

INTERVIEW WITH ELLEN BROSELOW¹



Interview by Gean Damulakis

1. Your work has often focused on loanword phonology. From a linguistic point of view, what are the most important findings one can reach in investigating phenomena involving loanword adoption and adaptation?

I have been fascinated by loanword and second language phonology ever since I took a summer

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intensive course in spoken Egyptian Arabic following my first year of graduate school. My classmates and I, all native speakers of English, struggled with a persistent problem: we tended to hear word boundaries where they did not exist, and to miss word boundaries where they did occur. To our great frustration, this mis-segmentation occurred even when the initial parse yielded nonsensical strings of non-words for utterances that should have been entirely predictable from context, and even when the utterances contained real words with which we were familiar. As the only linguist in a group of aspiring diplomats and Foreign Service officers, I was able to understand the source of this problem: Arabic allows greater freedom than English in resyllabifying segments across word boundaries. But this conscious knowledge was not sufficient to suppress the effect of my native grammar on my initial, automatic division of the speech stream into potential words.

The study of loanword and second language phonology relates directly to the central question of phonology: how are speakers able to produce and understand forms they have never heard before? In language contact, speakers are presented not only with new forms, but also in many cases with new structures, such as the cross-word syllabifications that led to such frustration in my Arabic class, or monosyllabic words in a language with a minimal disyllabic word size, or forms with word stress in a position that is impossible in the native language. It is precisely the fact that foreign language contact exposes speakers to new structures that makes language contact phonology such a valuable tool for seeing how learners generalize beyond the data to which they are initially exposed. And in some cases, where the data of the native language are compatible with multiple analyses, foreign language data provide evidence for choosing among competing analyses of native language patterns.

Language contact phonology is not only a probe into the native language grammar; it can also reveal patterns that appear not to be based in either the native or the foreign language. Some of these emergent patterns involve cases in which certain foreign structures are more readily mastered than other, equally novel structures: for example, why did Japanese speakers, whose native language forbids sequences of both [ti] and [si], begin almost upon initial exposure to maintain [ti] in English borrowings while continuing to palatalize [s] before [i] in both foreign and native words to the present day (as in [ʃitibanku] ‘Citibank’)? Other emergent patterns involve the choice of different repair strategies for different but equally novel foreign structures: for example, why do speakers of so many languages lacking any sort of complex syllable onsets repair rising sonority onsets in foreign forms differently than [s]+stop onsets, inserting a vowel between the two consonants of a rising sonority onset, but before the two consonants of an [s]+stop onset? And why is the vowel inserted within a rising sonority onset so frequently a copy of the next vowel, while the vowel inserted before an [s]-stop

onset is generally a default vowel? The emergence of apparently unmotivated patterns in language contact phonology, particularly patterns that arise among speakers of different native languages and different foreign languages, gives linguists an intriguing window into the language faculty.

2. How should one investigate UG and language universals in loanword phonology and in L2/L3/Ln acquisition?

Emergent patterns—those that appear not to be motivated by either the native or the foreign language data—have often been taken as evidence for innate language universals. The connection between putative universal markedness scales and language contact phonology is clear, and it is not surprising to find that less marked foreign structures often emerge in foreign language learning before equally novel but more marked structures (such as voiceless before voiced final obstruents). Similarly, the choice of different repairs for equally novel foreign structures (such as rising vs. falling sonority onsets) can be taken as evidence for sensitivity to universal principles governing sonority sequencing, even in speakers whose native language provides no evidence for such sequencing, at least in any obvious way.

What we need to be wary of, however, is being satisfied with simply pointing to these phenomena as effects of universal grammar and stopping there. The term ‘universal grammar’ is a label, not an explanation, and we need to look more deeply for explanations of why these patterns appear.

3. In your opinion, in contrast with its predecessors, what kind of advantages does OT provide in handling loanword phonology and L2/Ln acquisition?

OT differs from its predecessors in being a model not only of language competence but also of language acquisition. In SPE phonology, a grammar consists of a set of rules, and language acquisition is a matter of acquiring the rules of the adult grammar. In this approach, it is puzzling that the analysis of children’s productions often requires different rules than the adult grammar, and that many of the rules found in child language (such as devoicing of final obstruents) are unsupported by data of the target language, though they often enforce cross-linguistic preferences. Classical OT builds these universal preferences into the model directly by defining the initial state for the language learner in terms of the ranking of markedness constraints above faithfulness constraints. Demotion of a markedness constraint is motivated by forms in the ambient language that violate this constraint. OT therefore provides an explicit model of the interaction between grammar and data.

The advantage of OT for the investigation of language contact phonology is that it forces us to ask hard questions about the source of second language patterns. The initial state for language learners and loanword adapters encountering a new language is generally assumed to be the native language grammar. Where patterns of loan adaptation and language learning require rankings different from those of the native language, coming up with a grammar that describes these patterns is only half the job—an equally important step is to determine whether that grammar could have been learned from the available data, and if not, how it could have arisen.

4. Perception has a special role in loanword phonology, as can be seen in your research on this topic. What is the dimension of perception in loanword phonology? How is it possible to measure or capture it? What kinds of factors (e.g., linguistic typology, bilingualism) constrain perception in this case? Do you see a correlation between bilingualism and loanword phonology?

Just as the mapping from underlying to phonetic representation is shaped by language-specific grammars, so too is the mapping from the speech stream to a phonological representation: listeners' perception of speech is very much dependent on their native language, and much evidence has accumulated that listeners have difficulty perceiving contrasts that do not play a role in their native language.

The role of perception in loanword adaptation has been a subject of ongoing debate: do non-native speakers' adaptations of foreign forms reflect their misperception of those forms, or do non-native speakers accurately perceive the foreign forms but alter the foreign-like representations in their production grammars? Positions have been staked out on the separate ends of this continuum, with the claim on one side (associated most frequently with Sharon Peperkamp) that all loanword adaptation takes place in perception, and on the other side (associated most frequently with Carole Paradis) that loanword adaptation is carried out by bilinguals who perceive the foreign forms precisely as native speakers of the foreign language do. Clearly, neither of these views can fit every situation on the spectrum of language contact, and any analysis of loan phonology must take into account socio- and extralinguistic factors, including the extent of adapters' familiarity with the foreign language, the medium of contact (spoken vs. written), the prestige of the lending language, and many others.

What is increasingly clear is that a true understanding of language contact phonology can only come from careful study of both perception and production as well as their interaction. The study of perception can be particularly useful in helping to understand production patterns that appear not

to be learnable from either the native or the foreign language data. For example, the fact mentioned above that Japanese adaptations of English words frequently maintain English [ti] but not English [si] was initially analyzed by Ito and Mester as a reflection of constraint rankings—specifically, the constraint *[si] was argued to be ranked above the constraint *[ti] in the native grammar. The loanword grammar maintained the relative ranking of these two markedness constraints but promoted faithfulness constraints to intervene between the two, allowing /t/ to surface faithfully but forcing /s/ to undergo palatalization, as in native forms. This account poses a learnability problem: neither native Japanese data, in which both /t/ and /s/ are always palatalized before [i], nor English data, in which both structures occur, provide evidence for ranking *[si] above *[ti]. Thus, this account leaves unanswered the question of how Japanese speakers could have arrived at the ranking *[si] >> Faithfulness >> *[ti], as the only evidence for this ranking comes from the loanword adaptation pattern—exactly the data that the ranking is intended to account for.

Fortunately, perception studies, along with the widely accepted assumption that markedness constraints are highly ranked until the learner is exposed to surface forms that violate them, provide a motivation for the rankings of the loanword grammar. A speaker of Japanese, where both /s/ and /t/ palatalize before [i], has no need to perceive a contrast between palatal and non-palatal coronals in this context. In order to demote the constraints that forbid [ti] and [si], Japanese speakers exposed to English would need to correctly perceive the foreign forms that violate these constraints. The speedy demotion of *[ti], as opposed to *[si], would be motivated if there were an asymmetry in the perceptibility of the [ti- tʃi] and the [si- ʃi] contrasts. In studies at Stony Brook University and in Japan, we found just such a difference in perceptibility: both Japanese and English speakers more reliably discriminated [ti- tʃi] than [si- ʃi]. This suggests an alternative account of the loanword pattern which no longer rests on the assumption of a domination relationship between the two markedness constraints in the Japanese grammar—if Japanese speakers were able to correctly perceive that [ti] but not [si] as distinct from native language structures, because of language-independent differences in the perceptibility of the [ti- tʃi] vs. the [si- ʃi] contrasts, it follows that they were motivated to demote *[ti] but not *[si]. Crucially, this explanation does not simply ascribe the pattern to universal grammar—in the form, perhaps, of a universally specified ranking of *[si] >> *[ti] (a ranking that would in fact be problematic given at least one language, a dialect of Fijian, that is reported to allow [si] but not [ti]). Rather, this account assumes that learners arrive at a particular grammar on the basis of the data to which they are exposed, but that their interpretation of the data is affected by universal factors rooted in perceptual salience.