediated a rudimentary, less evolved way of thinking and so were assigned to the lowest rungs of Steinthal’s ladder of language evolution.⁸ As mentioned above, Boas instead argued that all languages are equally valuable. Sapir (1921, Ch. 10) also argued against the view that drew connections between cultural development and linguistic structure:

" . . . all attempts to connect particular types of linguistic morphology with certain correlated stages of cultural development are vain. Rightly understood, such correlations are rubbish . . . Both simple and complex types of language of an indefinite number of varieties may be found spoken at any desired level of cultural advance. When it comes to linguistic form, Plato walks with the Macedonian swineherd, Confucius with the head-hunting savage of Assam."

Sapir (1921, Ch. 21) argued that languages could be different, yet equally valuable, as with the different media available for artworks; the different materials offer different possibilities:

“Language is the medium of literature as marble or bronze or clay are the materials of the sculptor. Since every language has its distinctive peculiarities, the innate formal limitations - and possibilities - of one literature are never quite the same as those of another. The literature fashioned out of the form and substance of a language has the color and texture of its matrix."

⁸ Humboldt is sometimes unfairly accused of being “racist” (e.g. Aarsleff 1988) or “racialist” (e.g. Harris & Taylor 1997), but see Joseph 1999 for arguments why this view is incorrect. Humboldt was actually an early advocate for fair treatment of the Jews and also made a large number of statements on the “excellence” of Chinese, e.g. in Humboldt 1827 and Humboldt 1836[1988: 230-31]. He argued that Chinese is not a primitive language but has “a form which lends itself to the highest development of the intellectual faculties” (Humboldt 1827: 302, translation from Joseph 1999: 138). Humboldt also was one of those arguing for seeing another Asian language, Sanskrit, as a sister to Latin and Greek within the Indo-European tree, a controversial topic in early Indo-European studies, and for seeing it as equally valuable in terms of its literature and culture.

5. Sapir and Whorf on Language and Cognition:

Like Humboldt, Gabelentz, and Boas, Sapir and Whorf saw each language as representing a particular world view, i.e. a way of construing reality. That is, the language reflects the cognitive categories of the speakers (what Sapir refers to below as “the language habits of the speakers”):

“Human beings do not live in the objective world alone, nor alone in the world of social activity as ordinarily understood, but are very much at the mercy of the particular language which has become the medium of expression for their society. It is quite an illusion to imagine that one adjusts to reality essentially without the use of language and that language is merely an incidental means of solving specific problems of communication or reflection. The fact of the matter is that the "real world" is to a large extent unconsciously built up on the language habits of the group . . . We see and hear and otherwise experience very largely as we do because the language habits of our community predispose certain choices of interpretation.” Edward Sapir (1929[1949]: 162).

The idea here is that our world view is manifested in our language, and when children learn the language they also acquire the categories and world view manifested in that language. Research in psycholinguistics has supported this view. For example, research by the late Melissa Bowerman and her colleagues has shown that language influences the development of the categories (e.g. Bowerman 2004, 2007; Bowerman & Choi 2003). For example, Bowerman and Choi (2003) showed how Korean children acquired the spatial concepts manifested in the use of the Korean language while and from learning the language. They liken it to the development of phonemic categories: initially the child can make many distinctions, but will later come to distinguish only those patterns found in their language. As Whorf explains, this isn't something mystical, but simply the different ways of construing and categorizing our experiences of the world:

“... [L]anguage produces an organization of experience. We are inclined to think of language simply as a technique of expression, and not to realize that language first of all is a classification and arrangement of the stream of sensory experience which results in a certain world-order, a certain segment of the world that is easily expressible by the type of symbolic means that language employs. In other words, language does in a cruder but also in a broader and more versatile way the same thing that science does.’ (Whorf 1956: 55)

6. The Neogrammarians (*Junggrammatiker*; Late 19th century)

I include a brief discussion of the Neogrammarians out of concern for completeness, but also because some of the Romanticists (e.g. the Grimm brothers) became prominent Neogrammarians, and some of the Neogrammarians (e.g. Saussure and Bloomfield) became prominent Structuralists. The Neogrammarians worked mainly on historical linguistics (comparison of genetically related languages), and they developed the “Neogrammarian

hypothesis”, that all sound change is regular (exceptionless and rule governed). This was an early attempt to make linguistics scientific by coming up with falsifiable hypotheses, They assumed the autonomy of the sound level from syntax and semantics and treated it as the most important (as it is most observable). They did not investigate language as a system but as observable in an individual’s speech. This gave rise to the homogeneous view of language that is so problematic in the later Structuralist approach, according to Weinreich, Labov, and Herzog (1968).

7. Structuralism (late 19th century to present)

Structuralism contrasted with the Neogrammarian approach in its focus on language as a system: *un système où tout se tient* (‘a system where all (parts) hold to each other’) and in terms of being seen as mostly looking at an assumed static state of language, rather than taking a diachronic or dynamic perspective. As mentioned above, although some Neogrammarians became the key Structuralists, both of these aspects were in opposition to the Neogrammarian “atomism” and historical focus.

A key European figure in this school was Ferdinand de Saussure (1857-1913), who argued (1916) for seeing linguistics as part of semiology/semiotics, the study of signs, and a science of language systems. He divided individual languages into *langue* (what is in the minds of the speakers) vs. *parole* (what they actually say). He argued for seeing *langue* as a homogeneous system of values that is autonomous, that is, the system and meaning are not influenced by “external” factors such as sociological, psychological, and pragmatic factors. We now know this is quite a problematic view, and in fact not all Structuralists agreed at the time. For Saussure, categories are not defined by substance, but only by relations, and must be discrete. He also separated the linguistic system from temporality (cf. Hopper and Auer’s work trying to get temporality back into our considerations— Hopper 1992, Auer 2009, Auer et al. 1999).

In the US, Leonard Bloomfield (1887-1949) argued (1933) that all relevant aspects of verbal utterances can be captured on the basis of strictly formal criteria, identifying their parts in terms of articulatory and perceptual distinctions and their subsequent classification according to possible occurrences. The latter came to be known as the “distributionalist” and “building block” concept, the latter being the sort of thing Humboldt argued against. For a time the American Structuralists even tried to ignore meaning in doing their analyses. When they do talk about meaning, there is also an undiscussed but pervasive assumption that as communication is seen as coding-decoding, the meaning of an utterance must all be in the words and structures used. This is partially due to a bias toward written language. This assumption and this bias severely hampered work in linguistics in the 20th century.

As Noonan (1999) pointed out, there are many problems with Structuralism:⁹

- a. categories are defined relationally, not substantively
- b. adherence to discrete categories

⁹ As mentioned above, not all Structuralists went along with the more problematic aspects of Saussurean and Bloomfieldian Structuralism, e.g. The London School (J. R. Firth, 1890-1960, and his students, particularly MAK

- c. inability to deal adequately with language variation
- d. inability to deal with language in a dynamic, temporal framework
- e. difficulties in dealing with the problem of language change
- f. distinction between knowledge of language and knowledge of how language is used

Weinreich, Labov, and Herzog (1968) also discuss how problematic the Structuralist conception of language as homogeneous is, and argue instead for a view of language as heterogeneous, and argue that “command of heterogeneous structures is not a matter of multidialectism or “mere” performance, but is part of unilingual linguistic competence” (Weinreich et al. 1968: 101).

8. My Position

The view that “Linguistics is the scientific study of language”, as opposed to the study of communication, or more precisely communicative behaviour, has been harmful to linguistics, as it has blinded us to the process of communication and all that is involved in that (e.g. ignoring the cognitive basis of communication—what is actually going on in meaning creation—and ignoring non-verbal communication other than sign languages),¹⁰ and has made linguistics ivory tower and irrelevant to all but theory building, making it difficult for linguistics PhD’s to find jobs outside academia.

Modern linguistics didn’t start with Saussure and the Structuralists, but that was when linguists began divorcing language structure from its use (other than the Prague School and the London School), and so lost the connection between communicative behaviour, of which language use is only one part, and the linguistic forms used in communication. Noam Chomsky is the most extreme in this regard, denying the relevance of communication to language structure. Chomsky is in fact more Structuralist than many of its earlier proponents, such as Charles Hockett (1968, 1977), not just in divorcing structure from use, but also in the non-empirical assumption that there is a rigid, closed system of language. Hockett (1967[1977]:256), towards the end of his career, said, “Beyond the design implied by the factors and mechanisms that we

Halliday, 1925-2018) and the Prague School (Roman Jakobson, 1896-1982, who coined the term “Structuralism”; Nikolai Trubetzkoy, 1890-1938, Vilém Mathesius, 1892–1945, Sergej Karcevskij, 1884-1955, Bohumil Trnka, 1895-1984, André Martinet, 1908-1999, Josef Vachek, 1909-1996). The London School recognized the context-dependent nature of meaning and the need to include the entire speech act in the analysis, and also, much like modern views, saw the need to recognize multiple interacting systems rather than a single system. The Prague School did not go along with a strict distinction between synchrony and diachrony, and emphasized the importance of meaning. They also were the beginning of functionalist linguistics, as they emphasized the function of language in communication (see for example Jakobson 1960 on the functions of language, which also went against Saussure’s autonomy principle, but was consonant with Humboldt’s idea that we need to take into account the entire communicative act). They also developed von der Gabelentz’s ideas about psychological subject and psychological predicate into “theme-rheme” structure, which led to our current theories of information structure.

¹⁰ I have argued that communication does not happen through coding and decoding, but through one person doing something with the intention of the other person inferring their intention in doing it, and the other person then inferring the communicator’s intention. This is seen as one application of an instinct for creating meaning using abductive inference. Knowledge of all types, including but not limited to experience with the use of language forms, is involved in constraining the interpretive process. See LaPolla 2015 for an outline of this view.

have discussed, a language has no design. The search for an exact determinate formal system by which a language can be precisely characterized is a wild goose chase, because a language neither is nor reflects any such system. A language is not, as Saussure thought, a system ‘où tout se tient’. Rather, the apt phrase is Sapir’s ‘all grammars leak’.”

A number of other people pointed out problems with the Structuralist, particularly Chomskyan, assumptions, but were ignored or denigrated:

Dwight Bolinger (e.g. 1961, 1976) was ahead of his time when he argued for something like schemata/constructions, what he called ‘idioms’, and combinations of schemata, what he called ‘syntactic blends’ to form new syntactic structures, and attempted to show ‘the permeation of the entire grammatical structure by threads of idiom’ (1961: 366). He argued against a purely generative view of grammar, suggesting that our use of grammar was partly creative and partly a matter of memory: “At present we have no way of telling the extent to which a sentence like *I went home* is a result of invention, and the extent to which it is a result of repetition, countless speakers before us having already said it and transmitted it to us in toto. Is grammar something where speakers ‘produce’ (i.e. originate) constructions, or where they ‘reach for’ them, from a preestablished inventory, when the occasion presents itself? . . . Probably grammar is both of these things . . .” (1961: 381). A corollary of this is that there are then no clear lines between lexicon, morphology and syntax, as they form continua of generalness and rigidity (the degree to which they are fixed) (see Bolinger 1976:3; cf. also Langacker 1987).

Roy Harris (1981) *The Language Myth* (Duckworth, London). Harris calls the idea that the function of language is to be a tool for transferring thoughts from one person to another “the telementational fallacy” (cf. the “conduit metaphor” of Reddy 1979), and he calls the idea that the mechanism of language is the invariant meaning of the forms “the determinacy fallacy” (“fixed code fallacy”). He says “the language myth assumes that a language is a finite set of rules generating an infinite set of pairs, of which one member is a sound-sequence or a sequence of written characters, and the other is meaning; and that it is knowledge of such rules which unites individuals into linguistic communities able to exchange thoughts with one another in accordance with a prearranged plan determined by those rules” (Harris 1981: 11). As Harris shows in his book, in fact there is no determinacy of usage and no uniformity of usage. Instead of these fallacies Harris argues for “integrationalist” linguistics, which recognizes the cotemporality (chronological integration) of all the aspects of the experience of communication: “. . . linguistic acts have no special status vis-à-vis non-linguistic acts in respect of their integration into the sequentiality of experience” (Harris 1981: 156).

In papers published in 2016 and 2017 I debated with Martin Haspelmath and Matthew Dryer about the need for going beyond just looking at the syntactic structure and looking at the reasons for the patterns found. A key issue was their insistence on a Structuralist conception of

language, including separating *langue* and *parole*, and seeing structure as autonomous.¹¹ In that debate I was talking about the principles that lead to the clause being structured the way it is, such as information structure and the marking of grammatical mood. But beyond that we should be looking at how the words and patterns reflect the construal of the world of the speakers, as first done by the early typologists, and as now advocated by practitioners of cognitive linguistics such as Lera Boroditsky (e.g. 2001, 2011). And we should conceive of language as just part of the collaborative activity we call communication, as advocated by Humboldt and current Interactional Linguistics. And in studying structure, we should consider the whole context, as advocated by Humboldt and as currently practiced by Radical Construction Grammar (e.g. Croft 2001, 2013).

The way to do this is to look at which semantic domains the speakers obligatorily constrain the inference of (e.g. English and German obligatorily mark tense, while Chinese does not); the extent to which they do so (e.g. in English we distinguish *She sings* from *She is singing*, but for the German speakers there is only *Sie singt*); and the particular morphosyntactic means for constraining the interpretation. For example, in Chinese one would usually say something like (1a), with no overt constraint on whose hair is being washed, while English (1b) requires a possessive modifier on the noun *hair*, while Rawang ((1c); Tibeto-Burman, Kachin State, Myanmar) constrains the interpretation of whose hair is to be washed using a verbal reflexive/middle voice suffix, achieving the same goal as the English example, but using a very different morphosyntactic device that represents a different conception of the situation being described (from LaPolla 2015: 42, see that paper for more discussion and examples).¹²

- 1) a. 他在洗头发。
 tā zài xǐ tóufa
 3SG LOC wash hair
 ‘S/he is washing (his/her) hair’
- b. *He is washing his hair.*¹³
- c. *àng nī zvl-shì-ē.*
 3SG hair wash-R/M-NPAST
 ‘S/he is washing her/his hair.’

A similar and also useful approach is Heine’s (1993, 1994, 1997a,b; Heine & Claudi 1986, Heine & Kuteva 2001) discussions of the cognitive metaphors (event schemas, source schemas) behind the grammaticalization of different patterns found for expressing comparative constructions, possessive constructions, and auxiliary constructions. These event schemas are

¹¹ While accepting the Structuralist division into *langue*/competence and *parole*/performance, they argue that what is important is *parole*, and *langue* can be ignored, unlike Chomsky, who argues that it is *langue* that is important, and *parole* can be ignored.

¹² Glosses used in the examples: CL classifier; LOC locative verb or adposition; NPAST non-past marker; POSS possessive marker; PN personal name; R/M reflexive/middle voice marker; SG singular.

¹³ Notice how English also constrains the inference of the third person referent more than Chinese and Rawang do, distinguishing gender and animacy.

ways of conceptualizing states of affairs and lead to certain types of grammaticalizations. For example, whether speakers view a comparative situation (Heine 1997a) as an Action (surpass) schema, Location schema, Source schema, Goal schema, Polarity schema, Sequence schema, a Similarity schema, or a Topic schema will determine what sort of structure they use to express that situation. Even among the Sinitic varieties we find differences in this regard, e.g. Old Chinese reflects both a Locative schema (2a; a type found in many of the related Tibeto-Burman languages), and a classic Topic schema (2b); the southern varieties (and neighboring non-Sinitic languages) tend to have structures reflecting the Action (surpass) schema ((2c), from Ansaldo 2010: 925); while the northern varieties tend to reflect a sort of Topic schema different from that of Old Chinese (2d; cf. Tsao 1989).

- 2) a. 王如知此，則無望民之多於鄰國也。
mín zhī duō yú línɡuó
 people POSS many LOC neighboring.country
 ‘If you (the king) understand this, then don’t expect the people (of your country) to be(come) more than in neighboring countries.’ (Mencius Liáng Huì Wáng 1.3, available on ctext.org)
- b. 然則吾子與管仲孰賢？
rán zé wú zǐ yǔ Guǎnzhòng shú xián
 this.be.the.case then 2sgPOLITE and PN which capable?
 ‘If that is the case, which (of you) is more capable, you or Guanzhong?’ (Mencius Gōngsūn Chǒu 1.1, available on ctext.org)
- c. 佢快過我。
keoi⁵ faai³-gwo³ ngo⁵
 3SG fast-SURPASS 1SG
 ‘S/he’s faster than me.’
- d. 他比我快！！！！ (<https://www.youtube.com/watch?v=Ss9K7fOCNAc>)
tā bǐ wǒ kuài
 3SG compare 1SG fast
 ‘He is faster than me.’

As an example of how differently possession can be conceived of and expressed, we can look at the differences between the usual possessive construction used in Mandarin Chinese, which reflects a Topic schema (3a); that of Classical Tibetan, which reflects a Goal schema (3b); and those of the Qiang language (Tibeto-Burman, Sichuan, China) which reflect two different schemas (Genitive schema (3c) or Action schema (3d)), depending on whether the possessed object is physically inalienable or not.

- 3) a. 我有一隻小毛驢 (<https://www.storm.mg/article/552452>)
wǒ yǒu yī zhī xiǎo máolú
 1SG exist one CL small donkey
 ‘I have a small donkey’ (cf. *yǒu yī zhī xiǎo máolú* ‘There is a small donkey’)

- b. *rgyal-po-la ralgri yod* (Beyer 1992: 269)
king-GENDER-LOC sword exist
'The king has a sword' (lit.: 'to/at the king a sword exists')
- c. *qa-dzoqu-ji-tua wa* (LaPolla with Huang 2003: 97)
1SG-leg-two-CL exist
'I have two legs.' (lit.: 'My two legs exist.')
- d. *khumtsi tuts yzə-zi zi-z.* (LaPolla with Huang 2003: 98)
PN younger.brother four-CL exist-CAUSATIVE
'Khumtsi has four younger brothers.' (transitive causative clause with the possessor as actor and the possessed as undergoer)

Lexically we can also compare how the speakers carve up the world. For example, in English we have one word *new*, which is used for both 'brand new' and 'new to the owner', while French uses two different words for these concepts: *neuf* 'brand new' and *nouveau* 'new to the owner (not necessarily newly made)'. Another example: the use of English *have* includes both possession and temporary location, e.g. *I have a pen* (= *I own a pen*) and *Do you have my pen?* (no ownership on the part of the person in whose hand the pen is, just temporary location), while use of Mandarin Chinese *yǒu* (有) 'have' includes ownership (4a) but not temporary location, the latter being expressed by a location construction (4b).

- 4) a. 我有一支笔 (http://www.sohu.com/a/218824469_100009835)
wǒ yǒu yī zhǐ bǐ
1SG exist one CL pen(cil)
'I have a pen(cil).'
- b. 我的笔在你那儿吗? (<https://zhidao.baidu.com/question/20061914.html>)
wǒ de bǐ zài nǐ nàr mā
1sg ASSOC pen(cil) LOC 2sg there Q
'Do you have my pen(cil)? (lit.: 'Is my pen(cil) at you?')

My main point is that the goal of linguistics should not be to understand linguistic forms in the abstract, as if they were something special, when in fact they are simply one type of behavior involved in communication, but to understand how the human mind creates meaning and the many different ways it can understand the world, and how that affects our behavior. In short, the idea is to modernize typology and make it more empirical and scientific by going back to its roots.

References:

- Aarsleff, Hans. 1988. Introduction. In first ed. of Heath's translation of Humboldt (1836[1988]), vii-lxv.
- Ansaldo, Umberto. 2010. Surpass comparatives in Sinitic and beyond: Typology and grammaticalization. *Linguistics* 48.4: 919-950. DOI 10.1515/LING.2010.029
- Aristotle. 1962. *The categories on interpretation & prior analytics*. London: Heinemann/Cambridge, Mass.: Harvard University Press [*Loeb's Classics*].

- Auer, Peter, Elizabeth Couper-Kuhlen, and Frank Muller. 1999. *Language in time: the rhythm and tempo of spoken interaction*. Oxford: Oxford University Press.
- Auer, Peter. 2009. On-line syntax: Thoughts on the temporality of spoken language. *Language Sciences* 31: 1–13.
- Beames, John. 1868. *Outlines of Indian philology*. London: Trübner and Company.
- Beyer, Stephan V. 1992. *The Classical Tibetan language (SUNY Series in Buddhist Studies)*. Albany, NY: State University of New York Press.
- Bisang, Walter. 2013. Die ‘Chinesische Grammatik’ von Georg von der Gabelentz aus typologischer Sicht. Preface to the reprint of: Gabelentz, G. von der. 1881. *Chinesische Grammatik. Mit Ausschluss des niederen Stiles und der heutigen Umgangssprache*. Leipzig: T. O. Weigel. Tübingen: Stauffenburg.
- Bloomfield, Leonard. 1933. *Language*. New York: H. Holt and Company.
- Bo Hanxi 柏寒夕 (Michael Bauer). 2013. 德国汉学家甲柏连孜 (Georg von der Gabelentz) 《汉文经纬》 (*Chinesische Grammatik*) 研究 (A study of Georg von der Gabelentz' *Chinesische Grammatik*). Shanghai Normal University PhD thesis.
- Boas, Franz. 1911. Introduction. In Franz Boas (ed.), *Handbook of American Indian Languages*, 1–83. Washington, DC: Bureau of American Ethnology.
- Bolinger, Dwight L. 1961. Syntactic blends and other matters. *Language* 37: 366-381.
- Bolinger, Dwight L. 1976. Meaning and memory. *Forum Linguisticum* 1.1: 1-14.
- Boroditsky, Lera. 2001. Does language shape thought? English and Mandarin speakers' conceptions of time. *Cognitive Psychology* 43.1: 1–22.
- Boroditsky, Lera. 2011. How language shapes thought: The languages we speak affect our perceptions of the world. *Scientific American* 304.2: 63-65. DOI 10.1038/scientificamerican0211-62
- Bowerman, Melissa. 2004. From universal to language-specific in early grammatical development [Reprint]. In K. Trott, S. Dobbins, & P. Griffiths (eds.), *The child language reader*, 131-146. London: Routledge.
- Bowerman, Melissa. 2007. Containment, support, and beyond: Constructing topological spatial categories in first language acquisition. In M. Aurnague, M. Hickmann, & L. Vieu (eds.), *The categorization of spatial entities in language and cognition*, 177-203. Amsterdam: Benjamins.
- Bowerman, Melissa, & Soonja Choi. 2003. Space under construction: Language-specific spatial categorization in first language acquisition. In D. Gentner, & S. Goldin-Meadow (eds.), *Language in mind: Advances in the study of language and thought*, 387-427. Cambridge: MIT Press.
- Brown, Roger W. and Eric H. Lenneberg. A study in language and cognition. *Journal of Abnormal and Social Psychology*, 49:454-462 (1954).
- Burnouf, Eugene. 1825a. Review of "Vergleichende Zergliederung der Sanskrita-Sprache und der mit ihm verwandten Sprachen. Erste Abhandlung: Von den Wurzeln und Pronomen erster und zweiter Person" by Franz Bopp. *Abhandlungen der Königlichen Akademie der Wissenschaften zu Berlin, Philosophisch-historische Klasse* 1825: 117-148. *Journal Asiatique* 6: 52-62, 113-124.

- Croft, William. 2001. *Radical Construction Grammar: Syntactic theory in typological perspective*. Oxford: Oxford University Press.
- Croft, William. 2013. Radical Construction Grammar. In G. Trousdale and T. Hoffmann (eds.), *The Oxford handbook of Construction Grammar*, 211-232. Oxford University Press.
- Gabelentz, Georg von der. 1881. *Chinesische Grammatik, Mit Ausschluss des niederen Stiles und der heutigen Umgangssprache*. Leipzig: T. O. Weigel.
- Gabelentz, Georg von der. 1891[1901]. *Die Sprachwissenschaft: ihre Aufgaben, Methoden und bisherigen Ergebnisse*. 2nd edn. Leipzig: Tauchnitz.
- Gobineau, Joseph Arthur de. 1854–5. *Essai sur l'inégalité des races humaines* (4 volumes). Paris: Firmin-Didot et Compagnie.
- Greenberg, Joseph H. 1963. Some universals of grammar with particular reference to the order of meaningful elements. *Universals of language*, ed. by J. H. Greenberg, 73-113. Cambridge, Mass. MIT Press.
- Halliday, M. A. K. 1994. *An introduction to Functional Grammar, 2nd edition*. London: Arnold.
- Harris, Roy. 1981. *The language myth*. London: Duckworth.
- Harris, Roy and Talbot J. Taylor. 1997. *Landmarks in linguistic thought I: The Western tradition from Socrates to Saussure, 2nd edition*. London and New York: Routledge.
- Heine, Bernd. 1993. *Auxiliaries: Cognitive forces and grammaticalization*. New York & Oxford: Oxford University Press.
- Heine, Bernd. 1994. Areal influence on grammaticalization. In Martin Putz (ed.), *Language contact language conflict*, 55-68. Amsterdam & Philadelphia: Benjamins.
- Heine, Bernd. 1997a. *Cognitive foundations of grammar*. NY & Oxford: Oxford University Press.
- Heine, Bernd. 1997b. *Possession: Cognitive sources, forces, and grammaticalization*. Cambridge: Cambridge University Press.
- Heine, Bernd and Ulrike Claudi. 1986. On the metaphorical base of grammar. *Studies in Language* 10.2: 297-335.
- Heine, Bernd and Tania Kuteva. 2001. Convergence and divergence in the development of African languages: Some general observations. In R. M. W. Dixon and A. Y. Aikhenvald (eds.), *Areal diffusion and genetic inheritance: Case studies in language change*, 225-254. Oxford: Oxford University Press.
- Herforth, Derek D. 1987. A case of radical ambiguity in Old Chinese: Some notes toward a discourse-based grammar. *Suzugamine Joshi Tanki Daigaku Bulletin of Humanities and Social Science Research* 34: 31–40.
- Hockett, Charles F. 1967[1977]. Where the tongue slips, there slip I. In: *To honor Roman Jakobson: Essays on the occasion of his seventieth birthday 11 October 1966*, 910-36. The Hague: Mouton. [Reprinted in Hockett 1977, 226-56.]
- Hockett, Charles F. 1968. *The state of the art*. The Hague: Mouton.
- Hockett, Charles F. 1977. *The view from language*. Athens: The University of Georgia Press.
- Hopper, Paul J. 1992. Times of the sign: on temporality in recent linguistics. *Time and society* 1(2): 223-238.

- Hopper, Paul. 2011. Emergent grammar and temporality in interactional linguistics. In P. Auer & S. Pfänder (eds.), *Constructions: Emerging and emergent*, 22-44. Berlin: Walter de Gruyter.
- Hopper, Paul. 2012. Emergent grammar. In James Gee & Michael Handford (eds.), *The Routledge handbook of discourse analysis*, 301-314. London & New York: Routledge.
- Humboldt, Wilhelm von. 1827. *Lettre à m. Abel-Rémusat, sur la nature des forms grammaticales en general, et sur le génie de la language chinoise en particulier*. Paris: Dondey-Dupré père et fils. Available at <https://archive.org/search.php?query=source%3A%22http%3A%2F%2Fbooks.google.com%2Fbooks%3Fid%3DmW9GAAAAMAAJ%26oe%3DUTF-8%22>
- Humboldt, Wilhelm Freiherr von. 1836[1988]. *On Language — The Diversity of Human Language-Structure and Its Influence on the Mental Development of Mankind*. Translated by Peter Heath. CUP, 1988.
- Humboldt, Wilhelm von. 1903-1936. *Gesammelte Schriften*. 17 Volumes. Ed. by Albert Leitzmann. Berlin: Behr,
- Humboldt, Wilhelm von. 1997. *Essays on Language*. Ed. by T. Harden and D. Farrelly. Frankfurt: Peter Lang.
- Jakobson, Roman. 1960. Closing statement: Linguistics and poetics. In Thomas Sebeok (ed.), *Style in language*, 350-449. Cambridge, Mass.: The MIT Press.
- Joseph, John E. 1999. A Matter of *Consequenz*: Humboldt, Race and the Genius of the Chinese Language. *Historiographia Linguistica* 26.89-148.
- Langacker, Ronald W. 1987. *Foundations of Cognitive Grammar, Vol. I: Theoretical prerequisites*. Stanford: Stanford University Press.
- LaPolla, Randy J. 1993. Arguments against ‘subject’ and ‘direct object’ as viable concepts in Chinese. *Bulletin of the Institute of History and Philology* 63.4:759-813.
- LaPolla, Randy J. 2009. Causes and effects of substratum, superstratum and adstratum influence, with reference to Tibeto-Burman languages. In Yasuhiko Nagano (ed.), *Issues in Tibeto-Burman historical linguistics (Senri Ethnological Studies 75)*, 227–237. Osaka: National Museum of Ethnology.
- LaPolla, Randy J. 2003. Why languages differ: Variation in the conventionalization of constraints on inference. In David Bradley, Randy J. LaPolla, Boyd Michailovsky & Graham Thurgood (eds.), *Language variation: Papers on variation and change in the Sinosphere and in the Indosphere in honour of James A. Matisoff*, 113-144. Canberra: Pacific Linguistics.
- LaPolla, Randy J. 2013. Arguments for a construction-based approach to the analysis of Chinese. In *Human language resources and linguistic typology, Papers from the Fourth International Conference on Sinology*, edited by Tseng Chiu-yu, 33-57. Taiwan: Academia Sinica.
- LaPolla, Randy J. 2015. On the logical necessity of a cultural connection for all aspects of linguistic structure. In Rik De Busser & Randy J. LaPolla (eds.), *Language structure and environment: Social, cultural, and natural factors*, 33-44. Amsterdam & Philadelphia: John Benjamins.
- LaPolla, Randy J. 2016. On categorization: Stick to the facts of the languages. *Linguistic Typology* 20.2: 365–375.

- LaPolla, Randy J. 2017. Causation as a factor and goal in typological comparisons. *Linguistic Typology* 21.3: 547–554.
- LaPolla, Randy J., with Chenglong Huang. 2003. *A grammar of Qiang, with annotated texts and glossary (Mouton Grammar Library 39)*. Berlin: Mouton de Gruyter.
- Li Baoping. 2010. 〈加贝伦茨《汉文经纬》(Chinesische Grammatik von Hans Georg Conon von der Gabelentz) 汉文引例校笺——以《书》、《诗》、《论语》为中心〉。Southwest Jiaotong University (Chengdu, China) MA thesis.
- Li Fang-Kuei 李方桂. 1951[2013]. Zang-Hanxi yuyan yanjiufa 藏汉系语言研究法 (The method of studying Sino-Tibetan languages). *Guoli Beijing Daxue Guoxue Jikan* 7.2(1951), republished in *Journal of Sino-Tibetan Linguistics* 7(2013): 1-10.
- Li Jinxi 黎锦熙. 1924. *Xin zhu guoyu wenfa* 《新著国语文法》 (*New grammar of the national language*). Beijing: Commercial Press.
- Li Jinxi 黎锦熙. 1953. Zhongguo yufa de “cifa” yantao 中国语法的“词法”研讨 (Discussion of the grammar of words in Mandarin Chinese grammar). *Zhongguo Yuwen* 1953.9:8-12.
- Noonan, Michael. 1999. Non-structuralist syntax. In Michael Darnell, Edith Moravcsik, and Michael Noonan (eds.), *Functionalism and formalism in linguistics Vol. 2*, 11–31. Amsterdam and Philadelphia: John Benjamins [*Studies in Language Companion Series 42*].
- Reddy, Michael J. 1979. The conduit metaphor—a case of frame conflict in our language about language. In A. Ortony (ed.), *Metaphor and thought*, 284-324. Cambridge: Cambridge University Press.
- Renan, Ernest. 1858. *De l'origine du langage* (deuxième édition, revue et considérablement augmentée). Paris: Michel Lévy, Frères, Librairies-Éditeurs.
- Sapir, Edward. 1921. *Language: An introduction to the study of speech*. New York: Harcourt, Brace & Co. Also available as www.gutenberg.net EBook #12629.
- Sapir, Edward. 1929[1949]. The status of linguistics as a science. *Language* 5: 207-14. Also in David Mandelbaum (ed.), *Selected writings of Edward Sapir in language, culture, and personality* (1949).
- Saussure, Ferdinand de. 1916. *Cours de linguistique générale*. Edited by C. Bally & A. Sechehaye, assisted by A. Riedlinger. Lausanne and Paris: Payot.
- Serruys, Paul L-M. 1981. Towards a grammar of the Shang bone inscriptions. *Proceedings of the International Conference on Chinese Studies, August 15-17, 1980*, 313–364. Taipei: Academia Sinica.
- Steinthal, Heymann. 1850. *Die Classification der Sprachen dargestellt als die Entwicklung der Sprachidee*. Berlin: Ferdinand Dümmler's Buchhandlung.
- Steinthal, Heymann. 1860. *Charakteristik der hauptsächlichsten Typen des Sprachbaues*. Berlin: Ferdinand Dümmler's Verlagsbuchhandlung.
- Swiggers, Pierre. 1986. Review of *Brief an M. Abel-Rémusat: Über die Natur grammatischer Formen im allgemeinen und über den Geist der chinesischen Sprache im besonderen* by Wilhelm von Humboldt. Nach der Ausgabe Paris 1827 ins Deutsche übertragen und mit einer Einführung versehen von Christoph Harbsmeier. (*Grammatica universalis*, 17).

- Stuttgart—Bad Cannstatt: Friedrich Frommann Verlag—Gunther Holzboog, 1979. *Language* 62.2: 456-57.
- Tobin, Yoshua. 2006. Structuralist phonology: Prague School. In Brown (ed.), *Encyclopedia of language and linguistics*, 2nd edition, vol. 12, 170-177. Oxford: Elsevier.
- Trabant, Jürgen. 2016. Theses on the future of language. In Birgit Mersman and Hans G. Kippenberg (eds.), *The Humanities between global integration and cultural diversity*, 135-140. Berlin: de Gruyter.
- Tsao, Feng-Fu. 1989. Comparison in Chinese: A topic-comment approach. *Tsing Hua Journal of Chinese Studies, New Series* 19.1: 152-189.
- Wang, Kezhong 王克仲. 1986. Gu Hanyu dong bing yuyi guanxi de zhiyue yinsu 古汉语动宾语义关系的制约因素 (Factors conditioning the relationship between verbs and objects in Old Chinese). *Zhongguo Yuwen* 中国语文 no.1: 51-57.
- Wang, Li 王力. 1985. *Zhongguo Gu Wenfa* 中国古语法 (Ancient Grammar in China). In *Wang Li Wen Ji* 王力文集 (Collection of Wang Li's Works), Vol. 3, 1-85. Jinan: Shandong Jiaoyu Chubanshe.
- Weinreich, Uriel, William Labov, and Marvin I. Herzog. 1968. Empirical foundations for a theory of language change. In W. P. Lehmann and Yakov Malkiel (eds.), *Directions for historical linguistics: A symposium*, 95-195. Austin & London: University of Texas Press.
- Whorf, Benjamin L. 1956. *Language, thought, and reality; selected writings*. Edited by John B. Carroll. Cambridge, MA: MIT Press.
- Yao Xiaoping 姚小平. 2015. *Hanwen Jingwei* 《汉文经纬》 (Chinese translation of Gabelentz 1881). Beijing: Waiyu Jiaoxue yu Yanjiu Chubanshe.