Introduction

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The origin of this volume is the Workshop on Exceptionality in Phonology, which was held at the Universitat Autònoma de Barcelona the 27th of January 2015 as part of the 12th Old World Conference in Phonology, and which featured Kie Zuraw (UCLA) as keynote speaker. From the seven talks that were presented at the Workshop, six appear in this volume, and one more paper that was not presented at the Workshop has also been included. The papers presented in this monographic volume are not meant to cover the totality of theoretical approaches and research activities on the topic at hand, which is certainly a very broad topic, but to present up-to-date work by leading phonologists on a topic that is a long-debated problem for phonological theory.

The issue of exceptionality in phonology generally refers to the situation in which an otherwise robust linguistic generalization fails to apply to the entire lexicon. This kind of exceptionality is lexical and categorical, in that a pre-defined set of lexical items never undergo certain phonological processes that apply regularly to most items. Exceptional behavior can also be sensitive to the distinction between underived and derived environments, whether these are derived by virtue of the application of a phonological process or a morphological operation. It is a wellknown fact that certain phonological processes only apply in derived environments, which implies that those processes are blocked in underived monomorphemic words (see, among others, Kiparsky 1993, Anttila 2009, Burzio 2011). However, it is also true that some processes *fail* to apply precisely in (at least phonologically) derived environments, meaning that only derived environments are instances of an exceptional behavior (see Hall 2006, for instance). A different kind of exceptionality is revealed by phonological variation. It is not always the case that exceptional behavior is categorical, but sometimes a number of words behaves both regularly and exceptionally. Finally, exceptionality in phonology can also refer to exceptional, in the sense of typologically rare, sound inventories.

Since the early days of generative phonology, exceptions in phonology have basically been accounted for in two different ways that we can call *indexical* and *representational*. The first type of approach makes use of diacritics that index a particular exceptional item to a phonological rule or constraint. The second type

of approach, less often explored, encodes exceptionality directly into the lexical representation of the item by means of phonological structure that is different in some respect in regular items. Within Optimality Theory (OT), the indexical approach has taken one of two forms. One of them employs diacritics that specify exceptional items for a specific ranking of constraints that is different from the general ranking of the language, that is, co-phonologies selected by specific morphemes (Inkelas *et al.* 1997, Itô & Mester 1995, see Anttila 2002 for lexical items specified to select a particular ranking of unranked constraints). The other indexical approach has relied on lexically indexed constraints, which occupy a different position in the hierarchy with respect to the general, non-lexically indexed constraints from which they derive (Pater 2000). For a more extended discussion of different approaches to exceptionality in generative phonology, see Wolf (2011).

In this volume, the lexically indexed constraint approach is taken by Baković, Moore-Cantwell & Pater, and Rysling. Baković's paper on "Exceptionality in Spanish stress" shows that taking the stem as the domain for stress assignment in Spanish allows for a straightforward analysis of exceptional stress patterns by invoking the lexically indexed constraint Non-FINALITY. In Moore-Cantwell & Pater's paper on "Gradient exceptionality in Maximum Entropy Grammar with lexically specific constraints", it is shown that only a probabilistic grammar that incorporates lexically indexed constraints can model successfully both gradient productivity in nonce words, which depends on the number of exceptions to a phonological generalization, and the stable pronunciation of existing words in a language. Finally, in "Polish yers revisited", Rysling relies on lexically indexed constraints to block vowel-zero alternations in Polish and supports her formalization on the basis of corpus statistics. Zuraw's paper is an investigation of "Polarized variation", that is, scenarios of exceptionality in which there is a small number of items that behave variably as both regular and exceptional items, as opposed to scenarios in which most of the items behave variably. By means of computer simulations, Zuraw shows that polarized variation in fact results from the existence of variation between two categorical outcomes.

Exceptionality as evidence for serial versus parallel models of OT is addressed in Mascaró's paper on "Morphological exceptions to vowel reduction in Central Catalan and the problem of the missing base". By exploring the underapplication pattern of vowel reduction in Catalan in compound structures whose first component lacks a related base, Mascaró shows that internal constituent structure is necessary even under noncompositional semantics, and that only Stratal OT, as opposed to output-output constraints, can handle such cases of underapplication of vowel reduction. Rebrus & Szigetvári's paper on "Exceptions to harmonic uniformity" also deals with the relation between morphological constituent structure and phonological exceptionality. In this paper, Rebrus & Szigetvári describe a case of blocking of vowel harmony in Hungarian that is only found in diminutive forms, giving empirical evidence for the existence of morphologically derived environment blocking. In a different vein, Piñeros's paper on "Exceptional nasalstop inventories" shows that the shape of nasal inventories in languages of the world is the result of conflicting forces on place features: ease of production, ease of perception, and dispersion.

The papers presented in this volume range from accurate descriptions of phenomena of particular languages to technically accurate OT analyses that build on theoretically sound concepts, as well as work on computational modeling of gradient productivity and patterns of variation. We are confident that this volume provides a state-of-the-art update of studies on exceptionality in phonology and hope that it inspires others to further explore the nature of exceptions in phonology.

References

- Anttila, Arto. 2002. Morphologically conditioned phonological alternations. *Natural Language & Linguistic Theory* 20: 1-42.
- Anttila, Arto. 2009. Derived environment effects in colloquial Helsinki Finnish. In Kristin Hanson & Sharon Inkelas (eds.). *The nature of the word: Studies in honor* of Paul Kiparsky, 433-460. Cambridge & London: The MIT Press.
- Burzio, Luigi. 2011. Derived environment effects. In van Oostendorp, Marc; Ewen, Colin J.; Hume, Elizabeth & Rice, Keren (eds.). *The Blackwell Companion to Phonology*, 2089-2114. Wiley-Blackwell.
- Hall, Tracy A. 2006. Derived environment blocking effects in Optimality Theory. *Natural Language & Linguistic Theory* 24: 803-856.
- Inkelas, Sharon; Orgun, Orhan & Zoll, Cheryl. 1997. The implications of lexical exceptions for the nature of grammar. In Iggy Roca (ed.). *Derivations and Constraints in Phonology*, 393- 418. New York: Oxford University Press.
- Itô, Junko & Mester, Armin. 1995. The core-periphery structure in the lexicon and constraints on re-ranking. In Beckman, Jill; W. Dickey, Laura & Urbanczyk, Suzanne (eds.). *Papers in Optimality Theory*, 181-210. GLSA: Amherst.
- Kiparsky, Paul. 1993. Blocking in non-derived environments. In Hargus, Sharon & Kaisse, Ellen M. (eds.). *Studies in Lexical Phonology*, 277-313. San Diego: Academic Press.
- Pater, Joe. 1994. Against the underlying specification of an 'exceptional' English stress pattern. In Dyck, Carrie (ed.). *Toronto Working Papers in Linguistics* 13: 95-121.
- Pater, Joe. 2000. Nonuniformity in English stress: The role of ranked and lexically specific constraints. *Phonology* 17: 237-274.
- Wolf, Matthew. 2011. Exceptionality. In van Oostendorp, Marc; Ewen, Colin J.; Hume, Elizabeth & Rice, Keren (eds.). *The Blackwell Companion to Phonology*, 2538-2559. Wiley-Blackwell.