



## A Third Revolution in Linguistics: The Interplay between the Verbal and Non-verbal

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### Abstract

This article regards Saussure's social, static and structural perspective and Chomsky's individual, generative and formal perspective as two revolutions in linguistics in the 20<sup>th</sup> century. A third revolution is already on the way. This is characterised by considering the individual's mental mechanisms in relation to the interplay between verbal and non-verbal cognitive activities.

**Keywords:** Chomsky, Saussure, Linguistics, Revolution, Interplay

When we look back at the history of research in linguistics, we cannot help but feel the shifts of research interest, with one interest emerging out of the exhaustion of another. One thing worthy of being noted is that the shifts of interest are shifts of perspectives that grow out of their academic environment. Isaac Newton would not have discovered the law of gravitation had Copernicus not first found that the earth moves around the sun. Without the exhaustion of the comparative linguistics and the development of semiotics, Ferdinand de Saussure could not have turned to the structural system of language. Had the behaviourists not adopted those absurd "scientific" ways to research language and linguistic behaviours and excluded mind from their research, Noam Chomsky's transformational generative grammar would not have attracted so many enthusiastic linguists and psychologists.

These are the two main shifts of perspective in linguistics in the 20<sup>th</sup> century. Saussure (1916/1983) elucidated his perspective in his *Course in General Linguistics* at the beginning of the 20<sup>th</sup> century. Through his work, interest in linguistics was directed away from searching the changes and origins of languages toward the study of the structural system of language as a social phenomenon. The second movement of perspective came mainly with Chomsky (1957; 1965). His contribution was to direct public attention from viewing language as a static social phenomenon to seeing it as a generative individual phenomenon. Saussure extracted language from individual speeches, viz. paroles, and viewed it as a static social phenomenon. Chomsky placed this static and social language system back into an ideal native speaker's head and viewed it not only as a system but also ostensibly a dynamic individual linguistic phenomenon. We consider these two perspectives as two revolutions in linguistics in this century: each influencing the whole world for half a century.

In this article, we shall discuss a third revolution in linguistics that has already begun. One of the outstanding features of this revolution is its focus on the linguistic behaviour of an individual, ranging from an individual's linguistic production and perception, language acquisition, second language acquisition, to various aspects regarding the process of actual linguistic communication. Further study of the individual linguistic processes leads the current trends toward the investigation of the mental mechanisms of individual human behaviours with language. In general, the current concerns in linguistics seem to be with two major processes: the process of acquiring the linguistic capability and the process of linguistic perception and production.

In reality, however, the research of these two processes involves two aspects of the individual's total linguistic behaviour. Acquisition research is a historical study of the individual's linguistic abilities and the research of linguistic perception and production processes is a study of the current working mechanisms of the individual's linguistic abilities acquired. The individual's language, rather than the language system or grammar, will become the main concern of the third revolution in linguistics.

Chomsky regards individual linguistic competence as a pure linguistic competence that develops from an innate language acquisition device or universal grammar. The new perspective will view the individual linguistic competence as a manifestation of his general capacities. Language as a system, structural or formal, has already been exhausted. Research in linguistics seems to have considered individual linguistic behaviour to be isolated and a controller of other

behaviours of an individual. However, the new perspective tends to interpret individual's *linguistic* activity and *linguistic* competence from the point of view of the individual's *human* activity and *human* competence. According to this position, an individual's linguistic activity and competence are viewed as a part of and a manifestation of the individual's general behaviour and general capacity. Because of these holistic concerns, the mystery of individual linguistic behaviour is hopefully to be unveiled in this third revolution. The output of the research will contribute to the development of computer sciences and to the understanding of the nature of language and the long-standing controversial issue of the relationship between language and thought.

Chomsky studied the ideal grammatical competence in an ideal native speaker. Like Saussure's research, his study is actually a focus on the social aspect of language. The conception of an ideal speaker-hearer situation itself is another way of describing the social system of language. Therefore, Chomsky's contribution to linguistics is not the result of his grammatical study, which has got nowhere, but his different perspective of seeing the same thing that Saussure had observed. In actual fact, what people have been interested in is not Chomsky's transformational perspective but his generative perspective. It is this dominant interest in linguistics that has led experts from different fields to go beyond Chomsky's deep structure of language and investigate the deeper structure that is non-linguistic.

The third revolution will go beyond this deep end of the spectrum of Chomsky's research and explore the idea end of the individual's linguistic processes. It will try to answer such questions as:

1. How do we mentally process our ideas into language when producing written or spoken language?
2. How do we mentally process the language into ideas when we conduct linguistic perception?
3. How does our cognitive development contribute to our native language acquisition?
4. How do we understand the linguistic producer's intention during communication?

However, Chomsky was not concerned here with anything individual. Furthermore, he blocked the pathway of research into the individual's linguistic behaviour by hypothesising the innate linguistic competence and the universal grammar. This third revolution will break through the block and assume that language is learned, and the general cognitive learning capacity is innate. The individual language learning capability becomes only the manifestation of his general capabilities. The main assumption is that linguistic competence is rooted in a human's general learning capacity. If we consider the individual's linguistic competence as innate, then we have to convince ourselves that many other competencies are innate. The language of an individual plays a very important, even perhaps, crucial role in one's capacity to increase knowledge. However, people can conduct oral or written communication not because they have language, but because they are human beings that can acquire any kind of knowledge and skills including those regarding the use of language and because they are born with the corresponding capacities.

The individual language learning process involves genetic, biological, cognitive and behavioural factors. In this third revolution, the study of language will exceed the boundary of sentence and advance to the realm of ideas and the interface of ideas and linguistic expressions in the linguistic communication of an individual. Theories from philosophy, cognitive psychology, behavioural science, psycholinguistics, language acquisition research and second language acquisition studies will all be integrated into a multidisciplinary theory to explain the individual linguistic phenomena.

The third revolution is a natural and logical development of linguistics research. Both Saussure and Chomsky viewed individual linguistic behaviour as complicated, and shunned the complicated to attack the simple. Because the natural phenomena involving language are complex, the natural response is to study it piecemeal at the first stage of research and then to piece together the separate studies of different branches at a later phase. Saussure (Bally & Sechehaye, 1983: Preface) had promised to cope with parole (linguistics of speech) after he finished his study of langue (linguistics of language structure), but he could not do it for a reason that is all too well known. Chomsky's original interest was also in linguistic competence, i.e. his transformational generative grammar. He, too, excluded the individual's linguistic performance, but he had no intention of dealing with it in the future. The actual discussions on the innateness of the *universal grammar*, his *hypothetical language-acquisition device* and the super deep semantic aspect of linguistic generation are all beyond Chomsky's original intention and scope of research. However, what people are really interested in is none other than these very issues which lie outside the main concern of Chomsky.

Another phenomenon worthy of note is the rise and fall of pragmatics, speech act theories and semantics. All these disciplines seem to adopt a social and so-called objective perspective and fail to attract people's attention. The individual is a subjective human being. The meaning of a word in the individual's mind is not composed of features like the typical description of words in semantics. Human beings are too intelligent to ignore the implied meanings during communication, and awareness of implied meanings does not need to follow any rules as can be easily analysed in speech act theories.

The new upsurge of cognitive science and neuroscience, and the migration of psychologists and neuroscientists into linguistics are things we linguists should not fail to notice. There is a feeling that we are expecting advances in linguistics, psychology, neuroscience and other fields to provide us with background knowledge, against which we will

continue our work. Just as Obler & Gjerlow (1999:12) state: “In some ways it might seem that we are all waiting for advances in the crucial disciplines: waiting for linguists to settle on the precise best grammar to describe languages, and waiting for neurophysiologists to describe ways brain cells and their chemical environments contribute to processing it. If we all do our parts in working out how components of those unknown ‘black boxes’ operate, in another decade or three or five, we hope, the contributing disciplines should be able to converge to answer the basic question of neurolinguistics: how the brain is organised for language.”

In linguistics, this expectation is even stronger. We know that we have reached the meaning end of the linguistics boundary and touched the “black box”. This is a crucial point when we have to contribute our part to the understanding of this “black box”.

Nobody is in a position to assign linguists their task of linguistics despite the fact that Saussure (1916/1983) assigned linguists the task of langue and Chomsky (1957) said that linguists must be concerned with the problem of determining the fundamental underlying properties of successful grammar. Is there any special privilege that we can enjoy if we keep our status as pure linguists? Our attitude is that we should respect reality and seek the truth. It is high time that we shook off the straightjacket of pure linguistics. Only when we seek truth in linguistics research can we conduct interdisciplinary or multidisciplinary research. Formal linguistics is but one aspect in the study of language just like the study of language origins. The task of linguists is to cope with one aspect of the language phenomenon after another. To Edward Sapir, formal linguistic descriptions and analysis were only the beginning of the linguist’s task. He understood linguistics as a social science, and every language as one aspect of a whole culture. In his writing and teaching he stressed the importance of dealing with the phenomena of language in the context of culture, of studying speech in its social setting (Mandelbaum, 1949b:vi).

If we confine our research to pure linguistic phenomena or to one specific aspect of the entire language phenomena, we shall do what Sapir warned us not to do half a century ago in an article entitled “Linguistics as a Science”(Mandelbaum, 1949:75). “All in all, it is clear that the interest in language has in recent years been transcending the strictly linguistic circles. This is inevitable, for an understanding of language mechanisms is necessary for the study of both historical problems and problems of human behavior. One can only hope that linguists will become increasingly aware of the significance of their subject in the general field of science and will not stand aloof behind a tradition that threatens to become scholastic when not vitalized by interests which lie beyond the formal interest in language itself.”

Some linguists, such as Obler and Gjerlow, have stepped out of the pure linguistics ring. After working with colleagues across a number of disciplines, the two linguists (1999: Preface) were “challenged to think about the special status we linguists accord to language” among cognitive abilities. No matter what conclusion they might reach, the awareness of what other scholars think about individual linguistic competence will benefit us a lot in our research.

To cope with the individual's behavior with language will force us to think about the special status we linguists accord to language. Linguistic behaviour is one kind of the individual’s behaviours. Without a better understanding of the individual behaviour, we will not see the wood for the trees in linguistics research. We cannot help doubting one of the maxims in linguistics that man differs from animals because he has language. Human beings can do many things that the smartest primate species cannot. Man differs from other animals not because man has language, but because man is intelligent enough to create and learn language. It is not that we are different from other animals because we have language, but that we have languages because we are human beings, different from other animals. It is the belief in the mystery of language that encumbers our research progress in linguistics and psychology. If we consider language as the main factor that differentiates man from other animals, then we are bound to belittle man and cannot see the essence of human beings.

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