

# **Artificial/peripheral structures: What can they tell us about the (morpho)phonology of natural languages**

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Keywords: artificial language learning, nonce words, language periphery, constructed languages, morphophonology (morphology-phonology interface)

Linguists' endeavor to model speakers' internal grammatical knowledge is often hampered by the opacity of the linguistic data. This opacity, which "blurs" the underlying structures/rules/processes that may be responsible for a certain surface form, is usually the outcome of a wide range of extra-grammatical factors (e.g. lexical frequency, pragmatic context, diachrony) that exert a significant effect on the grammatical system, thus making its outputs less predictable and less transparent.

In order to avoid this interference and get a clearer picture of the (morpho)phonological biases that guide speakers' behavior, a great body of phonological research has shifted its focus from "conventional" data (i.e. actual words well-established in the lexicon of a language), which, more often than not, have undergone some kind of extra-grammatical influence, to structures that could provide direct insight into speakers' internal grammars. These structures fall into three main categories:

- a) Artificial structures that are developed by researchers themselves and are used as experimental material to elicit speakers' response to new data. The idea is that when speakers are asked to process pseudowords or pseudostems they have never encountered before, they access directly their grammatical knowledge without being influenced by any extra-grammatical variable. The goal of presenting the speakers with these nonce words is usually to test whether they are able to apply (morpho)phonological rules (that are taken to be part of their grammar) to novel forms (e.g. Berko 1958; Bybee & Moder 1983; Prasada & Pinker 1993; Albright & Hayes 2003; Becker et al. 2017; Ahyad & Becker 2020) or whether they are able to identify systematic patterns in the data and acquire artificial mini-grammars (e.g. Pycha et al. 2003; Peperkamp et al. 2006; White 2014; Finley 2017; White et al. 2018; Martin & Peperkamp 2020).
- b) Peripheral structures that are often used by specific groups of speakers and are not part of the standard lexicon of a language. The research in this field has focused, among others, on blends (e.g. Bat-El & Cohen 2012; Moreton et al. 2017; Schoenfeld et al. 2019), truncations (e.g. Piñeros 2000; Alber & Arndt-Lappe 2012), binomials (e.g. Benor & Levy 2006; Ryan 2019) and language games (e.g. Vaux 2011; Krämer & Vogt 2018). Given that, in most of these cases, speakers do not act just as language users but also as language "designers", these structures offer a direct insight into speakers' biases and intuitions.
- c) Constructed languages (con-langs) and names that have been developed to serve practical (e.g. Esperanto, van Oostendorp 1999) or artistic needs (e.g. fictional languages such as

Klingon and Dothraki, Destruel 2016; Pokémon names, Kawahara et al. 2018). Like peripheral structures, they are the product of speakers' linguistic innovation and therefore can provide a window to what drives speakers' choices.

The proposed workshop aims at bringing together scholars working on the (morpho)phonology of all these different kinds of artificial/peripheral formations. Our objective is to provide a stimulating environment to share related work and expertise, exchange ideas, and discuss the current status and the future prospects of the role of artificial and peripheral structures in linguistic research. The expected outcome will be a state-of-the-art exploration of the field that will advance our knowledge on language periphery and will highlight the importance of nonce words and artificial grammars as research tools.

More specifically, the workshop plans to address (but is not limited to) the following research questions:

1. Why is it important to include artificial/peripheral formations in the study of language and, specifically, in phonological research?

The workshop is anticipated to stress the significance of artificial and peripheral structures, not only as a flourishing field of study but also as a valuable tool in research methodology. These structures do not just shed light on the building blocks that comprise speakers' internal grammars, but also provide information about the productivity and the "strength" of the internalized rules and representations. Furthermore, artificial experimental material (nonce words and artificial grammars) allows researchers to manipulate the linguistic input the subjects are exposed to in a controlled fashion.

2. How do artificial/peripheral formations help us deepen our understanding of how natural languages work?

The contributions in the workshop are expected to provide empirical and experimental evidence that will allow us to draw important generalizations and conclusions about how language is represented and processed in the human mind. For example, some of the papers on artificial language learning are anticipated to offer new insights on the well-known debate as to whether the emergence of certain phonological phenomena is driven by phonetic (channel bias) or cognitive (analytic bias) factors (Moreton 2008).

3. How should artificial experimental material be designed in order to accurately reveal speakers' intuitions?

There are a lot of different factors one should consider when designing nonce words for experimental purposes. For instance, one of these factors is the effect of the L1 lexicon. Nonce words should not closely resemble any actual word in the lexicon of the subjects' L1, but at the same time they also need to sound natural. In an experiment where all subjects have the same L1, techniques to achieve this fine balance are possible (e.g. Revithiadou & Lengeris 2016), but this requirement is more challenging to be met in cross-linguistic studies that aim at revealing universal biases (e.g. White et al. 2018).

Our provisional list of participants includes renowned scholars with significant work on this field, as well as young researchers that will be given the opportunity to contribute with their

own fresh insights. Their contributions span a wide range of – typologically diverse – languages (Cantonese, English, Flemish, French, German, Greek, Hebrew, Italian, Norwegian, Esperanto), topics (e.g. blends, truncation, exceptional colloquial patterns, binomials, expletive affixation, contact-induced hybrid grammars, nonce words, artificial language learning, constructed languages), grammatical structures/phenomena (e.g. segment inventory, word-final devoicing, stress, tone, prosodic structure, metrical parsing, headedness, inflectional paradigms, word order), and research methods (e.g. theoretical analysis, diachronic study, corpus analysis, experimental procedures, computational models, crowdsourcing). We are confident that this diverse list of contributions, which is expected to be enriched during the third call for papers, will result in a highly successful and fruitful workshop.

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