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Prosodic Phonology

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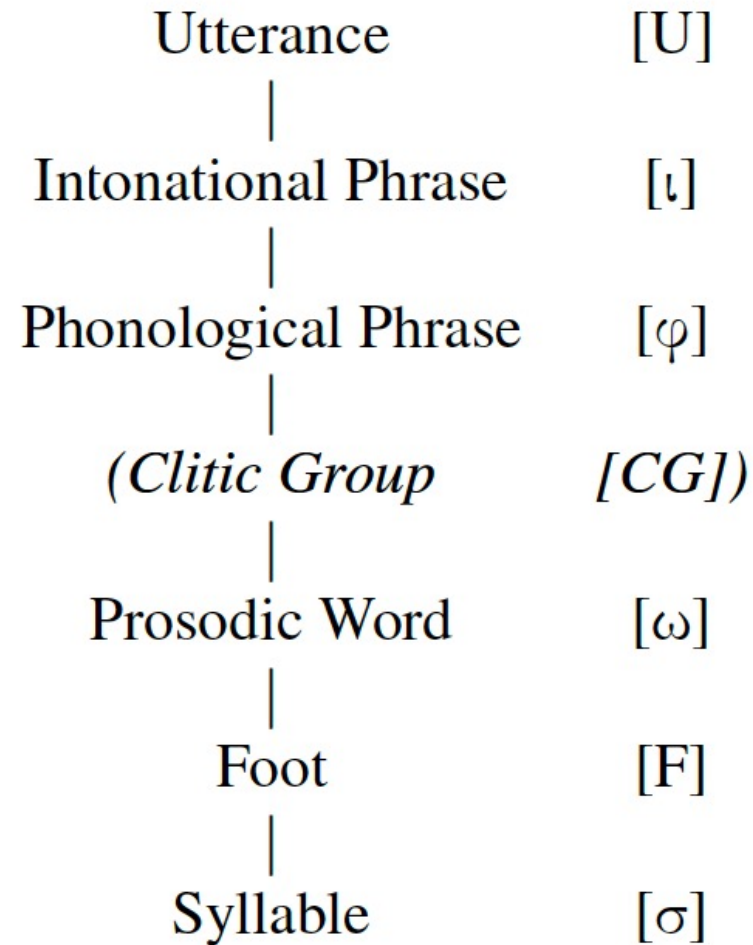
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Prosodic Phonology

- Prosodic phonology concerns itself with phonological constituent structure and provides an account of the organisation of phonological structures above the segmental level.
- Phonological representation is constructed from—but not isomorphic with—its morphosyntactic representation
 - cf. Inkelas and Zec (1990); Selkirk (1986, 1996)
- Hierarchically organised prosodic constituents generated by the phonological module, with each unit functioning as the domain of particular phonological rules and constraints

Prosodic Hierarchy



After Nespor & Vogel (1989)

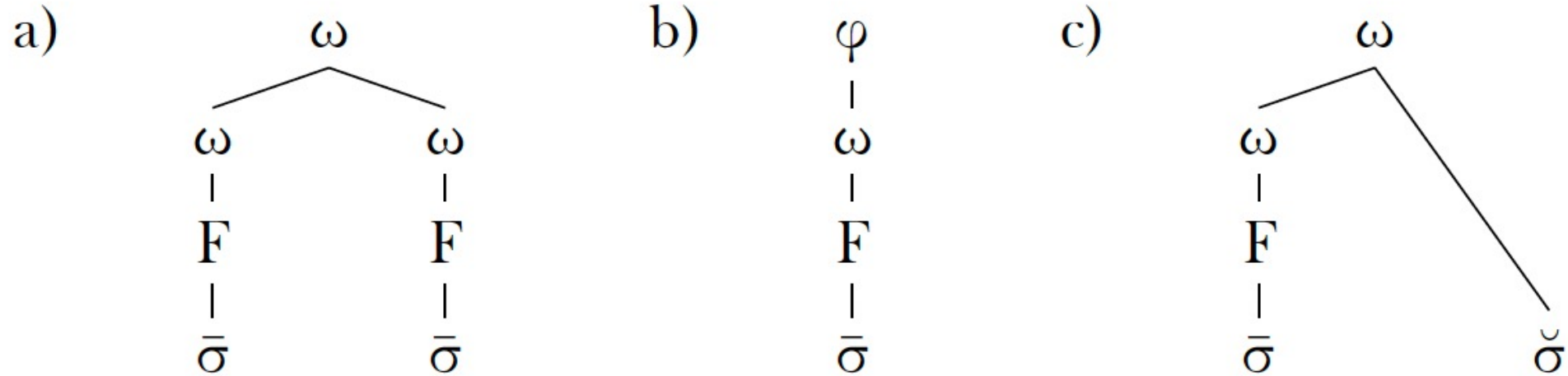
Prosodic Hierarchy

- Each unit dominates those immediately below
- The ‘head’ (strong branch) of a constituent has greater prominence than the ‘dependent’ (weak branch)
e.g. ‘strong’ σ s are the heads of Fs & the most prominent F carries main stress.
- The Clitic Group is superfluous and rejected by standard theory
cf. Wheeldon & Lahiri 1997; Selkirk 1986; and Itô and Mester 2009
- For approaches to phrasing at lower levels of the hierarchy, see Lahiri & Plank (2022)

Prosodic Hierarchy

- Strict Layer Hypothesis: no recursivity
- Principle of ‘exhaustivity’: constituent n may only dominate $n-1$
Selkirk 1984; Nespor & Vogel 1986
- However, the need for recursion within the prosodic hierarchy is increasingly recognised
cf. Gussenhoven 1986; Zec & Inkelas 1991; Itô & Mester [1992]/2003; McCarthy 1993; Booij 1995; Selkirk 1996; Wiese 2000; Lahiri & Plank 2010 (amongst others)
- Exceptions to exhaustivity are similarly well-documented
cf. Itô and Mester [1992]/2003; Kager 1989; Selkirk 1996, 190
- BUT: lower constituents can’t dominate higher ones, e.g. $*(\omega \omega)_F$

Prosodic Hierarchy



a) *blackbird* e.g. $((\text{blæk})_\omega(\text{bɜ:d})_\omega)_\omega$

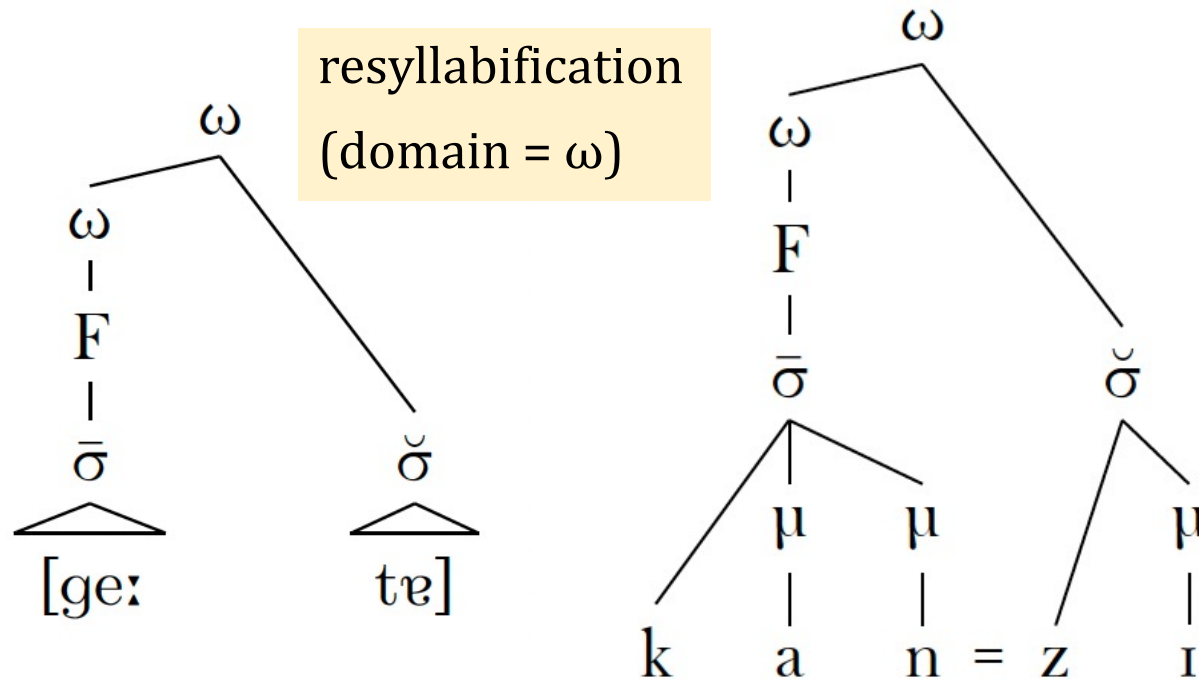
cf. Booij 1995, 2002; Wheeldon & Lahiri 1997; Wynne et al. 2018

b) *bird* e.g. $(\text{bɜ:d})_\omega$

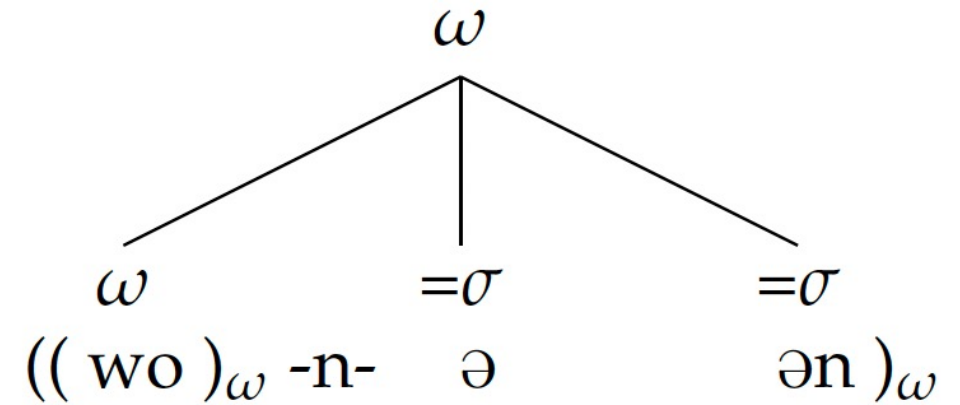
c) Selkirk's (1996) 'affixal clitic' e.g. $((\text{kan})_\omega=\text{zə})_\omega$ 'can=she'

see also Itô and Mester [1992]/2003; Wheeldon and Lahiri 1997; Lahiri and Plank 2010; Bögel 2021; Booth 2023

Prosodic Hierarchy



(Optional) Swabian *n*-insertion
 Can only occur between a ω and a preceding or following clitic



go-3SG.PRES=he.NOM
 'does he go [...]'

can-3SG.PRES=she.NOM
 'can she [...]'

where-n=I.NOM=he.ACC
 'where I [...] him'

Prosodic Hierarchy

- Structures such as $(\sigma \omega)_\varphi$ —where a constituent is dominated by $n+3$, i.e. a ‘free clitic’ in Selkirk’s (1996) terminology—have also been proposed to account for certain clitic structures

cf. Hall 1999; Kabak and Schiering 2006

- However, it is unclear that this is necessary, as Itô and Mester (2009) argue

References I

- Bögel, Tina. 2021. Function words at the interface: A two-tier approach. *Languages* 6: 197.
- Booij, Geert. 1995. *The phonology of Dutch*. Oxford: Clarendon Press.
- Booij, Geert. 2002. *The morphology of Dutch*. Oxford: Oxford University Press.
- Booth, Joshua. 2023. *Prosody in the parchment: Manuscript evidence for the pertinacity of syllable, foot and word-prosodic structures in the mediaeval German grammar*. Thesis (DPhil), University of Oxford, Oxford.
- Gussenhoven, Carlos. 1986. Over de fonologie van Nederlandse clitica. *Spektator* 15: 180–200.
- Hall, Tracy Alan. 1999. 'Phonotactics and the prosodic structure of German function words', in T. Alan Hall & Ursula Kleinhenz (eds.). *Studies on the Phonological Word*. Amsterdam: J. Benjamins. 99–132.
- Inkelas, Sharon, and Draga Zec. 1990. *The phonology-syntax connection*. Chicago: University of Chicago Press.
- Itô, Junko, and Armin Mester. [1992]/2003. 'Weak Layering and word binarity', in Takeru Honma, Masao Okasaki, Toshiyuki Tabata & Shin-ichi Tanaka (eds.), *A new century of phonology and phonological theory: A festschrift for Professor Shosuke Haraguchi on the occasion of his 60th birthday*. Tokyo: Kaitakusha. 26–65.
- Itô, Junko, and Armin Mester. 2009. 'The extended prosodic word', in Janet Grijzenhout & Baris Kabak (eds.), *Phonological domains: Universals and deviations*. Berlin: De Gruyter Mouton. 135–194.
- Kabak, Baris, and René Schiering. 2006. The phonology and morphology of function word contractions in German. *Journal of Comparative Germanic Linguistics* 9: 53–99.
- Kager, René. 1989. *A metrical theory of stress and destressing in English and Dutch*. Dordrecht: Foris.
- Lahiri, Aditi, and Frans Plank. 2010. Phonological phrasing in Germanic: The judgement of history, confirmed through experiment. *Transactions of the Philological Society* 108: 370–398.
- Lahiri, Aditi, and Frans Plank. 2022. 'Phonological phrasing: Approaches to grouping at lower levels of the prosodic hierarchy', in B. Elan Dresher & Harry van der Hulst (eds.), *The Oxford History of Phonology*. Oxford: Oxford University Press. 134–162.
- McCarthy, John. 1993. A case of surface constraint violation. *Canadian Journal of Linguistics* 16: 169–195.

References II

- Nespor, Marina, and Irene Vogel. 1986. *Prosodic phonology*. Dordrecht: Foris.
- Selkirk, Elisabeth. 1986. On derived domains in sentence phonology. *Phonology Yearbook* 3: 371–405.
- Selkirk, Elisabeth. 1996. 'The prosodic structure of function words', in James L. Morgan & Katherine Demuth (eds.), *Signal to syntax: Prosodic bootstrapping from speech to grammar in early acquisition*. Mahwah: Lawrence Erlbaum Associates. 187–214.
- Wheeldon, Linda, and Aditi Lahiri. 1997. Prosodic units in speech production. *Journal of Memory and Language* 37: 356–381.
- Wheeldon, Linda, and Aditi Lahiri. 2002. The minimal unit of phonological encoding: Prosodic or lexical word. *Cognition* 85: B31–B41.
- Wiese, Richard. 2000. *The Phonology of German*. Oxford: Clarendon.
- Wynne, Hilary S. Z., Linda Wheeldon, and Aditi Lahiri. 2018. Compounds, phrases and clitics in connected speech. *Journal of Memory and Language* 98: 45–58.
- Zec, Draga, and Sharon Inkelas. 1991. 'The place of clitics in the prosodic hierarchy', in D. Bates (ed.), *Proceedings of the 10th West Coast Conference on Formal Linguistics*. Stanford: Stanford Linguistics Association. 505–519.

	Noun	Def art + noun	Indef art + noun	Gloss
1.	bá:k	arbá:k	óba:k	'boat'
2.	mérx	arvérx	óverx	'girl'
3.	gó:s	arhó:s	óho:s	'mole'
4.	tí:	ãntí:	únti:	'house'
5.	ká:s	arhá:s	óha:s	'cat'
6.	kí:	arhí:	óhi:	'dog'
7.	ká:dɔr	argá:dɔr	ɔgá:dɔr	'chair'
8.	bá:bik	arbá:bik	ɔbá:bik	'baby'
9.	lá:bus	alá:bus	ɔlá:bus	'bird'
10.	baláf:ɛn	arvaláf:ɛn	ɔvaláf:ɛn	'butterfly'
11.	bolót:ɛn	arvolót:ɛn	ɔvolót:ɛn	'ball'
12.	lɔgó:dɛn	alɔgó:dɛn	ɔlɔgó:dɛn	'mouse'