How optimal is the Optimization Model?

BERND HEINE
Institut für Afrikanistik, Universität zu Köln
bernd.heine@uni-koeln.de

Pieter Muysken's article on modeling and interpreting language contact phenomena constitutes an important contribution. The approach chosen is a top–down one, building on the author's extensive knowledge of all matters relating to language contact. The paper aims at integrating a wide range of factors and levels of social, cognitive, and linguistic accounts, incorporating findings on bilingual individuals in the same way as on language systems in contact and bilingual speech communities. It enables the reader to place seemingly disparate phenomena in a wider perspective and to relate quite divergent manifestations of language contact to one another in a principled way. In accordance with its ambitious goal, the paper proposes a high level of generalization, or abstraction.

Given this potential that the optimization model, as the author refers to it, offers to students of language contact of any kind, the present commentary focuses on a few questions that may need to be looked into for a full appreciation of what the model can achieve. These questions are most of all:

(a) What is the explanatory basis of the model?

(b) Do the generalizations proposed really hold for all the phenomena examined?

(c) Is the evidence presented in support of the model appropriate?

An answer to question (a) is implied in the title of Muysken's paper: The model proposed is formulated in terms of optimization strategies hypothesized to be adopted by speakers in specific contact situations. Thus, the model is "linked to Optimality Theory" (OT), even if it does not have the predictive power that is claimed for OT, as the author readily admits (Section 6). In accordance with the formalism proposed in OT, the external factors determining outcomes of language contact are modeled as ranked constraints on language behavior.

The four bilingual speaker optimization strategies are the key theoretical notions of the paper, they are described thus: maximize structural coherence of the first language (L1); maximize structural coherence of the second language (L2); match between L1 and L2 patterns where possible; and rely on universal principles of language processing. This raises the question of the motivations underlying the use of the strategies: What makes an optimal strategy an "optimal" one and why? Why do speakers "optimize" and what do they wish to achieve with optimization? What do they wish to achieve, for example, by maximizing the structural coherence of their first or their second language? It would seem that there is no entirely satisfactory answer to these questions and more work needs to be done.

Such work might also deal with a more general issue, namely with whether these strategies are restricted to bilingual speakers or may also be available in some form or other to monolingual speakers, or else, do these two kinds of speaker groups differ fundamentally in their linguistic and/or sociolinguistic behavior?

Question (b) asked whether the generalizations proposed really hold for all the phenomena examined. The author is confronted with a highly diverse set of contact-related phenomena. His major concern is with what speakers do or can do, more specifically with bilinguals and the strategies at their disposal. To this end, he analyzes processes such as bilingual interference (Section 5.2) and interaction (5.3). But he extends his generalizations to languages such as creoles (2.3), pidgins (3.1), mixed languages (3.2), and ethnolects (3.3), and it would seem that this procedure is not without problems.

We may illustrate this with his discussion of creoles in Section 2.3. He observes that the many scenarios that have been proposed for the genesis of creoles "may be reduced to four main strategies", namely to the bilingual strategies he proposes for code-switching, that is, relexification, convergence, universal principles, and imitation of a European vernacular. The author illustrates the effect of the four strategies with the constructed example in (1) below (his example (12)), from Papiamentu: The serial chain *kana bini* illustrates L1 SUBSTRATE INFLUENCE (i.e., the result of transfer); the third person plural pronoun *nan* as a nominal plural marker is taken by Muysken to be a case of a UNIVERSAL STRATEGY; the use of the particle *bèk* is interpreted as a case of CONVERGENCE between the English V+particle pattern and an African serial verb chain; and the choice of "lexical items", the aspectual marker *ta* and the preposition *di*, may have resulted from SUPERSTRATE INFLUENCE. He argues that the four strategies "correspond directly to the four bilingual strategies listed above for code-switching".

(1) e   mucha-NAN ta   kana bini *bèk* di
    DET child-3PL ASP walk come back from
    Punda.[1]
    Punda
    "The children are walking back from Punda (the center)."

This analysis raises a number of problems. One concerns methodology, namely the question of how the scenarios, that is, linguists' hypotheses on creole genesis, relate to the strategies: Whose strategies are these – those of the scholars that proposed the scenarios, or of the people who created the creoles? And if in fact the scenarios "can be reduced" to the strategies, then it does not become entirely clear what the mechanism is by which the one can be reduced to the other. Similar observations can be made in the discussion of other kinds of languages. In Section 3.1, four types of pidgins or scenarios for the genesis of pidgins are distinguished. But the reader is left guessing why there should be a one-to-one relationship between the presence of these language types, or scenarios of language evolution, and the four speaker strategies, and what the exact nature of this relationship is.

The second problem concerns the question of whether or to what extent language change can be taken to reflect what speakers do in contact situations. The author cites the important simile proposed by Weinreich ([1953] 1964, p. 11), who likens contact-induced language change – as resulting from individual interferences – to the sediment left at the bottom of a lake by the sand carried along in a stream. One may wonder whether this observation is always appropriately taken into account in the paper. For example, do we really know what induced earlier speakers of Papiamentu to extend the use of the third person plural pronoun to also mark nominal plural ("the sediment")? Did they have a model within their L1, or from some other language,[2] to do so, or did they rely on general conceptual templates (or a "universal strategy"), or did they perhaps use more than one of these strategies?

All information available on grammaticalization processes of this kind suggests that the change from personal pronoun to nominal plural marker does not happen overnight but rather extends over a longer period of time, and that it conceivably involves simultaneously more than one of the possibilities listed (Heine & Kuteva, 2002). Deciding that this is a "case of a UNIVERSAL STRATEGY" (Section 2.3), as the author does, is a straightforward solution but not one that is entirely satisfactory to solve the problem considering the implications that such a decision has for the overall structure of the model proposed in the paper.

To conclude, it would seem that the generalizations proposed by the author are relevant to understanding the behavior of bilingual speakers, but there remain questions once these generalizations are extended to the analysis of whole languages, such as creoles and pidgins.

The case of creoles just cited can also be used to look at question (c): Is the evidence presented in support of the model appropriate? It would seem that there are also problems with the evidence presented and the way it is interpreted. Creoles, including Papiamentu, are the result of complex externally and internally induced processes, and the motivations underlying the strategies that are responsible for these processes are in many cases still largely unclear. In order to be able to serve as evidence of the kind presented by the author, therefore, it seems that an appropriate historical analysis of these processes would be desirable.[3] One example, concerning the Papiamentu case discussed earlier, may illustrate the problem involved. The development from third person plural pronoun to nominal plural marker is a grammaticalization process that has been observed in a number of languages in different parts of the world (though by no means in all languages; Heine & Kuteva, 2002, pp. 237f.). But grammaticalization of serial chaining (or verb serialization) is also found in different parts of the world (Aikhenvald & Dixon, 2006). In both cases there are indications that these developments can be induced either internally or externally, or both. The question therefore is: Is there really sound historical evidence for claiming that in Papiamentu the former (i.e., the third person plural pronoun *nan*) is a case of a universal strategy while the latter (the serial chain *kana bini*) is due to substrate influence?

It would seem that such questions are not trivial considering that they concern central pieces of evidence in the author's attempt to model a large range of types of language contact in terms of a simple catalog of speaker strategies.

To conclude, the generalizations proposed by Muysken are intuitively plausible and of interest to students of language contact and bilingualism, but they also raise questions. One question concerns the motivations that speakers have when drawing on the four strategies the way they do: What induces speakers to seek for an optimal strategy in a given situation and given the cognitive and linguistic resources that are at their disposal? Our own research suggests that one of these motivations is to increase communicative efficiency by establishing formulas of equivalence between different languages (or dialects) that speakers are exposed to (Heine forthcoming), but there surely are many more possible motivations that need to be taken into account.

Another kind of question, one that we discussed in some detail above, concerns the evidence for the hypotheses proposed, especially for generalizations based on or implying diachronic processes. Creole languages, for example, are the product of a range of historical processes. These processes can be internally or externally induced, but they can also be due to a combination of

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[1] The following glosses are used: ASP = aspect; DET = determiner; PL = plural; 3 = third person.

[2] Note a number of the West African "substrate" languages of Atlantic creoles, such as Ewe and Fongbe, use their third person plural pronoun to also mark nominal plural (see Heine & Kuteva, 2002, pp. 237f.).

[3] Conceivably, such an analysis is available but if in fact it is then this should be made clear, e.g. by providing references.

both. Accordingly, to reconstruct the strategies employed by early speakers of creoles, pidgins, or mixed languages can only be achieved by means of detailed historical reconstruction of the processes concerned.

References

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