

## **The linear nature of generative models developed within the framework of the Government and Binding theory as a methodological problem**

The linear nature of generative models developed within the framework of the Government and Binding theory is evident from the following observations:

1. Generative models developed within the framework of the Government and Binding theory are based on a system of general principles of language acquisition, which compose the Universal Grammar, widely understood as an inborn mental structure. The Universal Grammar is viewed as a language learner's general reference system. The language diversity we contemplate is accounted for by parameter variation possibility within the framework of subsystems of the principles.
2. The abovementioned subsystems represent specific theories that develop generative models, which describe a linear process of S-structures evolvement:
  - a. One is able to differentiate leading or node elements and bound elements of an S-structure within the framework of most of the theories:
    - heads and complements in the X-bar theory;
    - moved elements and their traces in the Trace theory;
    - verb forms and nominal groups in the Case theory;
    - predicates and actants in the  $\theta$ -theory;
    - antecedents and anaphors in the Binding theory.
  - b. Most of the theories are united by the notion of c-command that plays an important role in description of linear relations between single-level elements in an S-structure.

The linearity of generative models inevitably causes their reductive and hierarchical patterns, both might have serious methodological consequences, especially if one intends to apply these models in some domains of applied linguistics, such as forensic linguistics and computational linguistics:

1. Reductionism restricts generative models application for the purposes of author's psycholinguistic features investigation, which is an important part of forensic authorship identification.
2. The hierarchical patterns of S-structures can complicate application of generative models in investigations, aimed at automation of structural and semantic analysis of a literary text, which might implicate several possible interpretations.

In order to expand the sphere of application of generative models developed within the framework of the Government and Binding theory measures should be taken to impart nonlinear patterns to generative models:

1. One should accept the relative nature of the Universal Grammar principles. As a result, a complicated system of principles and parameters interaction would be simplified, and a language learner would, on the one hand, gain a deeper insight into the similarities of typologically different languages and, on the other hand, penetrate an intricate world of a linguistic personality.
2. One should develop nonhierarchical relations between constituents of an S-structure by imposing the constituents a higher level of abstraction and imparting multifunctional patterns to them. As a result, it would be possible to construct multidimensional projections of an S-structure in order to increase its information capability, so as it could implicate several possible interpretations.

#### The Bibliography

1. Belokovilsky M. S. (1998). *Linearity and Nonlinearity. An encyclopedia of philosophy.* Moscow: Panprint.
2. Chomsky N. (1993). *Lectures on Government and Binding. The Pisa lectures.* Berlin, New York: Mouton de Gruyter.
3. Chomsky N. (1995). *The Minimalist Program.* Massachusetts: The MIT Press.
4. Gritz M. A. (2012). *Semantic analysis of a sentence by means of the proposition three-dimensional model.* Saint-Petersburg: Author.
5. Kibrik A. A., Kobozeva I. M., Sekretina I. A. (2002). *The modern American linguistics: fundamental trends.* Moscow: Editorial URSS.
6. Mitrenina O. V. (2007, February 16) *Colorless green ideas live and win.* Retrieved from the Russian magazine website: <http://www.russ.ru>
7. The Generative (Transformational) grammar (2001). *An encyclopedia of postmodernism.* Minsk: Interpress service; The House of books.