Multiple grammars: old wine in old bottles

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Amaral & Roeper (henceforth A&R) argue that all speakers - regardless of whether monolingual or bilingual - have multiple grammars in their mental language representations. They further claim that this simple assumption can explain many things: optionality in second language (L2) language behaviour, multilingualism, language change, and L2 language processing – in essence, all the developmental phenomena that are the focus of current research. A&R are right that a linguistic theory of multiple grammatical representations is necessary; however, their proposal falls well short of explaining anything that we didn’t already know and in fact fails to account for what we do know. In my brief commentary I will address three points. First, the idea of multiple grammars is not new: it has been at the foundations of models of L2 acquisition ever since the concept of ‘interlanguage’ was proposed. Second, recent work on L2 optionality is incorrectly represented. Third, A&R do not offer a new descriptive account of L2 optionality, let alone a new formal model of optionality, largely because they limit themselves to restating the problem instead of suggesting solutions.

A&R argue that any human grammar has optionality, i.e. accommodates apparently incompatible rules or sub-grammars. This, A&R claim, is ignored by models of L2 acquisition. Some of these models, for example Full Transfer-Full Access (Schwartz & Sprouse 1996) argue that the point of departure in L2 acquisition is the final state of the L1 grammar and that acquiring a second language consists of progressively ‘restructuring’ the L1 grammar in the direction of the L2. A&R argue instead that “interlanguage is not being restructured away from the L1, but simply built on top of it”. Do they mean by this that the L1 rules are not themselves changed and that they continue to co-exist alongside the developing L2 rules? It is clear that the L1 is not ‘replaced’ by the L2: recent work on L1 individual attrition indicates that mental representations of the L1 grammar are not themselves affected by exposure to
L2 (Sorace 2011), although access and allocation of processing resources affect the use of particular L1 structures. A&R suggest that L2 rules are added to a complex repository of sub-grammars comprising all sub-grammars built during L1 acquisition, which are ‘available for life’. This idea is also not new: Corder (one of the founding fathers of interlanguage theory), made an identical claim and maintained, like A&R, that this is the reason why people are spontaneously able to use baby talk, foreigner talk and other examples of what he called ‘simple registers’, and why these registers show similarities both among themselves and with early interlanguage grammars (Corder 1981).

Thus, according to the Multiple Grammars approach L2 acquisition does not consist in building a separate L2 grammar, but in adding L2 rules or sub-grammars to an existing repertoire of rules and sub-grammars; and then deciding which rules are productive and which rules are unproductive. This potentially results in massive optionality, of course, which leads to the second point of this commentary. A&R’s summary of recent work on the ‘Interface Hypothesis’ (henceforth IH) is marred by two misunderstandings. The first is the belief, incorrectly attributed to the IH, that optionality is exclusively found in the final attainment of L2 speakers. On the contrary, Sorace (2000) presented a detailed comparison between L1 and L2 optionality, maintaining that optionality exists in stable native grammars and showing that the differences are more a matter of degree than being due to radically distinct etiologies.

The second misunderstanding is the incorrect claim that the IH does not assume the representation of contradictory grammatical rules and so it doesn’t address the issue of formal properties of the L2 competence. On the contrary, early work on the IH (e.g. Sorace 2000, Sorace 2005, Tsimpili et al 2004) firmly assumes that optionality refers to a state of grammatical competence and as such is the pre-requisite for behavioural variation. Furthermore, early accounts of anaphora resolution in the Italian of Italian-English bilinguals are entirely based on a representational account that clearly presupposes the existence of multiple grammatical representations. According to these accounts, underspecification is a characteristic of the bilingual grammar that selectively applies to the mappings between syntactic argument realisation and pragmatic conditions and that is due
the influence of English (the most ‘economical’ language) on Italian (the least ‘economical’ language). Underspecification results in the over-extension of the scope of the overt pronoun; it does NOT result in speakers’ inability to choose a possible interpretation, contrary to what A&R suggest. More recent work is motivated by the fact that this phenomenon is also found in bilingual speakers of two null subject languages of the same type (Sorace et al 2009; Sorace & Serratrice 2009). The processing explanation originally suggested by Sorace & Filiaci (2006) is not an alternative to the linguistic explanation; rather, it is an account based on consideration of the interaction between linguistic and general cognitive factors. These factors are not only, as simplistically suggested by A&R “memory limitations or heavy cognitive load”, but rather aspects of executive function that affect the way speakers incrementally build central coherence in anaphora resolution. In the example La mamma saluta la figlia mentre lei si mette il cappotto (“The mother greets the girl while she is putting on her coat”), a late bilingual may be less efficient than a monolingual in retrieving ‘la figlia’ as the antecedent of the overt pronoun in the embedded clause because of any of these factors: (a) slower inhibition of ‘la mamma’ as the other potential antecedent, (b) slower inhibition of the pronoun-antecedent mappings offered by the other language, (c) slower incremental integration of information as the sentence unfolds. Inefficient processing may result in the default reliance on the overt pronoun-subject antecedent mapping. This cognitive explanation does not exclude the assumption that the speaker has both L1 and L2 grammatical representations; indeed, it presupposes it, as the authors themselves show in their short summary of the literature on the cognitive aspects of bilingualism. The Multiple Grammars approach, as formulated by A&R, would not be able by itself to capture either the selectivity of optionality in L2 acquisition and L1 attrition, the resulting variation in bilingual behaviour across tasks and developmental stages, or the particular bilingual strategies adopted.

The last point I would like to address is the explanatory power of A&R’s proposal. The main motivation for the idea of multiple grammars is the Minimalist principle Avoid Complex Rules. The problem is that is unclear how the principle works, both in stable mature grammars and, even more so, in developing
grammars. The notion of ‘simplicity’ is undefined. While it may be more economical to have two simple rules than one rule with “an optional part to capture two related phenomena”, it is not immediately obvious in what way simplicity or economy would be served by postulating rules that allow ‘diacritics’ to specify, for example, that they are lexically limited to particular verb classes. How does this solution succeed in placing optionality “out of individual rules and into co-existing sub-grammars”?

As for development, A&R are explicitly not committed “to any views of how features are added or subtracted in developing grammars”, nor are they committed to how multiple grammars are affected by input or other learning mechanisms. In this respect, their proposal is noticeably less useful than Yang’s model which, in contrast, makes concrete hypotheses about how statistical learning may interact with linguistic principles. A&R repeatedly make the point that the multiple grammars approach is a theory of representations that provides a formal mechanism to explain optionality and makes more precise predictions. However, what they put forward in this paper is a restatement of uncontroversial assumptions that have been at the foundations of the L2 acquisition field for decades (e.g. "The speaker’s competence can be represented by a descriptive mechanism called grammar"). This restatement is not only insufficiently elaborated from a formal perspective (in the authors’ own words, "the notion of Multiple Grammars can be completely explicit, although many areas of the linguistic theory itself are themselves not explicit enough to carry out this promise") but also does not incorporate more recent interdisciplinary advances in the field of bilingualism.


