

**The Determinism Assumption in Morphology**  
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Many models of morphology are essentially deterministic. That is, computation of the morphological realization yields one outcome. Recent advances have accepted the challenge that non-deterministic morphology poses (see Blevins, Milin and Ramscar 2017; Kapatsinski 2022), but determinism still pervades much reasoning about both derivational and inflectional morphology. For word-formation, different processes are associated with different functions or meanings, rather than being treated as manifestations of the same underlying conceptual structure with more than one outcome. For inflection, the assumption appears to be even stronger, namely that where we have to deal with particular inflectional features there is by default a biunique mapping between form and function (but with well-known violations of this such as syncretism). The determinism assumption for morphology also forms an important contrast with conceptions of syntax, where the structures described, in whatever form or framework, can involve multiple constituent types for the same categorial distinction.

Among the multiple challenges for deterministic approaches, overabundance and defectivity are prominent examples of the challenge to the Determinism Assumption, although by no means the only ones. The former (Thornton 2011) represents a non-deterministic outcome where multiple forms serve what appears to be a single function (e.g., Meakins and Wilmoth 2020), and the latter represents the failure to converge on a mutually agreed outcome for the language community (Sims 2015), resulting in avoidance or the production of a variety of forms that do not enjoy broad acceptability (Nikolaev and Bermel 2022). However, overabundance and defectivity are only part of a bigger story. They can be construed as emerging properties of uncertainty: either of outcome, as per Kapatsinski (2010), or more generally in the underlying system, as per Blevins, Ackerman and Malouf (2016), forming part of a broader spectrum of phenomena that fall within the purview of morphological non-determinism. These include variable morph ordering, in particular where it occurs in the same paradigm (see, for instance, Crysmann and Bonami 2016, Riese et al 2010 on variable order in Mari). The choice between periphrasis and synthesis (Sims 2009) is another phenomenon that raises issues for the Determinism Assumption, as well as apparently unmotivated stress variation (as demonstrated to be widespread in Russian by Ukiyah 1999, 2000, 2003).

This workshop is an invitation to researchers of all persuasions interested in interrogating this Determinism Assumption and what this might tell us about morphology in general and its relationship with other elements of language. In doing this we welcome contributions that address: the broader typological context of non-deterministic inflectional morphology; the relationship between non-deterministic outcomes and frequency; non-determinism's relationship to the structure of the lexicon; its sociolinguistic aspects (intersection with age, education, region or gender); its relationship to language acquisition and attrition; its cognitive aspects; our attempts to model non-deterministic outcomes computationally; and our attempts to represent them in prescriptive or norm-creating works.

Key research questions for the workshop include, but are not limited to, the following:

- Is there an underlying theoretical unity to the set of morphological phenomena that involve non-determinism or are they merely manifestations of a diverse range of factors that shape morphological systems?
- To what extent do the manifestations of non-determinism in morphology change over the life-cycle, according to age, region, educational background or gender?
- Is non-determinism to be seen as a challenge in child language acquisition, or a natural consequence of the world, linguistic and other, in which humans grow up?
- Is it correct to consider that linguistic authorities (such as language institutes) contribute to a deterministic view of standard morphological systems?
- What types of methods and models (computational, corpus-based or experimental) should we apply in the study of non-deterministic morphological phenomena?

A major contribution of the workshop will be to expand on our understanding of non-determinism as it arises from corpus data; appears in experimental data; and can be reflected in computational approaches as well as in language planning.

In **experimental studies**, non-determinism can be interpreted as reflecting a mediation between individual speaker variation, or alternatively as an outcome that individual speakers/hearers can entertain as a viable option without problems. This tension is visible most clearly in a psycholinguistic approach to non-deterministic features, found both in adult and child language. On one account, each speaker can have a deterministic outcome in his/her idiolect, with non-determinism being simply the by-product of differences between speakers, and therefore an issue for reception but not for production. On a second account, at least some subset of speakers in a language have non-deterministic systems, pushing non-determinism to the centre of concerns for production as well as for reception. In corpus and experimental work, the existence of more available forms of a word has been shown, paradoxically, to facilitate quicker processing, which gives non-deterministic paradigm cells, with their greater number of potential realisations, an advantage (Lõo et al. 2018; Lõo et al. 2022).

**Sociolinguistic approaches** can highlight the way certain outcomes vary across different regions, educational levels of speakers, age and gender. In some instances this argues for the first account above, where variation only occurs on a societal rather than an individual level, but in other situations it is . On a larger level, studying **standardized languages** that have a significant educational, publishing and regulatory apparatus may display different tendencies from non-standardized languages, which often evince a greater variety of outcomes without any visible communicative barriers for participants. Within standardized languages, there are also a variety of approaches, with some prescribing the possibility of non-deterministic outcomes in the form of sanctioned variation, while others attempt to forestall non-deterministic outcomes by decreeing that certain cells shall remain unfilled.

**Corpus accounts** are significantly affected by the extent to which non-deterministic outcomes surface in the source data, which is affected by corpus size and composition (Kovářiková et al. 2020; Nikolaev and Bermel forthc.). Contributions are encouraged that explore the interplay of these factors in developing robust methods for work on non-deterministic cells. The workshop also welcomes a wide range of **computational approaches** that address the

Determinism Assumption in morphology, from generative rule-based descriptions to empirical supervised or unsupervised model construction.

The proposed workshop includes researchers at all levels from PhD students through early career researchers to more senior academics whose work already forms a reference point in the field. With representation from three continents and an even greater variety of languages, countries and institutions, the workshop will offer a diverse range of perspectives on the topic informed by multiple research frameworks.

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