The Syntactic Cartography program: An Interview with Guglielmo Cinque

Dr. Guglielmo Cinque[1]

1) What are the main objectives of studies within the Syntactic Cartography program?

Cartography is a long-term research project aiming at the discovery and mapping out of the functional structure of natural language phrases and sentences. The impetus of the study of functional structure, after Chomsky (1986) (*Barriers*. Cambridge, Mass.: MIT Press) first suggested extending the X-bar format to the nonlexical categories of Inflection and Complementizer, can be traced back to Abney's (1987) Ph.D. Dissertation (*The English noun phrase in its sentential aspect*, MIT) for the DP, and to Pollock's (1989) article "Verb Movement, Universal Grammar, and the Structure of IP" (*Linguistic Inquiry* 20: 365-424) for the sentence.

Since then, the amount of work produced in the study of functional structure, on a variety of languages, has grown to such an extent that a systematic mapping of the various functional heads found in the sentence and other phrases of the languages of the world has become appropriate, if not imperative. The idea is that we are at a point when it is finally possible to set the question in a systematic and empirical fashion, by having the various types of evidence considered in the literature interact and converge onto distinct functional hierarchies for each phrase.

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What makes the enterprise all the more interesting is the mounting evidence of the last several years that the distinct hierarchies of functional projections may be universal in the inventory of the heads they involve, in their number, and in their relative order (despite certain appearances). This is, at any rate, the strongest position to take, as it is compatible with only one state of affairs. It is the most exposed to refutation, and, hence, more likely to be correct, if unrefuted.

2) According to the Cartographic Program, there are linguistic categories that would be a biological inheritance: could you explain how this relationship occurs in the faculty of language?

How much of language should be attributed, if any, to a language-specific genetic endowment of our species, the traditional "Language Faculty" (or "Universal Grammar"), and how much to non language-specific external factors (general cognition, cultural environment, biological and physical laws, etc.)? This traditional question was resurrected, with the force of new arguments, some sixty years ago by Noam Chomsky, and remains a moot empirical question. In addition to the poverty-of-the-stimulus argument (i.e. the fact that we come to know much more than the linguistic data can teach us), there are two other potential arguments supporting the idea that the genetic endowment that the child brings to language acquisition is richer than usually thought: the first piece of evidence revolves around the observation that of all the concepts and distinctions that populate our system of thought only a fragment receives a grammatical encoding in the languages of the world, arguably the same in all languages. In the absence of a genetic predisposition toward certain specific grammatical functions we could expect to find many more distinctions encoded grammatically in the languages of the world, and yet these are not found.

The second has to do with the quite rigid limits that exist on cross-linguistic word order variation (some potential orders are never found), again pointing to specific limitations imposed by a biological inherited "Language Faculty".

3) Cartography maintains a close relationship with Generative Syntax. Given the developments of Chomsky's enterprise, what is this relationship like currently?

The cartographic program has been developed roughly at the same time as Chomsky's Minimalist Program. At first sight, there appears to be a tension between the rich representations in cartographic works and the sober representations of clausal structures in the minimalist literature, which comprise just C(omplementizer), T(ense), and little v, above VP. But the contradiction between these two research lines is actually only apparent. Labels such as C, T, and v are sometimes explicitly considered abbreviations of richer cartographic structures in the minimalist literature (e.g., Chomsky 2001 "Derivation by Phase". In M.Kenstowicz (ed.) *Ken Hale: A Life in Language*. 1-52. Cambridge, Mass.: MIT Press, fn.8). On this topic, also see Cinque and Rizzi (2010: §5). Minimalism focuses on the generating devices, the elementary mechanisms which are involved in syntactic computations, while cartography focuses on the fine details of the structures generated by these mechanisms, two research topics which can be pursued in parallel in a fully consistent manner, and along lines which can fruitfully interact.

4) *Typological Studies. Word Order and Relative Clauses* (2013) is a work of yours that dialogues with typological and functionalist works. How do you see the relationship of the Cartographic Program with these two areas of Linguistics? In a broad sense, what does cartography gain by dialoguing with these areas?

I think that the cartographic approach has much to gain from the typological and functionalist traditions despite the different assumptions that characterize them in opposition to formal comparative syntax. In-depth studies of a single, or of few languages, however deep they may be, fall short of revealing the actual richness of the functional/grammatical structure of UG owing to the often silent character of a certain functional category in a certain language.

Comparison of many different languages may provide evidence for determining the precise relative order of the different functional projections by combining the partial orders overtly manifested by different languages into what, in principle, should be a unique consistent order/hierarchy, imposed by UG. This presupposes that the order of functional projections is fixed within one language, and, more crucially, across languages; hardly an obvious assumption.

Comparative evidence is also crucial in exposing how certain ordering properties are strictly impossible across languages. Even in cases in which variation is permitted by UG, it is never the case that "anything goes". There are precise limits to the observed cross-linguistic variation, a fact which calls for a principled explanation.

5) We usually close the interview by asking our interviewee for some reading recommendations. For those who want to understand syntactic cartography, which works would you suggest as important milestones of the theory?

Cinque, Guglielmo. 1999. *Adverbs and Functional Heads: A Cross-Linguistic Perspective*. New York: Oxford University Press.

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Shlonsky, Ur. 2010. The cartographic enterprise in syntax. *Language and Linguistic Compass* 4: 417–29

Tescari Neto, Aquiles. 2012. *On Verb Movement in Brazilian Portuguese: A Cartographic Study*. Ph.D. Dissertation, University of Venice.

https://www.academia.edu/14119755/On_Verb_Movement_in_Brazilian_Portuguese_A_Cartographic_Study

And the 11 Oxford University Press volumes of the *The Cartography of Syntactic Structures* series.

Editors

Revista Virtual de Estudos da Linguagem – ReVEL

ISSN 1678-8931

https://www.revel.inf.br/en/