

MINIMALISM – AN INTERVIEW WITH JAIRO NUNES

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ReVEL – Chomskyan Generative Syntax has already gone through Standard *Theory*, Extended Standard *Theory*, Government and Binding *Theory*. Why does Chomsky refer to Minimalism as the “Minimalist Program” and not as the “Minimalist Theory”?

Jairo Nunes – The Minimalist Program proposes to explore the hypothesis that the language faculty has domains governed by questions of economy and optimization. To call the body of research having this concern a *program* stresses the fact that, more than being the formalization of a solid collection of knowledge, it is a scientific enterprise that demands interdisciplinary effort, and it may still be too soon for the pertinent questions to be adequately answered, or even formulated, given the various degrees of development of the involved disciplines.

ReVEL – You have participated closely in interesting debates concerning the Minimalist Program, since the first developments of Minimalism in the 1990's. Tell us how the transition to the Minimalist Program happened in the Chomskyan syntactic model - and how it has still been going on.

Jairo Nunes – I believe that the title of one of the last of Chomsky's works, “Beyond Explanatory Adequacy”, synthesizes well the new horizons that we want the Minimalist Program to explore. The second half of the twentieth century was marked by great advances in the description of the structural properties of human languages (the so-called descriptive adequacy), as well as by the development of the Principles and Parameters model, which delineated a hypothesis about the structure of the language faculty that allowed the fascinating “Plato's problem” in the domain of language - that is, how children end up mastering incredibly complex linguistic structures in the absence of evidence for this complexity in their environment - to be explored with considerable success for the first time (the so-called explanatory adequacy). The step beyond that the Minimalist Program aims to take is to investigate why the language faculty has the properties it has, instead of other conceivable properties. It is evident that this kind of question can be seriously contemplated only once we possess the formidable body of knowledge on the structure and the acquisition of natural languages gathered in the second half of the past century. As I mentioned before, it may still be too early today for this kind of question to find a satisfactory answer. But the mere fact that there is already a research program devoted to this question reflects the promising and stimulating stage of current studies on the human language.

ReVEL – **Historically, we see that, since the beginning of the transformational generative theory in the 1950's, the role of transformations has been gradually reduced. Today, there are very interesting formal syntactic models (such as HPSG and LFG) that do not work with movement or transformations. Do you believe that it will also be possible to discard the notion of movement in future versions of Chomskyan generative theory?**

Jairo Nunes – Well, this question requires that the linguistic phenomena be distinguished from the technical apparatus developed to account for these phenomena. One of the central properties of human languages is that syntactic constituents may appear in a certain position and be interpreted as if they were

occupying another position in the sentence. Any model that aspires to adequacy will have to capture this fact. Some models do that by postulating a formal operation that is **metaphorically** called movement. I would like to emphasize that *movement* is a metaphorical term to describe a certain computational step that has nothing to do with the notion of movement employed in Physics or in common usage. After all, no syntactician measures the speed of the moving constituents. So, the question concerns the adequacy of the various technical mechanisms that a model puts to use in order to describe this property of “displacement” in the natural languages. A great part of the debate is, in general, unproductive, insofar as the alternatives are, in the end, nothing but notational variants and make the same empirical predictions. However, there are some cases in which derivational models and representational models make different predictions, and the result of the ongoing debate will certainly be of great relevance for the inquiry on the human mind, as a whole. So, to answer the question:

(i) if *movement* is taken as a metaphorical term to describe what we call the property of displacement in the natural languages, my answer is negative: unless there is some genetic change in the human species, movement will always take part in syntactic analyses, since there is no natural language which does not involve movement;

(ii) if *movement* is taken as the technical device employed by some syntactic models since the work of Chomsky 1973, my answer is positive. One of the questions that have been raised in the Minimalist Program concerns precisely the theoretical status of the operation Move within the system. In my own work, I have argued that if the complex operation Move is seen as a result of the interaction between the basic operations Copy and Merge, the system not only gains in formal elegance, but also enlarges its empirical coverage.

ReVEL – Some central ideas of previous models of generative theory (such as D-Structure, S-Structure, X-bar theory, etc.) are being abandoned or entirely revised. In order to account for the linguistic

facts, other notions are being introduced. Could you explain a little about the main innovations of the Minimalist Program in relation to the Principles and Parameters Theory and the Government and Binding Theory.

Jairo Nunes – One of the chief lines of investigation in the Minimalist Program is trying to determine the extent to which the properties associated with the language faculty are really intrinsic properties of the language faculty or if they are, instead, reflections of an optimized interaction between the language faculty and other modules of the mind. In order to face this question, which brings back the question of the autonomy of syntax, all the conceptual and technical apparatus developed previously has been submitted to a meticulous reanalysis.

For example, one of the main hypotheses of this program is that levels of syntactic representation, if they exist, must be conceptually motivated in terms of the interfaces of the language faculty with other modules of the mind. In this sense, levels like D-Structure and S-Structure become suspect insofar as their motivation is essentially internal to the model. Therefore, many works have been developed to investigate if these two levels could be eliminated, and the partial results are very stimulating. In the context of this reappraisal, the question emerges of how these syntactic objects are constructed, since there is no D-Structure. The solution was to take back the notion of generalized transformation and to develop a model in which complex syntactic constituents (phrases) are built by the operation Merge, which connects two syntactic objects and identifies the head of the resulting complex object. This vision of syntactic “assemblage”, by its turn, has made it possible to derive many properties that were axiomatic in X-bar Theory.

Another distinctive property of the investigations in the Program concerns the importance given to the interpretability of the features manipulated by the syntactic computation. In a completely optimized computation, one would expect every feature to receive interpretation at the interface. Still, one of the prominent properties of natural languages is that certain features are

redundantly specified with no contribution to interpretation, like the feminine and plural marks of the adjective in *meninas altas*. Since not every feature receives interpretation at the interface, this may suggest that the syntactic computation itself is responsible for eliminating uninterpretable features. This line of investigation has put agreement phenomena as a crucial point in the model. In other words, one of the why-questions that I mentioned before: Why should there be agreement in the natural languages?

Finally, as a last example, one of the most intriguing hypotheses of the program is that the syntactic computation is subject to questions of optimization that regard certain operations as more economic than others. In this domain of inquiry, there is an interest for sentences that, although judged unacceptable, are perfect in relation to their phonetic and semantic *outputs*, suggesting that the problem is not in the resulting linguistic object, but in the process of construction of this object instead.

ReVEL – Could you suggest some readings for those who want to start their studies in Minimalist Syntax? And could you talk a little about your two last books, *Understanding Minimalism* and *The Copy Theory of Movement*?

Jairo Nunes – For a general view of the program with emphasis on the conceptual questions, I would suggest the books *Rhyme and Reason: An Introduction to Minimalist Syntax* (MIT Press, 1998), by Juan Uriagereka, and *Linguistic Minimalism: Origins, Concepts, Methods, and Aims* (Oxford University Press, 2006), by Cedric Boeckx; for a discussion of the technical apparatus and the changes since the *GB* model, I would suggest *Understanding Minimalism* (Cambridge University Press, 2005), by Norbert Hornstein, Jairo Nunes e Kleantes K. Grohmann; finally, for a selection of relevant texts, I would suggest *Minimalist Syntax: The Essential Readings* (Blackwell, 2007), organized by Željko Bošković and Howard Lasnik.

As I mentioned above, *Understanding Minimalism* is an introductory book to the Minimalist Program, with emphasis on the changes occurred since the *GB* model. Each chapter starts with a discussion on how a certain empirical domain was treated in *GB*, considers if the technical apparatus employed is in agreement with the general lines of the Minimalist Program and presents at least one possibility of analysis within a cleaner framework with more solid conceptual bases. The book is tailored to be used in a graduate course during a semester and contains a substantial number of exercises for each chapter, with several degrees of complexity.

The Copy Theory of Movement (John Benjamins, 2007), organized with Norbert Corver, groups a number of works developed within the Minimalist Program which explore aspects of the copy theory of movement, with special attention to the syntax-phonology mapping. The book is divided into four parts. In the first one, Željko Bošković and I review a series of arguments in favor of the copy theory of movement, based mainly on our previous works on the phonetic realization of lower copies (traces) and the phonetic realization of more than one copy. The two following parts involve case studies concerning these possibilities: the second part involves studies on the phonetic realization of more than one copy in European Portuguese (Ana Maria Martins), Nupe (Jason Kandybowicz), Mandarin Chinese (Lisa Cheng) and Dutch (Norbert Corver); the third part, in turn, discusses cases of phonetic realization of lower copies in Serbo-Croatian (Sandra Stjepanović) and Coptic Egyptian (Chris Reintges). Finally, the fourth part discusses other aspects of the copy theory of movement in the syntax-phonology mapping: the question of cyclicity in copy deletion (Tomohiro Fujii), the question of the syntactic accessibility of copies (Marjo van Koppen) and a discussion about the status of pronouns in a perspective in which reflexives are copies (Norbert Hornstein).