Non-Structuralist Linguistics[*]

Randy J. LaPolla (罗仁地)
randylapolla.info

Abstract:
This talk is a purely theoretical, even philosophical talk, the purpose of which is to get linguists to think about the choices they make in terms of theoretical axioms and assumptions, including the definition of language and what it is we are doing when we do linguistics, and contrasting the assumptions and definitions of Bloomfield-Chomsky Structuralism with non-Structuralist approaches, particularly usage-based approaches such as The Creation of Meaning, Integrationist Linguistics and Radical Construction Grammar. The goal is not to argue against Structuralist principles, but to argue that in doing linguistics, as in any science, we should be aware of what we are doing and why we are doing it, and make conscious choices in deciding what to do.

In his influential book, *The Structure of Scientific Revolutions* (1970), Thomas Kuhn argued that the history of science has been a series of different paradigms, that is, cognitive frameworks within which the world was seen as structured in a particular way, and within which "normal science" as he called it, was carried out. These paradigms could last a long time, during which people working within the paradigm would make progress in understanding things within that paradigm's possibilities, but they would also run into problems that were the result of the paradigm itself, but the paradigm would continue to be dominant until an alternative became available, one that could handle all of the problems that the earlier paradigm couldn't handle.

For example, in the West before the 16th century, the dominant paradigm for understanding the solar system was Claudius Ptolemy's (AD 90-168) view that the earth was at the center of the solar system (geocentric view), and all the planets were seen to revolve around the earth. In the 16th century Nicholas Copernicus revived an old suggestion that the sun is at the center of the solar system (heliocentric view), and this was improved on by Johannes Kepler, Galileo Galilei, and Isaac Newton in the 17th century. This was the basis for our understanding of the universe for hundreds of years, but then Albert Einstein once again changed the paradigm with his theory of relativity. Now there are people trying to develop the string theory of the universe.

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[*] The title of this paper evokes and is meant as a tribute to Mickey Noonan's 1999 paper, "Non-Structuralist syntax". Although Noonan is arguing for a constructionist and integrative approach, he uses the term "syntax", which doesn't exist separately in a truly constructionist approach. Many claiming to be doing constructionist studies actually see the constructionist approach as just another form of syntactic analysis, but this is missing the whole non-componential nature of the constructionist approach (see Croft 2021 for discussion). The Chinese version was presented as a talk at Nankai University, Tianjin, China, on 2022-05-25 as part of their "Experimental Linguistics" Online Forum, and was published (in Chinese) in the journal *Experimental Linguistics* 11.3:16, 2022:.

Linguistics has gone through several paradigms throughout history, such as the shift from the Neogrammarian paradigm to the Structuralist paradigm at the beginning of the 20th century. These involved different ways of understanding what language is and how to go about studying it.

Generally when one is working within a paradigm, one is often not even aware that one is working within just one possible paradigm, as all paradigms are seen as attempts at finding "the truth" about some phenomenon, and one thinks that the current paradigm is the one that is doing that. Of course each paradigm creates a different "truth", as each paradigm is based on different subjective assumptions, goals, and even ideas about what it is one is studying. The dominant paradigm in Linguistics over the last century has been Structuralism. The most influential version of Structuralism is the Bloomfield-Chomsky Structuralism of North America. It is known as Bloomfield-Chomsky Structuralism because the early Structuralists under Bloomfield and the later 20th century Structuralists under Chomsky accepted most of the same assumptions, and differed only in their philosophical/epistemological approaches, with Bloomfield being an extreme Empiricist and Chomsky being an extreme Rationalist, which is why Chomsky calls his form of linguistics "Cartesian linguistics", named after René Descartes, the famous Rationalist philosopher. Because of the difference in philosophical outlook, there are differences in methodology but there are still many shared assumptions, such as seeing language as a single autonomous system (*langue/competence*) that can be studied divorced from its actual context, as it is said to be unaffected by that context, and that scientific analysis of language involves a reductionist approach, breaking language down into its smallest parts and looking at their distribution (distributionist "building block" approach), which involves a componential analysis, that is, separating syntax, semantics, pragmatics, and phonetics apart from each other and looking at them in isolation, or at most looking at the "interfaces" between them. (See Hymes and Fought 1981: 10-20 and the references given therein on the continuity of early and later 20th century Structuralism.)

Most linguists today do not even realize they are working within this Structuralist paradigm, and that there are other possibilities, as it has been dominant for quite some time. This does not mean there haven't been alternatives. I have spoken about the Romanticist tradition of Humboldt, Boas, Sapir, and Whorf (LaPolla 2020), but there are also the European Structuralists, such as the Prague School, the London School (including MAK Halliday), and the Geneve School, which while accepting some of the fundamental concepts of Structuralism stayed more in touch with language as it is actually used.

Attempts began in the late 20th century to break with at least some aspects of the Structuralist paradigm, pointing out anomalies (e.g. Chafe 1969, Harris 1981, Noonan 1999), and some scholars proposed alternatives. The most well-known non-Structuralist alternative is Construction Grammar, developed initially in the early 1980's at the University of California, Berkeley, by George Lakoff, Charles Fillmore, and Paul Kay, and to some extent by Ronald Langacker at UC San Diego.

Lakoff (1977) pointed out the "gestalt" nature of language structures, that the whole has a meaning greater than the sum of the parts. Charles Fillmore and Paul Kay took Chomsky's conception of core vs. peripheral grammar as their starting point. Chomsky had argued there were two aspects to grammar, a rule-based core grammar and a "messy" peripheral grammar of idioms and other things not amenable to the usual rules of grammar, and Chomsky argued that scholars only need to study the rule-based aspects of grammar to understand the Universal Grammar that is supposed to be hard-wired in the brain. Charles Fillmore and Paul Kay argued that a linguistic theory cannot ignore the "messy" bits of language, and so wanted to create a theory that began the analysis with the "messy" bits. They argued that if the theory could explain those bits it could explain everything.

Unfortunately, the particular form of Construction Grammar they created was very much influenced by their Structuralist training and habits, and ended up being quite similar to Head-Driven Phrase Structure Grammar (HPSG), very much a Structuralist metalanguage for describing languages rather than a true break with Structuralism. To a greater or lesser extent others attempting to use the constructionist view tried to break with Structuralism, but due to the strength of habit and training, most did not go very far in that regard, and this is why William Croft (who had been a student at Stanford, not far from Berkeley, when Construction Grammar was first being developed) named his own constructionist approach "Radical Construction Grammar" (2001), meaning 'thoroughly constructionist grammar', as he felt the other approaches were not as constructionist as his own. To this day, most working in constructionist approaches, including Croft, have not fully implemented the constructionist ideal, and so much of what they do does not differ greatly from Structuralist syntax.

Today I'd like to talk about some aspects of the way we think about language, communication, and how to do linguistics, contrasting the Structuralist approach with a truly non-Structuralist approach. I will in particular be referring to my own approach, The Creation of Meaning (LaPolla 2015), but also most other usage-based approaches such as Croft's Radical Construction Grammar (Croft 2001, 2022, to appear), and also to some extent the integrationist approach of Roy Harris (1981, 1997).

In any field it is important to constantly clarify and question our most basic assumptions, as they have implications for everything we do:

> "Every linguistic theory is the direct result of a specific set of theoretical axioms that is related to how the linguist defines language, defines a linguistic problem, determines the source, kind, and amount of data to be selected and analyzed, chooses a methodology to select and analyze the data, and evaluates, compares, and contrasts the analyses in light of the above." (Tobin 2006: 170)

The first aspect is how we define language:

> ". . . it is the definition chosen for language by the linguist that determines which language phenomena will be selected as being important and relevant for the theory and the analysis.

Therefore, the model is predetermined by the theoretical units found in the analyst's definition of language . . . In short, for linguistics, it is the definition of language espoused by a theory that actually creates the object of study." (Tobin 2006: 171)

Chomsky defines language as all of the possible sentences that can be produced by the grammar that is said to be in the mind of the speaker, and so linguistics does not study the actual language produced, but the grammar that can produce it:

Chomsky (1981: 4): "The study of generative grammar in the modern sense [. . .] was marked by a significant shift in focus in the study of language. To put it briefly, the focus of attention was shifted from "language" to "grammar" [. . .]. We shift our focus from the language to the grammar represented in the mind/brain. The language now becomes an epiphenomenon; it is whatever is characterized by the rules of the grammar [. . .]. The grammar in a person's mind/brain is real; it is one of the real things in the world. The language (whatever that may be) is not [. . .]."

Chomsky (1965: 208–209): "partial generative grammars will provide the only empirical data critical for evaluating a theory of the form of language".

Responding to this view, Labov (1972:109), argued that "[. . .] if our theories are merely the artifacts of our own analyzing activity, they will have little to tell us about the natural evolution of language. Either our theories are about the language that ordinary people use on the street, arguing with friends, or at home blaming their children, or they are about very little indeed."

Croft (2001) and others who follow a usage-based approach define language not as the language forms that can be produced, but the language forms that have actually been produced already. In other words, the object of inquiry is the actual language that has been spoken.

Second, all theories are trying to be scientific, but what that means differs between theories:

Structuralist linguistics:

"In its mapping of grammatical form, this kind of linguistics deploys reductive, objectivizing and centripetal procedures in order to discern a single structural unity underlying the diversity of observable manifestations of language. The rules, generalizations, and categorizations deployed in describing grammar tend in a single direction: almost exclusively, intellectual effort is devoted to bringing complex facts under the scope of general rules, and to deriving the diverse manifestations of speech, sign and text from the operations of a unique and singular grammar – the Platonic form that underlies the variety of human language, guarantor of the "scientificity" of linguistics." (Riemer 2019: 226)

Non-Structuralist approaches, in particular integrational linguistics, reject the assumption of "a single vantage point from which language presents itself as forming a unified or homogeneous system", along with "the idea of a scientific search for the single best model or set of procedures for analyzing language and communication" (Pablé & Hutton 2015: 4, 15). They also reject

the idea of a reductionist approach which implies signs having fixed meanings as being scientific. For example Orman (2016: 29) states that "The key to the integrationist position on both language and the possibility of a science of language is its affirmation of the radical indeterminacy of the linguistic sign. For integrationists, signs of any sort can only be rendered determinate in form or meaning by the contextualised sign-making activities of individuals and even then only provisionally since they are always subject to possible recontextualisation." The way to do science is to investigate the diversity of forms and functions, including all of the factors involved in the communicative interaction as they occur in natural interactions.

Third, assumptions about language and communication:
The Structuralist assumption is that there is a fixed synchronic system (*langue/competence*) shared by all speakers of a language, a system where all the parts hold together, which is separate from *parole/performance*, what is actually spoken. This *langue* system is seen as autonomous, and is atemporal and not affected by its usage and "external" factors such as communicative, sociological, psychological, and pragmatic factors. Noam Chomsky is the most extreme in this regard, denying the relevance of communication to language structure. Language is treated as a fixed "thing", an inventory of labels for objects in the world and mental objects (this view is known as "nomenclaturism"). Language is not seen as situated action. For this reason this view cannot deal adequately with language variation and change. Categories are not defined by substance, but only by relations, and must be discrete. Some structuralists (e.g. Chomsky) take langue/competence as the object of study, and some (e.g. typologists such as Martin Haspelmath and Matthew Dryer) take parole/performance as the object of study, but both accept the distinction between langue and parole.

Usage-based approaches see language as behavior, situated action, and so a fluid phenomenon, one that emerges from the communicative interaction of people, and so changes as it adapts to and is influenced by its use. What is spoken is the language, there is no distinction between langue and parole. It does not exist anywhere as a "thing", as it is behavior, not an object; this behavior emerges from the interaction of people communicating according to their needs, and so variation and change is seen as the norm, determined by communicative, sociological, psychological, and pragmatic factors. Categories can be fuzzy and overlap.

In Structuralism, to the extent that meaning is considered,[1] it is assumed that all of the meaning to be conveyed is in the linguistic form, so language is a tool for transferring thoughts from one person to another, and that the mechanism of language is the invariant meaning of forms. These assumptions are called "The Language Myth" by Roy Harris (1981):

> ". . . 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

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[1] In the 20th century there were two periods when first Bloomfieldian Structuralists and later Chomskyan Structuralists argued that syntactic analysis could be done without considering meaning. To this view Roman Jakobson responded, "Language without meaning is meaningless" (quoted in the NY Times, October 11, 1971, p. 39).

into linguistic communities able to exchange thoughts with one another in accordance with a prearranged plan determined by those rules." (Harris 1981: 11)

The usage-based approach does not accept the language myth, as in reality there is no determinacy of usage and no uniformity of usage. As the Structuralists study language as an object divorced from context and purpose, temporality has been removed from the analysis. For the non-Structuralists, the temporality of language use is quite important (Harris 1981, Hopper 1992, Auer 2007, Auer et al. 1999). 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" (1981: 156). Integrationists see the communicative life of the individual as integrating the present with the past and the future, i.e. making sense of things relative to one's experience, and doing this depends on the ability to contextualize ongoing events.

My own view (The Creation of Meaning, e.g. LaPolla 2015) is that the mechanism of communication is abductive inference of the speaker's intention in using a particular communicative act, looking for its relevance, "making sense" of it, and the creation of meaning in that context involves the same cognitive mechanisms as non-communicative situations where we create meaning, not coding and decoding. Similar to the Integrationist view, it argues that we make sense of things by relating them to and integrating them into our current knowledge base, and so the more we know the more we can understand. This is not just in terms of communication, but knowledge generally, as this is the main way we create meaning generally (Peirce 1878[1992]), so the cognition involved in understanding linguistic behavior is not some special kind of cognition, and there is no hard-wired informationally encapsulated brain module such as postulated for Chomsky's Universal Grammar.

Fourth, the nature of linguistic knowledge:
Structuralism posits as a theoretical construct a distinction between knowledge of language and knowledge of how language is used (Noonan 1999). Language is seen as something special, different from other knowledge.

In the usage-based approach, knowledge of language and how to use it is no different from other types of knowledge, it is just memories of how forms have been used in the past, and so like all knowledge, what the individual knows is unique to the individual, as it is based on that person's experience of the language.

Fifth, the methodology:
Structuralist methodology is reductionist, componential, and distributionist, as Bloomfield argued 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 distinction and their subsequent classification according to possible occurrences. This is often referred to as the "building block" method. It is componential in separating syntax, semantics, pragmatics,

and phonetics apart from each other and looking at them in isolation, or at most looking at the "interfaces" between them.

The usage-based methodology is not reductionist, as it takes the actual units of speech (intonation units, constructions) as the basic units and looks at the speech act in its totality (an integrationist and Gestalt approach), including not only the context and intonation, but gesture, gaze, and other aspects of the interaction.

While many linguists recognize problems with the Structuralist approach, they have difficulty making a break with the conceptions, methodology, and terminology of that approach. This is due to habit, and lack of awareness of the paradigm they are working within and its limitations, but can be overcome with conscious effort and exposure to natural language data (The language is your best teacher!). Let me just mention a couple of aspects where this Structuralist influence is felt:

First, because of a written bias in the history of linguistics (Linell 2005), and later the influence of Rationalism in the late 20th century, the use of natural language data is not common, and often either a context-less elicitation method and "grammaticality" judgements are used, or sentences are made up by the linguist. No other science allows the scientist to make up his or her own data, and so this is something linguists should give up. Asking for "grammaticality" judgements, particularly negative ones, is problematic, because you are not testing grammaticality, but testing the person's ability to imagine a context in which the sentence makes sense. This might tell us something about the frequency of a form, but not its grammaticality. As Chao Yuen Ren (赵元任) commented on Wang Li's (王力) MA thesis: "言有易，言无难" ('It is easy to say what does exist, (but) it is difficult to say what does not exist').

In fact the whole concept of grammaticality is a prescriptivist notion, not a descriptivist notion, established by language teachers based on some abstract ideal and influenced by the written bias. What we think of as grammaticality is just our sensibilities, which reflect our own habits, and whether we can make sense of something by creating a context in which it makes sense. There are no fixed rules. The written bias also leads to odd expressions such as talking about the "left edge" or "right edge" of a spoken linguistic form. Natural oral language has no left or right edges, only earlier or later in the speech stream.

In writing papers using a usage-based approach, there will be no "ungrammatical" examples. All generalizations are made on the basis of actual language use. One works inductively.

Another remnant of Chomskyan influence is the habit of thinking in terms of transformations, using terms such as "relativization", "topicalization", "passivation", etc., which imply a transformation from a more basic structure. In usage-based approaches each construction is seen as emerging to satisfy a communicative function and the form can become conventionalized (grammaticalized) as an exemplar for that function. The forms can be seen to

contrast with each other, but do not derive from each other. That is, there are no transformations in the Chomskyan sense.

In many linguistics papers it seems there is an assumption of some universal set of cross-linguistic categories, and that the goal of writing a linguistics paper is to assign the labels of the categories to the language being described. Some linguists even problematically assert that all languages have a particular category, such as "subject" or "adjectives", or assert that in all languages the topic must come first in the clause, making very broad generalizations on the basis of just a few of the 7000 languages on Earth. There is an unspoken assumption (based on English and other IE languages) that a certain amount of grammar is necessary for communication. This is not the case, but leads to forcing certain analyses on language.

Also, formalist theories consider all languages to be basically the same, so they even create a metalanguage with the categories already fixed, and so the template just needs to be imposed on the language under analysis. In fact for many years in the 1970's-1990's only these metalanguages were considered theories; doing linguistic work without forcing such a metalanguage onto the language being studied was talked about as "atheoretical". Yet any description of some phenomenon is a theory of that phenomenon.

Forcing a metalanguage based on English or some other language onto an undescribed language does not actually tell us much about the language, and of course assuming that all languages are basically the same you are going to miss a lot of the diversity, so if one's goal is to learn something about the language, rather than build an abstract model, one needs to understand the diversity of possibilities, that is, work on the basis that there are no cross-linguistic categories, and no a-priori categories; one needs to do an inductive analysis of natural language data to see what patterns are repeated or conventionalized in the language and make generalizations about that data (and only that data) and the patterns and their functions.

Radical Construction Grammar does not even recognize cross-construction categories; all categories are defined relative to the construction, and so there are no abstract categories that hold for the entire language, such as grammatical relations (Dryer 1997; Van Valin & LaPolla 1997, Ch 6; LaPolla in press), word classes (Croft 2022, to appear; LaPolla 2013) and transitivity (LaPolla, Kratochvíl, & Coupe 2011). Croft states (to appear, p. 1):

> "Radical Construction Grammar analyses conform to the following three basic principles:
> (1) Word classes and other syntactic structures are language-specific and construction-specific. What is universal . . . is patterns of variation in the verbalization of experience, represented for example in conceptual space.
> (2) The internal structure of the morphosyntactic form of constructions consists solely of the part-whole relation between construction roles ("slots") and the whole construction. The complexity of constructions rests in the symbolic relations between the roles and their meanings/functions, and the rich semantic/functional structure expressed by the construction and its parts.

(3) The morphosyntactic forms of constructions are language-specific, that is, there is potentially gradient variation of constructional form across and within languages."

From this point of view, the frequent habit of some linguists to talk about whole languages as being "ergative" or some other category, is problematic, as it obscures the actual diversity of patterns within the language itself. For many years it also blinded typology to the true diversity of possibilities in language, as all languages were forced into a small number of assumed types, for example forcing Tagalog and other Philippine languages into an either nominative-accusative or ergative-absolutive straightjacket, when in fact the clause structure principles are of a very different types from those assumed by these labels (see LaPolla 2014, 2019, in press).

The assumption of universal categories is also behind the debates about whether a certain category exists or not and whether a certain language manifests a particular category, such as the debate between Scott DeLancey and Nathan Hill about whether there is such a cross-linguistic category as "Mirative", and whether that category exists in Tibetan and other languages (DeLancey 1997, 2001, 2012; Hill 2012, 2013, 2015). I find this sort of debate pointless; if we are trying to understand languages, we need to see what the patterns are in the language and what functions they perform. We may define a category in a language and even give it a name used for a similar category in another language (e.g. a comparative concept), but we should recognize that the facts of each language are distinct and not assume that if categories in two different languages have the same label, then all facts about that category are the same (see LaPolla 2016 for discussion). This goes even for phonetics. We can use IPA symbols in describing a language, but these are abstractions, and we need to specify the particular forms in the individual language, e.g. detailing the voice onset time, length, etc.

As mentioned above, the Structuralist view attempts to assign all forms of the language to a single abstract rule system. This results in the use of category labels for entire languages, as the whole language is seen to be uniform in that regard, but this is an abstraction, and hides the actual facts of the language. This sort of abstraction is easy to do, particularly when one does not use natural data. But the reality is quite different. For example, there are lists of verbs and their argument structures, as these are seen to be fixed, but natural language is generally not like that. In Chinese for example, argument structure is quite fluid, not only in terms of being able to use just about any word in any function in a construction, but also in terms of the types of referent that can be treated as a main participant in a clause or as a peripheral argument. MAK Halliday's Systemic Functional Grammar is the only major framework that acknowledges the flexibility and construction-based nature of argument structure, and so does not talk of verbs, but of processes, as the same verb can be used to represent very different processes in different constructions.

I mention these things because I see it as problematic that scholars often cite linguistic work from the late 20th century without any knowledge of the historical and theoretical background of that work, and have no understanding of Structuralism's influence generally. I am not telling people not to follow Structuralist principles, even though I personally don't believe in them, I am saying that in doing linguistics, as in any science, we should be aware of what we are doing

and why we are doing it, and make conscious choices in deciding what to do. As Su Dongpo (苏东坡) advised, "博观而约取"(《稼说》) 'Read/observe widely but chose wisely'.

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