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The Prosodic Transfer Hypothesis in the grammar and its treatment of clitics

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1.   Introduction

The Prosodic Transfer Hypothesis (PTH) makes an important contribution to the analysis of morphosyntactic issues relating to L2 acquisition. What distinguishes PTH from competing theories of L2 acquisition is its claim that some morphosyntactic problems in linguistic performance (e.g., inflection and articles) are caused by a mismatch in prosodic structure between L1 and L2 rather than by differences in morphosyntactic structure. That is, L2 learners typically fail to employ L2 prosodic structures that are absent from their Ll. This claim is significant not only for L2 acquisition studies but also for our understanding of the interfaces between different components of the language faculty.

The following paragraphs discuss two questions arising from my review of Goad and White (2019) (hereafter G&W). The first is a general point concerning the design of the language faculty, which has a bearing on our view of the language acquisition process. The second concerns two theory-specific issues relating to the representation of clitics, the structural organisation of which may affect the analysis of L2-related phenomena in a PTH approach but which also impinges on our treatment of certain L1 phenomena.

2.   A general question on the model of prosodic representation

The PTH has been developed primarily in the context of Prosodic Hierarchy Theory (Selkirk, 1984, 1996 and references therein; et passim), which describes the interface facility responsible for mapping morphosyntactic representations onto prosodic (phonological) representations. The theory states that a single morphosyntactic structure may be prosodified differently depending on how a given language employs the mapping rules/constraints between syntax and phonology

(prosody). Different prosodifications are attributed either to the choice of rule types selected from a universal set (in Principles-and-Parameters-oriented terms) or to the language-specific ranking of constraints (in Optimality-theoretic terms).

It is also widely acknowledged that another translation/mapping process between two different components of the grammar takes place at the morphosyntax-phonology interface: this process controls the linearisation of morphosyntactic structure, which has been investigated from various angles using a range of representational models (Cinque, 1996; Kayne, 1994; Kural, 2005; Tokizaki, 2018 and others). Most approaches to linearisation assume a direct mapping between (morpho)syntactic structure (constructed in syntax) and a linearised sequence of morphosyntactic items (words and morphemes) at the interface, rather than appealing to any prosodic representation. However, if a representational model takes this view of linearisation, it is forced to admit two different types of structure-building – one in (morpho)syntax and another at the interface between (morpho)syntax and phonology, where phonology maps a linear sequence of morphosyntactic items onto prosodic representation. In other words, hierarchical prosodic structure is based on a set of items arranged in a linear sequence.

(1)   A model for building the relation between morphosyntax and phonology
      Items selected from the mental lexicon
      → [building morphosyntactic structure] → morphosyntactic hierarchical structure
      → [linearisation] → a set of linearly-ordered items
      → [building prosodic structure] → prosodic hierarchical structure

For this approach to stand up to scrutiny, it must be able to justify the need for two structure-building facilities – one for morphosyntax as well as one for prosodification. On the face of it, this approach seems to oppose a minimalist view of linguistic representation.

In fact, some existing studies have denied the existence of a structure-building facility (computational device) other than in (morpho)syntax (Chomsky, 1995, et passim). Furthermore, in the spirit of a minimalist view, some researchers (Lowenstamm, 1996; Scheer, 2004, 2008 and others) claim that phonological representations consist only of chains of C(onsonant)-V(owel) sequences with no prosodic structure (including syllable structure in the narrow sense). However, others (Samuels, 2009, 2011) take the view that phonological structure is absent altogether, and instead, that sound-related properties derive from Chomsky's third factors (Chomsky, 2005). Surely, these various approaches reject the view of phonological representation employed in PTH. To defend their stance, PTH scholars must provide stronger evidence for their prosodically-defined structure in the language faculty.

3. Questions on some specific issues

3.1 The representation of affixal clitics and free clitics

Assuming that the syntax-phonology interface recognizes prosodic structure that has been constructed by the translation facility, let us consider some issues which are unclear in the G&W discussion. An important factor in the development of the PTH has been the representation of clitics (which belong to the set of functional elements), as found in verb inflections and DPs (determiner phrases). Following Selkirk (1996), the theory is able to explain certain linguistic phenomena by assuming three different types of representation which are prosodified by the translation facility at the interface:

(2)   a.   *internal clitics* (part of the internal structure of a Prosodic Word (PWd), which modify the base word to which they are attached: e.g., *-ic, -al, in-*, and which may trigger phenomena such as stress shift and degemination in English),
      b.   *affixal clitics* (adjoined to a PWd: e.g., *-es, -ed, un-* in English),
      c.   *free clitics* (directly dominated by a Prosodic Phrase (PPh): e.g., articles *a/the* in English).

In all three cases, clitics are unstressed and are dependent on their substantive host; by contrast, the host is stressed and is directly dominated by a PWd. In the PTH framework, a PWd behaves as a stress-bearing unit just like a syllable nucleus does.

In the context of Lexical Phonology (Kiparsky, 1982, 1985), the structural distinction between (2a) (internal clitics) and (2b) (affixal clitics) corresponds to that between Class 1 and Class 2 affixation. Meanwhile, in the framework of Government Phonology (Harris, 1994, Kaye, 1995, Onuma & Nasukawa 2020), (2a) and (2b) are described as being *non-analytic* and *analytic*, respectively. Non-analytic forms were once historically active but are now derivationally inactive; moreover, rather than being synchronically derived, they are thought to be stored in the lexicon just like other underived lexical items. In terms of word construction, they participate in *root-level* morphology. By contrast, analytic forms are synchronically active in morphological derivation and take part in *word-level* morphology.

On this basis, it may be assumed that internal clitics are invisible to the prosodification process whereas affixal clitics and free clitics, which are derivationally active (in a theory-neutral sense), are visible in prosodification. So, how do affixal clitics and free clitics differ in terms of their lexical representation and in terms of the level at which they are submitted to the translation facility (which maps morphosyntactic representations on to phonological representations)? It is important that we understand how the two differ structurally, if the PTH is to analyse them as having distinct behaviour. Otherwise, even if free clitics behave

as syntactically independent morphemes, they could still be treated as affixal morphemes in prosodic terms, and vice versa.

3.2 Strong forms of affixal clitics and free clitics

Another question concerns the representation of the strong forms of affixal and free clitics.

(3) a. the strong (stressed) forms of articles (e.g., *the man* vs. *THE man*)
   b. the form of clitics when they are emphasized for contrastive purposes (e.g., *complete* vs. *INcomplete*).

As for (3a), there are at least two options when it comes to analysing the distinction:

(4) a. a weak form and its strong form are stored in the lexicon as separate items;
   b. the distinction between strong and weak forms may be just a performance-related issue rather than one involving different types of dominating prosodic categories.

If we assume that (4a) applies to (3a), then for the sake of a coherent analysis we may also have to assume that it applies to (3b) too. However, it seems rather ad hoc to assign different representations to the two different types of affixal clitics, and for this reason should be avoided. On the other hand, if we assume (4b) then we need to understand what kind of mechanism is responsible for assigning stress to an item (such as a clitic) which is not directly dominated by a PWd, the stress-bearing unit. In either case, PTH scholars need to clarify these points.

The PTH is considered to be one of the leading theories which reflect what language learners actually experience during the acquisition process, and it makes a strong contribution to the study of second language acquisition. In particular, it has the advantage of being able to explain not only prosodic phenomena in the phonological domain but also certain difficulties in the acquisition of morpho-syntactic properties. To strengthen the validity of PTH as a theory, its proponents must address the questions raised in this commentary by providing relevant and detailed discussions.

Acknowledgements

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