

Chapter 22

Phonology

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1 Introduction: PHONOLOGY in the HPSG sign

The PHONOLOGY attribute in (Pollard & Sag 1987) and (Pollard & Sag 1994):

- rudimentary PHON value
- basic Phonology Principle constrained by Linear Precedence rules: corresponds to simple terminal spell-out of the phrase structure tree
- “Phonology-Free Syntax” (Miller et al. 1997): PHON information inaccessible for selection via SYNSEM

There has been relatively little work within HPSG on phonological representation and the analysis of phonological phenomena. Most references to the PHON attribute use it simply as a lexical identifier, or they are dealing with phenomena at the phonology-syntax interface (e.g. constituent order, ellipsis). For such applications, the actual content of the PHON value is unimportant. These topics are covered in other chapters.

2 Phonological representations in HPSG

Proposals for the detailed content of PHON values:

- encoding of phonological constituents (Bird & Klein 1994; Klein 2000; Höhle 1999)



- syllable structure [Tseng \(2008\)](#)
- metrical phonology ([Klein 2000](#); [Bonami & Delais-Roussarie 2006](#))

3 Phonological analysis in HPSG

- principles of constraint-based phonology vs derivational phonology ([Bird & Klein 1994](#)): compositionality, monotonicity
- compositional construction of prosodic structure in parallel with phrase structure ([Klein 2000](#))

But HPSG is formally compatible with many approaches, and there is as yet no emerging consensus among practitioners.

- Finite state phonology ([Bird 1992](#); [1995](#))
- need for abstract underlying forms ([Skwarski 2009](#)); phonologically empty categories
- OT in HPSG ([Orgun 1996](#))

4 Specific phenomena and case studies

- shape conditions ([Asudeh & Klein 2002](#))
- French ([Tseng 2003](#); [Bonami et al. 2004](#))
- phonological idioms [already covered in Manfred's chapter]
- ...

Abbreviations

Acknowledgements

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