

# Niches in morphology

1-day workshop

Organizers: Anja Hasse<sup>1</sup>, Rik van Gijn<sup>2</sup>, Tania Paciaroni<sup>2</sup>, Sandro Bachmann<sup>2</sup>  
(<sup>1</sup>University of Surrey, <sup>2</sup>University of Zurich)

As a general principle for all organized systems, situations of competition for a particular niche are expected to be resolved either by elimination or adaptation of one or more of the competing elements (Gause 1934). As organized systems where everything is connected, languages can be assumed to be no exception to this principle. And indeed it has been claimed that language change is partly driven or shaped by competition resolution or synonymy avoidance (see e.g. Carstairs-McCarthy 2010 on the evolution of morphology). Exploring the role of competition in language change in detail, Aronoff (2016) proposes to apply the notion of “niche” to linguistic systems to explain distributions of rival expressions in languages. A clear example of adaptation in language is the distribution of the affixes *-ic* and *-ical* in English, which appear to be completely synonymous, but occupy different morphological niches: While *-ic* is generally preferred, forms in *-ical* are only derived from a subset of stems ending in *-ology* (cf. Lindsay & Aronoff 2013).

Aronoff’s proposal interestingly suggests that competition and its resolution in language is an instantiation of a much more general principle, which opens up an interdisciplinary dialogue about competition resolution across complex systems. Moreover, it provides a framework that can bring together phenomena not normally considered together. Aronoff (2016), for instance, discusses allomorphy, ranging from resolved (complementary distributed) allomorphy to situations of (near-)equilibrium such as overabundance (cf. Thornton 2011), but he also addresses limits to defaults in inflection classes (cf. e.g. Carstairs-McCarthy 1994).

Conceivably, the niche metaphor can be extended to many more phenomena. For example, Walsh (2012) describes a phenomenon in the Australian language Murrinhpatha that might be termed templatic, or slot competition, where there is a particular slot on the verb that can be filled either by a direct object bound pronoun or by an indirect bound pronoun. Only when there is no direct object, or when the direct object has zero exponence can the indirect object appear in that slot.

In this workshop, we propose to explore the extent to which the notion of niche can be extended to linguistics (and therefore the extent to which an interdisciplinary dialogue becomes feasible and fruitful). In order to keep the range of phenomena within reasonable boundaries, we focus on morphological phenomena, and in particular on niches provided by the language system (thus excluding sociocultural niches such as register). Potential phenomena and topics linked to the notion of niche include (but are not limited to):

### *Rivalry between derivational affixes*

Bases may have several derivational operations available to them, which seem to be rivalling in the sense that they yield similar results. This situation may point to genuine rivalry or, on closer inspection, they may be occupying different niches, based on e.g. selection restrictions of the base or of the morphological markers, or on properties of the resulting derivate.

### *Allomorphy in inflectional systems*

It is a well-established fact that inflectional systems can be organized in classes, effectively creating a situation of lexeme-based allomorphy. Less is known about the elements that contribute to the rise, fall, and maintenance of these classes. Diachronic (corpus) research can shed light on these issues, and achieve a fuller picture of the niches constituted by inflection classes.

### *Productive niches*

Niches may also provide an environment for the survival of morphological patterns that are otherwise absent or lost in a language, such as partial agreement. These types of niches may be called productive niches, which can help understand the tenacity of lexically limited morphological (sub)systems.

### *Slot competition*

As has been discussed above, a different type of competition is slot competition. Apart from the type exemplified by Murrinhpatha, one can think for instance of so-called hierarchical alignment systems, where the competition between person markers for a particular templatic slot is resolved systematically, generally on the basis of a hierarchy of person value and/or syntactic role.

### *Psycholinguistic factors in competition resolution*

Beyond the purely linguistic definition of niches lies the question of the psychological reality of niches. A different set of questions therefore relate to psycholinguistic factors involved in the resolution of competition, e.g. frequency of use, the number of members in a particular morphological class, the degree of similarity between the items in a morphological class.

### *Structural parsing competition*

Morphologically complex words may show structural ambiguity in the sense that they can have more than one structural interpretation, which may be regarded as a form of parsing competition. One possible reason that these ambiguities persist may be because they are associated with different paths of semantic relations in the mental lexicon and therefore not in direct competition.

The topics described above can be approached in many different ways. For the workshop we propose to focus on four broad approaches (but contributors should not feel limited by them):

- Explicit comparisons with ecological niches, addressing questions such as what would be the linguistic equivalent of environmental factors, what would a species mean in linguistics, to what extent do we see interaction between species and the environmental factors that is typical of ecological niches (e.g. depletion of the resources by growth rates that are too fast)?
- In-depth analyses of phenomena, addressing the nature of niches and their explanatory value for the understanding of the phenomenon in question.
- Comparative (typological, areal, genealogical) perspectives on niches, addressing questions regarding the genealogical/areal (in)stability of niches, borrowability of niches, common versus uncommon niches.
- Corpus studies of niches. Competing exponents of a feature value (or a bundle of feature values) are ideally in complementary distribution. Corpus studies, however, may show that distributions are no more than statistical tendencies – or even very different than is claimed (see e.g. Lindsay & Aronoff 2013).

#### References

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