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DST vs. UG: Can DST account for purely linguistic phenomena?

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The article "A Dynamic Systems Theory approach to second language acquisition" by De Bot, Lowie and Verspoor discusses Dynamic Systems Theory (DST), and in particular the benefits of studying second language acquisition (SLA) within the DST framework. The article explains the main characteristics of DST, and goes on to show how various aspects of SLA can be treated from a DST perspective. In particular, the article proposes that the DST framework allows an investigation of how various social and cognitive aspects of SLA interact.

It is quite possible that the DST framework can in fact contribute to the field of SLA. However, such contributions are at this point largely hypothetical, and the present paper does not put forth a concrete proposal for how to investigate SLA in the DST framework. Much of the section entitled "DST and its applications to SLA theory" is devoted to critiquing existing approaches to SLA without offering a tangible alternative. More importantly, some of these critiques appear to be empirically inaccurate. The goal of this commentary is to show that many of the problems that, according to the authors, are present for existing approaches to SLA are in fact not problems at all.

In critiquing the Information Processing model and SLA approaches based on Universal Grammar (UG), the authors state (in the Introduction section) that "in much SLA research an L2 learner, no matter what his/her L1, is predicted to go through highly similar stages in acquiring the L2". The authors later go on to argue (in the "Variation and morpheme order studies" section) that "[t]he most important pitfall of the morpheme order studies was their predetermined desire to diminish the role of the learner's first language and to demonstrate linear development as a result of some innate mechanism". While early studies of SLA, in particular the morpheme order studies of the 1970s, did in fact attempt to diminish the role of the first language (L1), much has changed in the field since then. The role of L1-transfer is now taken quite seriously, and few (if any) SLA researchers today would claim that SLA is unaffected by the learner's L1. For examples of SLA studies of L1-transfer in the UG framework, see Schwartz and Sprouse (1996), Schwartz (1998), Slabakova (1999), Montrul (2001), and Cabrera and Zubizarreta (2005), among many others.

The present paper furthermore critiques UG-grounded SLA literature for focusing on group results, and argues that group results can obscure individual learner patterns. This is a valid argument, and the reason for why many recent studies have in fact paid attention to individual learner data. While it is true that SLA studies tend to be cross-sectional group studies, there are some well-known longitudinal case studies as well, notably those of Lardiere (2000) and White (2003) in adult L2-acquisition, and Lakshmanan (1994) and Hazendar (2001) in child L2-acquisition.

Morpheme-order studies are correctly critiqued in the present paper for minimizing the role of the L1 and disregarding individual differences. However, these morpheme order studies are now 30 years old, and more recent work DOES pay attention to both the role of the L1 and individual differences. The focus is no longer on particular sequences of acquisition, but rather on an understanding of the different linguistic factors that underlie the acquisition of specific morphemes: in the case of articles, for instance, recent literature has looked at the role of prosodic structure (Goad and White, 2004), syntactic constraints (Robertson, 2000) and semantic universals (Ionin, Ko and Wexler, 2004).

The present authors state (at the end of the section "Variation in morpheme order studies") that "any account that focuses on one aspect only cannot but provide a gross oversimplification of reality. Only an account that incorporates the dynamic interaction of all factors can form an appreciation of the actual complexity." It is certainly quite reasonable to argue that to understand any phenomenon in SLA completely, we need to consider multiple factors. However, it is not clear why DST is required for this. To go back to the example of the acquisition of articles discussed above, existing literature has in fact considered a variety of factors (prosodic, syntactic, semantic), as well as looked at the role of the L1 (Thomas, 1989; Ionin, Zubizarreta and Bautista Maldonado, in press) and the role of task type (Tarone and Parrish, 1988). There is no reason why these (and other) factors cannot be brought together and examined in a systematic manner under existing approaches to SLA. In fact, SLA research typically does take more than one factor into account, for instance, considering linguistic

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constraints along with L1-transfer and age effects (e.g. Unsworth, 2005).

It is true that UG-based approaches typically do not take social factors into consideration, focusing instead on linguistic and age-related factors, and it is possible that the DST approach would pay more attention to social and cognitive factors. However, the present paper does not actually explain HOW this would be done. It does not seem very fair to criticize existing, developed theories for not incorporating all possible factors, when no alternative theory is presented that DOES incorporate these factors.

In fact, it seems that the UG-based and DST approaches focus on very different aspects of SLA. The studies cited in the present paper in relation to DST tend to involve non-grammatical phenomena such as mean length of utterance, word recognition, sentence length, and literacy. It may well be that development in these areas is in fact best explained by a model that takes multiple cognitive, social and linguistic factors into consideration. On the other hand, UG-based models of SLA are generally much more concerned with the acquisition of particular grammatical phenomena, such as (to give a few examples) argument structure, question formation, reflexive binding, article semantics, and so on. It is not at all clear how social and cognitive factors influence the acquisition of these phenomena on a specific level.

On a general level, it is quite likely that learners with higher aptitude and/or motivation, more input and time, etc. will be more successful (see Johnson and Newport, 1989 and DeKeyser, 2000, among others, for relevant discussion). It is possible that DST is a good way to study the interaction of these factors. However, on a specific level, it is not clear how DST can explain such subtle linguistic phenomena as learners' misinterpretation of the article *the*, an incorrect binding domain for a reflexive, or an argument structure overgeneralization (all real errors attested in L2-acquisition). Perhaps DST does have the potential to explain such errors. However, there is no concrete proposal in the present paper that shows how this might be done.

Given the lack of a concrete DST model of SLA, it may be a good idea to limit the potential scope of the DST approach. Instead of treating the DST framework as an alternative to UG-based approaches, it may be more productive to view the two approaches as dealing with very different phenomena. It is possible that DST could be fruitfully used to explain overall changes and individual differences in proficiency (with various social and cognitive factors playing a role), while leaving the investigation of specific grammatical phenomena to non-DST approaches. The authors state (at the end of the section "DST, UG and creativity in language use") that "a DST approach is incompatible with an Information Processing model to communication and even though it does not necessarily reject innate principles, it does not need specifically linguistic principles to account for the creativity in language use". However, no clear alternative to specifically linguistic principles is proposed that would successfully account for the variety and depth of linguistic phenomena that have been found in SLA. Until such an alternative is formulated, and shown to work, it would be better to limit the scope of the DST approach to SLA to an investigation of non-grammatical phenomena.

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