The Ontogenesis Model: How do multiword units fit in, and are most lexical representations in the L1 really at their optima?

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Bordag, Gor and Opitz (2021) (henceforth BGO) present the Ontogenesis Model of the L2 Lexical Representation (OM), which focuses on the individual developmental trajectories of L2 lexical represen-tations. The need to assume that each lexical unit has its own unique trajectory is appealing (Gyllstad & Suhonen, 2017; Suhonen, 2020), a feature also of Ecke's (2015) Parasitic Model. I welcome the OM as a point of departure for further refinement. In particular, I believe it has the potential of creating a rapprochement of sorts between a research tradition in L2 vocabulary which to a great extent relies more on descriptive frameworks, and a more psycholinguistically-oriented tradition that more commonly relies on explanatory models and experimentation. In my commentary, I will address two topics that deserve more clarity in further development of the OM:

a) The representation of multi-word units
b) The assumptions behind the concepts 'optimum' and 'fuzziness' in an L2 and L1

My first point relates to the nature of the mental lexicon, and the type of representations that are assumed to exist. The issue at hand is that more clarity is needed on how the OM caters for multi-word units (MWUs). Over recent decades, research has highlighted the ubiquity and importance of lexical units larger than single words, for example phrasal verbs, collocations, idioms, binomials, proverbs and lexical bundles (see e.g., Siyanova-Chanturia & Pellicer-Sánchez, 2019; Wray, 2002), for native-likeness and fluency. In her seminal monograph from 2002, Wray proposes the 'Heteromorphic Distributed Lexicon', in which units of different grain sizes are represented in the lexicon. At the outset, BGO say that the OM is a blueprint for "individual lexical units" (p. 1). Their use of the term "lexical unit" in theory allows for the possibility that what is in fact targeted is a range of lexical structures – from monomorphemic to multi-word units. But the question is how MWUs fit into BGO's model. Their account of the third dimension – called 'Dimension of Networks' – stipulates that this deals with how a given lexical representation is interconnected with other units in the given language. They refer to "collocations" (p. 3) as the knowledge about which words are used together. I have referred to this approach as a "word-centred approach" (Gyllstad, 2007, p. 235), in which the point of departure is any word of interest, and how that word is associated with other word components, together forming a collocation. In contrast, a "holistic approach" sees collocations as types of holistic lexical units in their own right. The question is thus, does a collocation like *pursue a career* exist as a lexical unit in the 'Dimension of Linguistic Domains' in the OM, or is it regulated in the 'Dimension of Networks', where the lexical unit *pursue* is linked to another lexical unit, *career*? In Figure 1, with arrows indicating links between representations, do we have a case of (I) or (II), or both? This needs clarification.

My second point has to do with two central terms in the OM and the way BGO envisage them; the first one is "fuzziness" – by BGO seen as one of the crucial OM concepts – and the second is "optimum". The latter is in my interpretation akin to 'ultimate attainment', and is by the authors explained as a level whereby a representation is properly encoded and fully speci-fied. Fuzziness, on the other hand, entails "inexact or ambiguous encoding of different components or dimensions of the lexical representation…" (p. 2). The OM is a model primarily developed for L2 representations, but BGO argue that the core of the model could also account for L1 lexical representations. BGO claim that most L1 representations reach their optima and stay around it. Most L2 lexical representations, however, do not reach their optima and are consequently fuzzy. These claims raise a number of questions. How can we establish whether an L1 word (or lexical unit) has reached its optimum in a native speaker? Here, I am primarily thinking of word meanings, in cases of a high degree of polysemy and a large number of extended meanings. Furthermore, are the optima for assumed translation equivalents the same for the L1 and L2? Importantly, is it really the case that <u>most</u> L1 representations are at their optima? Could it not be argued that there is a high level of fuzziness also in native speakers? For example, how many speakers of L1 English have fully specified semantic representations of lexical units like *plaintive*, *gregarious* or *serendipity*? In line with Hulstijn's (2015)
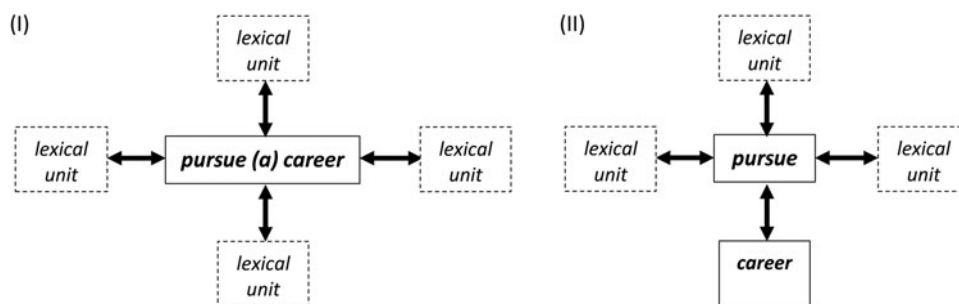
Fig. 1. Two alternative representations of L2 lexical units.

proposal of differentiated proficiency levels in an L1, either as Basic Language Cognition (BLC), which is shared by all native speakers, and Higher Language Cognition (HLC), standing for the domain where differences between native speakers can be observed, perhaps optima can only be argued for the BLC?

The OM is likely to attract interest as an attempt to account for the developmental trajectories of L2 representations of individual lexical units. Its present version will spark off discussion and research activity on aspects that are in need of empirical support, many of them identified by the authors. In my commentary, I have focused on two points in need of more clarity in the OM: MWUs and the "optimum" and "fuzziness" concepts. On a final note, one area that I personally would like to see developed is the 'InterNetwork', where cross-linguistic influence will be a major factor to model.

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