

# Chapter 1

## Phonology

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### 1 Introduction: PHONOLOGY in the HPSG sign

The PHONOLOGY attribute in (ps ) and (ps2 ):

- 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” (MPZ97a-u-platte ): 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 (BK94b; Klein2000a; Hoehle99a-u )



- syllable structure TsengHPSG08
- metrical phonology (Klein00-ACL; BonamiDelais06 )

### 3 Phonological analysis in HPSG

- principles of constraint-based phonology vs derivational phonology (BK94b ): compositionality, monotonicity
- compositional construction of prosodic structure in parallel with phrase structure (Klein2000a )

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

- Finite state phonology (Bird92; Bird95 )
- need for abstract underlying forms (Skwarski09 ); phonologically empty categories
- OT in HPSG (Orgun96 )

### 4 Specific phenomena and case studies

- shape conditions (AsudehKlein01 )
- French (TsengLiaison; BBT04 )
- phonological idioms [already covered in Manfred's chapter]
- ...