

MARKEDNESS AND NON-CONCATENATIVE MORPHOLOGY

A COLLECTION OF PAPERS IN HONOR OF OUTI BAT-EL

Short introduction by NOAM FAUST and SI BERREBI

This volume groups papers in honor of Outi Bat-El, written by her colleagues and former students. One topic is common to most of these papers: markedness and non-concatenative morphology. This is an especially adequate theme for celebrating Outi Bat-El's work: paper after seminal paper, Outi takes a universal perspective in accounting for the cross-linguistically marked phenomenon of non-concatenative morphology, tying its seemingly exotic features with cross-linguistic tendencies. Her work on such topics as templatic morphology (in Semitic and beyond it), truncation, acronyms and blends is widely known and appreciated. Indeed, it is hard to overestimate Outi's contribution to the study of phonology and morphology in general, and Modern Hebrew phonology and morphology in particular.

Much of Outi's work concerns *the prosodic shape of linguistic objects*. It is argued that templatic shapes in Semitic result from universal pressures regarding size and morpheme alignment, which are also central in the formation of blends, clippings, acronyms and hypocoristics. The first three papers in this collection relate to this strand of Outi's research. **Ezer Rasin**, in a reply to Bat-El (2008), examines the phenomenon of syncope in Modern Hebrew. He argues that it is best explained with rule ordering, as opposed to the combination of constraints on prosody and paradigmatic uniformity

proposed by Bat-El. **David Gil** shows how ludlings are formed in two Indonesian languages using a prosodically defined, universally unmarked template. This template is slightly different in the two languages because it interacts with language-specific constraints. Finally, **Renate Raffelsiefen** provides an in-depth analysis of several cases of shortenings, highlighting the universal tendencies in their formation. The phenomena examined range from hypocoristics to abbreviations and acronyms. Importantly, the influence of orthography is factored in and formalized. It is proposed that Output-Output constraints operate on a surface phonemic level, as opposed to a phonetic or underlying representation.

Output-Output relations, which express the influence of one surface form on the other, occupy a central place in Outi's work. Her most influential work in this domain argues against the derivation of items in Semitic languages from the non-surface-true object of the consonantal root. From Bat-El (1994) onwards, Outi has been pushing the idea that one surface form can be derived from the other through the replacement of the vowels of the base, without passing through an unvocalized consonantal set. The theme of Output-Output relations runs through the next five papers in this chapter. **Roey Schneider and Evan-Gary Cohen** illustrate how avoidance of similarity between surface forms drives syncretism patterns in the case marking of Standard Arabic plural nouns. **Michael Becker** examines stress in Cairene Arabic, and argues that two cases of non-adherence to the general rules of the language can be accounted for by assuming faithfulness to the position of stress in the form that serves as a base of derivation. In a similar vein, **Lior Laks**'s contribution examines innovations in the formation of adjectives and verbs from each other, and claims that the patterns are best accounted for by factoring in the prosodic shapes of the bases of derivation (as opposed to extracting the root). **Faust & Berrebi** return to Bat-El's (2002) work on the new, truncated imperative of Modern Hebrew. Capitalizing on novel experimental results, it is claimed that the output of truncation is influenced by its base in an even more radical way than

identified in that by Bat-El: it allows for initial clusters which are banned elsewhere in the language. Finally, **Shmuel Bolozky** explores the productivity of concatenative vs. non-concatenative derivations, and shows that Semantic regularity - in a sense, an Output-Output requirement - plays an exceedingly central role in both.

Alongside her interests in the formalization of non-concatenative morphology, Outi Bat-El is also invested in the field of *language acquisition*. Her work on the acquisition of Modern Hebrew is innovative and much cited well beyond Semitic circles. It compares children from different backgrounds, with different starting conditions, with the general claim of innate markedness constraints being gradually demoted below faithfulness ones. The next two articles in the collection concern this domain. **Ruth Berman**'s contribution continues where Bolozky's stopped, and examines whether children exhibit a preference for concatenative (cross-linguistically unmarked) or non-concatenative (cross-linguistically marked) word formation. She shows that there is a preference for the marked pattern, and discusses why that might be. **Lyle Lustigman** then examines the acquisition of subject pronouns in children acquiring Modern Hebrew, and also finds interactions between the language-specific traits and cross-linguistic tendencies. Children, it is shown, first acquire subjects in configurations where these do not require agreement on a verb.

A recurrent issue in Semitic morphology is the *OCP effect* introduced in McCarthy (1981), whereby roots with identical adjacent consonants are ruled out. Bat-El (2006) shows how the effect can be derived without admitting the abstract root morpheme. The two papers in the next section are related to this issue. **Jean Lowenstamm** discusses verbs of the form QaQaT (with identical first and second Cs) in the Ethiosemitic language Chaha. At first sight, these verbs pose a problem, since they seem to derive from QQT roots. Lowenstamm proposes an alternative, whereby they are a result of the combination of conditions attested elsewhere in the language. **Iris Berent, Vered Vaknin-Nusbaum and Albert Galaburda** relate OCP violations to the behavior of

dyslectic individuals. These react differently from non-dyslectics to a discrimination task given *tapapa* and *papata* sequences. The authors interpret this finding as the compensation, on behalf of dyslectic individuals, for problems in phonetic perception through the use of phonological generalizations.

The tension between *phonetics and phonology* is also present in the last two papers in this collection. **Aviad Albert** examines the phonetics of initial clusters in Modern Hebrew and proposes a novel understanding of sonority based on pitch intelligibility, which can be read directly from the acoustics. **Charles Kisseberth** studies tone attenuation in Emakhua dialects, which exhibits characteristics typical of phonetic implementation. Kisseberth argues that nevertheless, it is phonological, not phonetic.

About half of the contributors above are Outi's ex-students, reflecting her exceptional qualities as a teacher. In the classroom, she is inspiring, thought-provoking and enthusiastic about students' ideas, thus actively drawing them to science, often by integrating them in her projects. Her mentorship provides a role model of maintaining students' independence on the one hand, and constantly providing challenges on the other. Outi's influence surpasses the strictly academic world: many of her former students went on to become speech-therapists, language teachers, psychologists. Most, if not all, look back on their experience as Outi's students as a positive, life-shaping period in their personal evolution.

To this extra-academic influence of Outi's one should add her commitment to share science with the public. In 2014, she founded with students from Tel-Aviv University the NGO "Keys" (*Maftexot* in Hebrew), with the goal of using tools from linguistics, mostly from phonology, to teach analytical thinking skills in elementary school. The resulting program ran until the outbreak of Covid-19, and had three cycles of graduates of the two-year program.¹ It was acclaimed by the school's staff as well as the students.

¹ Some of the materials and games were adapted to an online version. They can be found at

In all of her activities, Outi stands out as an exceptionally gentle, warm and non-judgmental person, who prefers the common ground to the battleground, the dialog to the sermon.

It is an honor for all of the authors of this volume to have participated in its creation.

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