

On pronouns and their prosodic phrasing in German

Frank Kügler

IfL Phonetik, Universität zu Köln

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Overview

- In general, prosodic light elements are unaccented.
- Pronouns are prosodic light elements.
- What are the conditions for phrasing of pronouns?
- A pitch accent represents a head of a phonological phrase.
- Optional accentuation of pronouns in German.
- Analysis in terms of minor phrase stress (Kratzer & Selkirk 2007) or recursive prosodic phrasing.
- Pitch accents on pronouns usually bear less prominent accents than obligatory sentence accents.

Background

Pronouns and prosodic phrasing (cf. Selkirk 1996)

- Fundamental division between lexical words and function words.
- Prosodic characteristics:

	Function words	Lexical words
English	stressless “weak” form, or stressed “strong” form	stressed and unreduced form
Croatian	no high tone accent	lexical high tone accent
Japanese	may lose its high tone word accent	high tone word accent

Background

- “Options in the surface prosodization of function words simply reflect the manner in which function words are organized into *prosodic words* in the sentence.”

(Selkirk 1996:188)

(1) Prosodic word: $(\text{fnc})_{\omega} (\text{lex})_{\omega})_{\varphi}$
Prosodic clitic: $(\text{fnc } (\text{lex})_{\omega})_{\varphi} / ((\text{fnc lex})_{\omega})_{\varphi} / ((\text{fnc } (\text{lex})_{\omega})_{\omega})_{\varphi}$

- Selkirk’s claim:

The type of prosodic representation of a function word in a given language depends on the interaction of (well-attested) constraints on prosodic structure formation.

■ Background

- Prosodic structure formation of function words in Serbian depends on its size (Zec 2002:214):
 - Disyllabic function words receive ω -status, monosyllabic function words not.
- Strong and weak pronouns have different prosodic effects:
 - Rightward displacement of certain kinds of pronouns in Irish (Bennett, Elfner & McCloskey 2016).
 - Weak pronouns in the Austronesian language Chamorro occur right after the predicate, i.e. after the leftmost phonological phrase of their intonational phrase (Chung 2003).
- Prosodic realization of function words varies according to Selkirk's (1996) typology.

Background

Prosodic structure formation in German

(Féry & Samek-Lodovici 2006, Truckenbrodt 2006, Féry 2011):

- Formation of prosodic phrases (φ -phrase and ι -phrase) – based on universal syntax-phonology interface constraints (cf. Selkirk 2011).
- Assignment of sentence accents on the head of a φ -phrase.
- One nuclear accent within ι -phrase (main accent of the sentence).

- (2) a. $[_{CP} [_{NP} \text{MARIA}_1] \text{ hat } [_{TP} t_1 [_{VP} [_{VP} [_{NP} \text{ein BUCH}] \text{ gekauft }]]]]]$
 b. $((\text{MARIA})_{\varphi} (\text{hat } (\text{ein BUCH})_{\varphi} \text{ gekauft})_{\varphi})_{\iota}$

- (3) $(((x)_{\varphi} ((x)_{\varphi})_{\varphi})_{\omega} (x)_{\omega} (x)_{\omega})_{\iota}$
 MARIA hat ein BUCH gekauft.

(Adapted from Féry 2011:1907)

■ Background

Prosodic structure formation in German

(Féry & Samek-Lodovici 2006, Truckenbrodt 2006, Féry 2011):

- Pronouns in German do not carry sentence stress:
 - Pronouns fail to be phrased as a φ -phrase (Kratzer & Selkirk 2007)

(4) (MARIA) _{φ} (hat *was* geKAUFT) _{φ}

- Presence of object pronoun may lead to alternation in verb accentuation (Truckenbrodt 2012)

(5) a. Am Dienstag hat *ihn* ein Kunde geklaut.

b. Am Dienstag hat *ihn* ein Kunde geklaut.

‘On Tuesday a customer has stolen it.’

(Truckenbrodt 2012:491, underlining = stress)

Background

Pitch accent as head of φ -phrase

- “presence of pitch accents reflects patterns of phrase stress” (Kratzer & Selkirk 2007:94; cf. Ladd 1996; Féry and Samek-Lodovici 2006; Selkirk 2006)
- However, “ACCENT” is not like “accent”
 - Usually, sentence accent or nuclear accent is discussed (CAPITALS / underlining).
 - Pre-nuclear or rhythmically determined accents (Calhoun 2010).
 - Pitch accents have different inherent prominences (Baumann & Röhr 2015).
- Kratzer & Selkirk 2007: major vs. minor phrase stress.
 - Major phrase stress in obligatory position.
 - Minor phrase stress in non-obligatory position.

(6) MARIA studiert/STUDIERT die GESETZE.

‘Mária is studying/stúdying the láws.’

(Kratzer & Selkirk 2007:94)

■ Research questions

- What are the conditions for prosodic phrasing of pronouns in German?

(Q1): Are pronouns generally left unaccented in German?

(Q2): If not, does the size in terms of syllables of the pronoun play a role in the accentuation of pronouns (cf. Serbian)?

(Q3): If accented, how are pronouns phrased prosodically – do they constitute a prosodic word, and/or do they form a prosodic head of a φ -phrase?

■ Empirical study

Speakers

- Ten (5f / 5m) native speakers of German in their twenties received course credits (four analysed).

Recording procedure

- sound-proof chamber equipped with an AT4033a audiotechnica studio microphone, using a C-Media Wave sound card at a sampling rate of 44.1 kHz with 16 bit resolution.
- Repetitions of hesitations or false starts.
- Presentation flow was controlled by the experimenter (25 min).

Speech materials

- Recording of read speech (context and target sentence, n=180).
- Control of information status and size of pronoun.

■ Empirical study – Speech materials

(7) C: Warum freust du dich? *'Why are you so happy?'*

a. Ich weiß, dass Maria **ihrer Freundin** ein Buch geschenkt hat.

'I know that Maria gave a book to her friend as a present.'

b. Ich weiß, dass Maria **ihr** ein Buch geschenkt hat.

'I know that Maria gave her a book as a present.'

c. Ich weiß, dass Maria **ihnen** ein Buch geschenkt hat.

'I know that Maria gave them a book as a present.'

(8) C: Warum freust du dich? *'Why are you so happy?'*

a. Ich glaube, dass ein Junge eine Geige **an einen Freund** schickte.

'I think that a boy sent a violin to friend.'

b. Ich glaube, dass ein Junge **ihr** eine Geige schickte.

'I think that a boy sent her a violin.'

c. Ich glaube, dass ein Junge **ihnen** Geigen schickte.

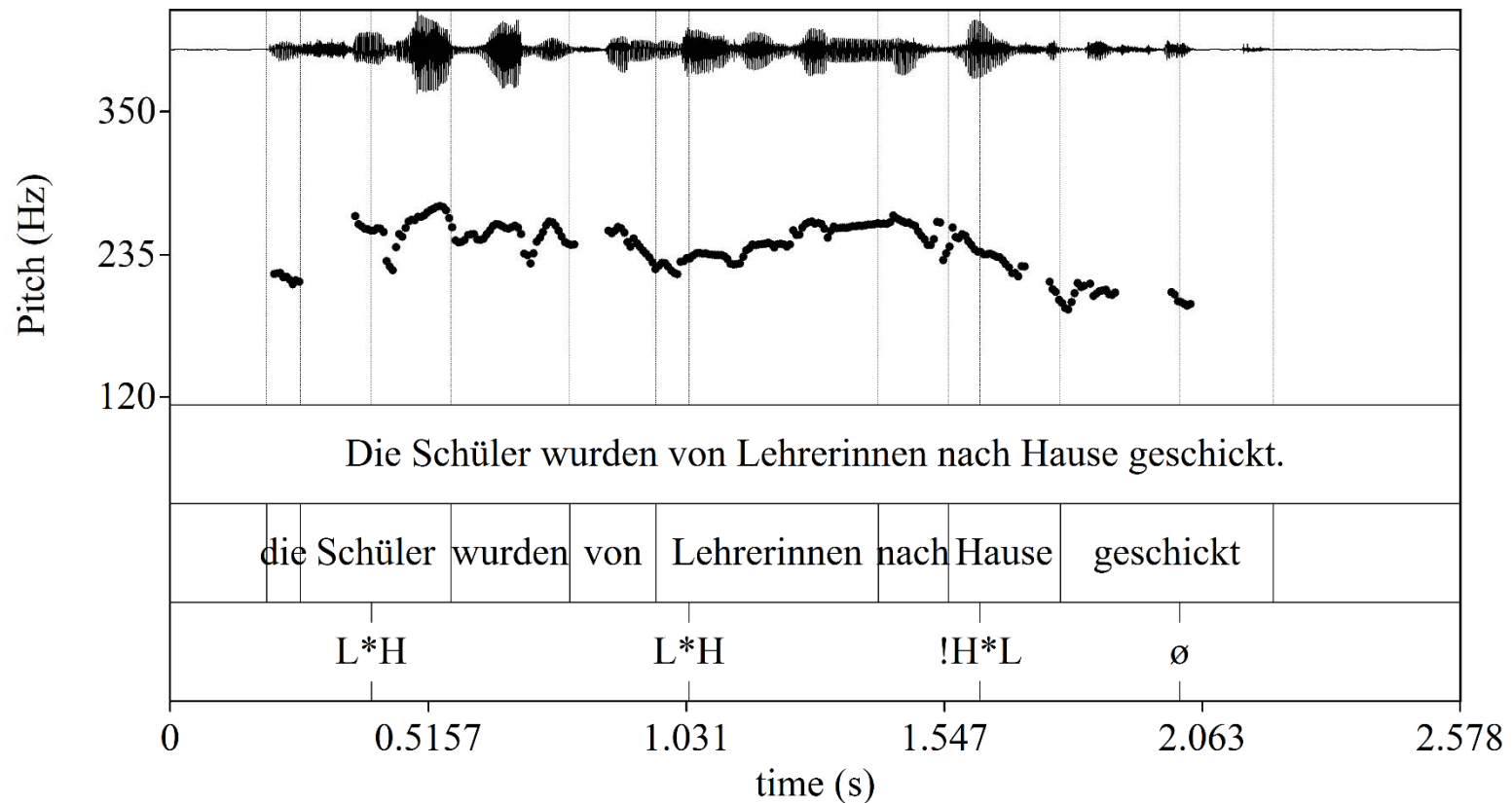
'I think that a boy sent them violins.'

■ Empirical study – Speech materials

- (9) C: Warum ist es hier so ruhig? *'Why is it so quiet here?'*
- a. Die Schüler wurden von **einer Lehrerin** nach Hause geschickt.
'The students were sent home by a teacher.'
 - b. Die Schüler wurden von **ihr** nach Hause geschickt.
'The students were sent home by her.'
- (10) C: Warum ist es hier so ruhig? *'Why is it so quiet here?'*
- c. Die Schüler wurden von **Lehrerinnen** nach Hause geschickt.
'The students were sent home by teachers.'
 - a. Die Schüler wurden von **ihnen** nach Hause geschickt.
'The students were sent home by them.'
- C2: Was hat die Lehrerin gemacht? *'Why is it so quiet here?'*

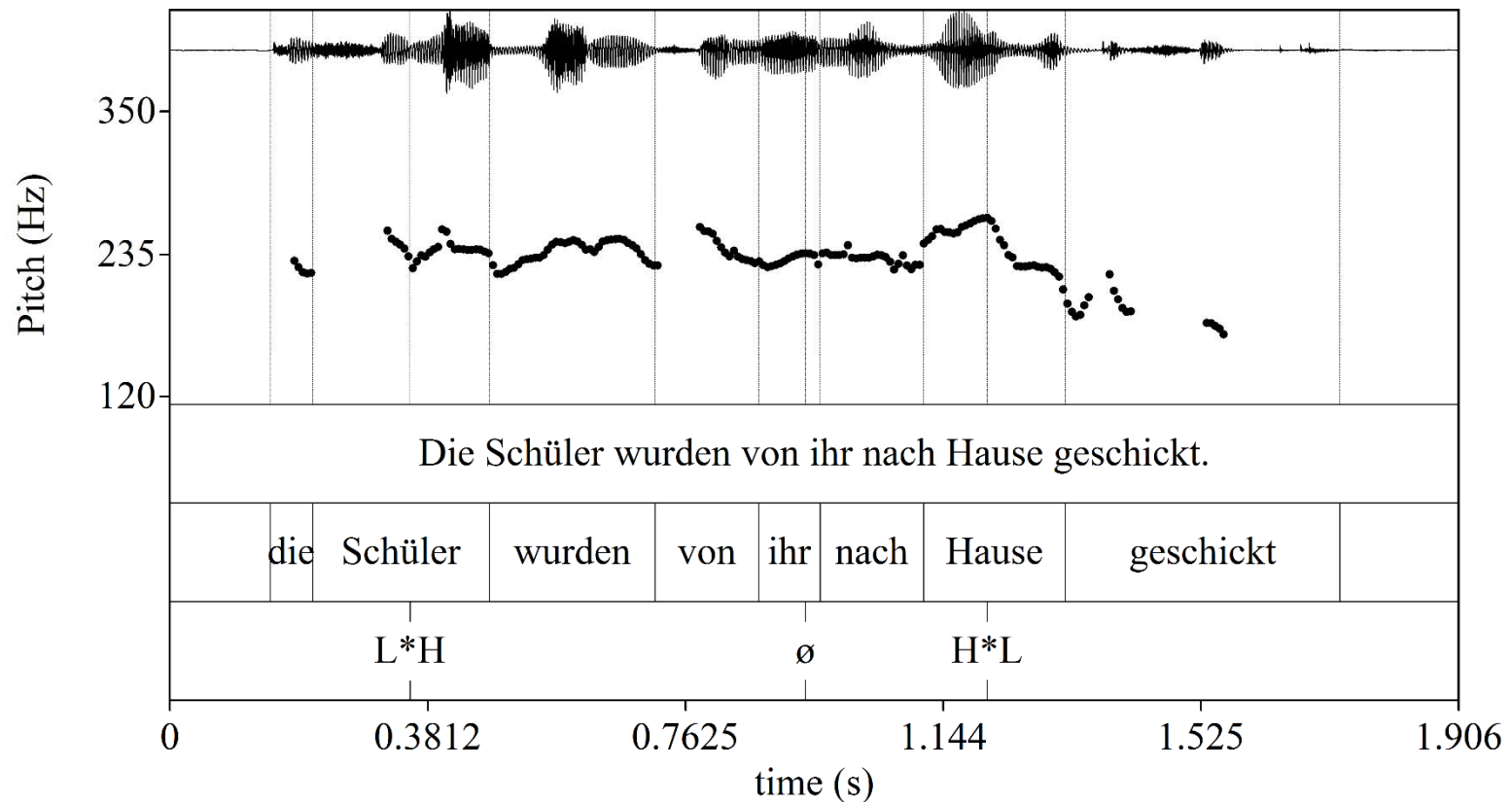
Empirical study – Examples

Target constituent = full NP



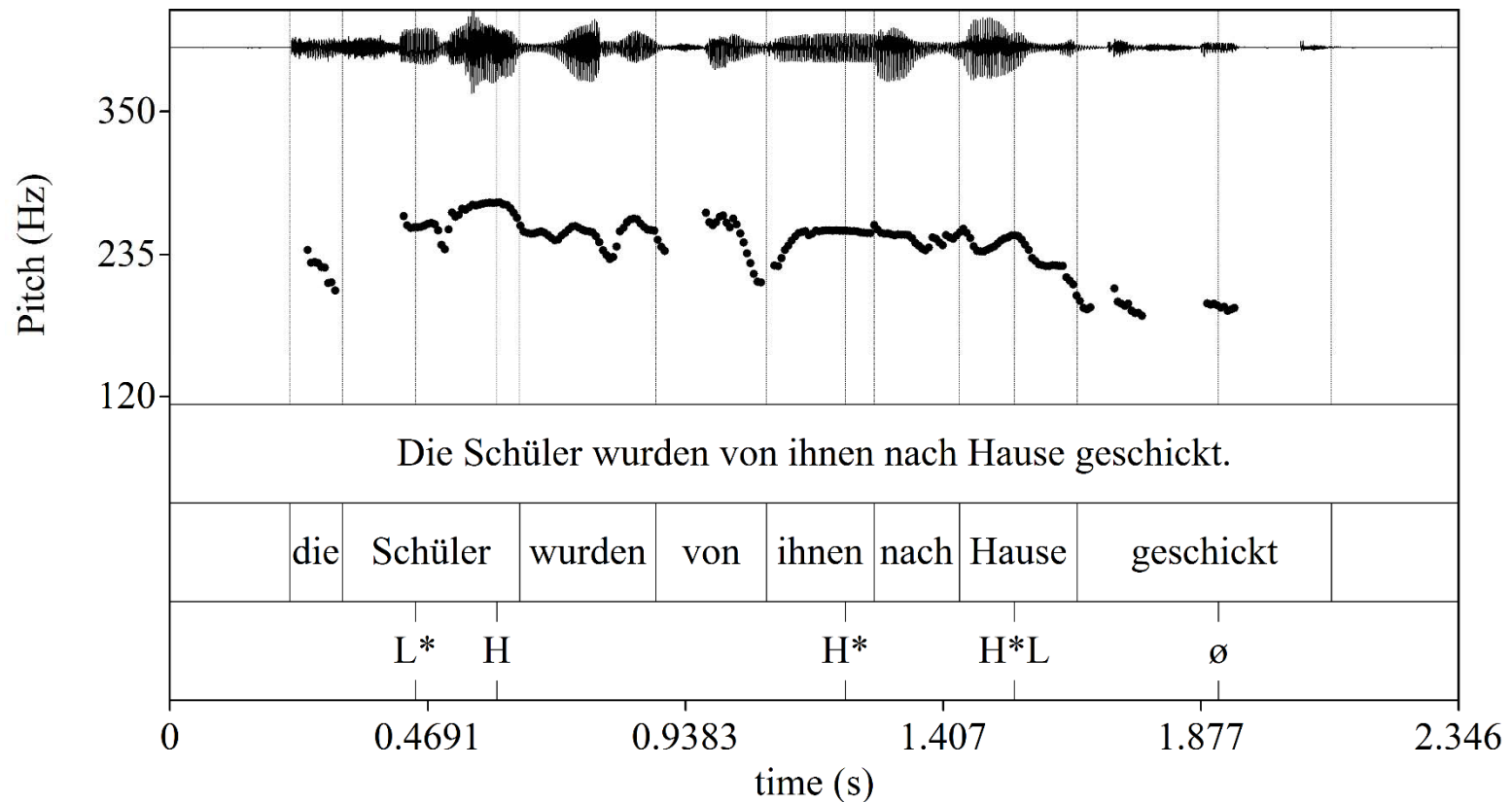
Empirical study – Examples

Target constituent = monosyllabic pronoun



Empirical study – Examples

Target constituent = disyllabic pronoun



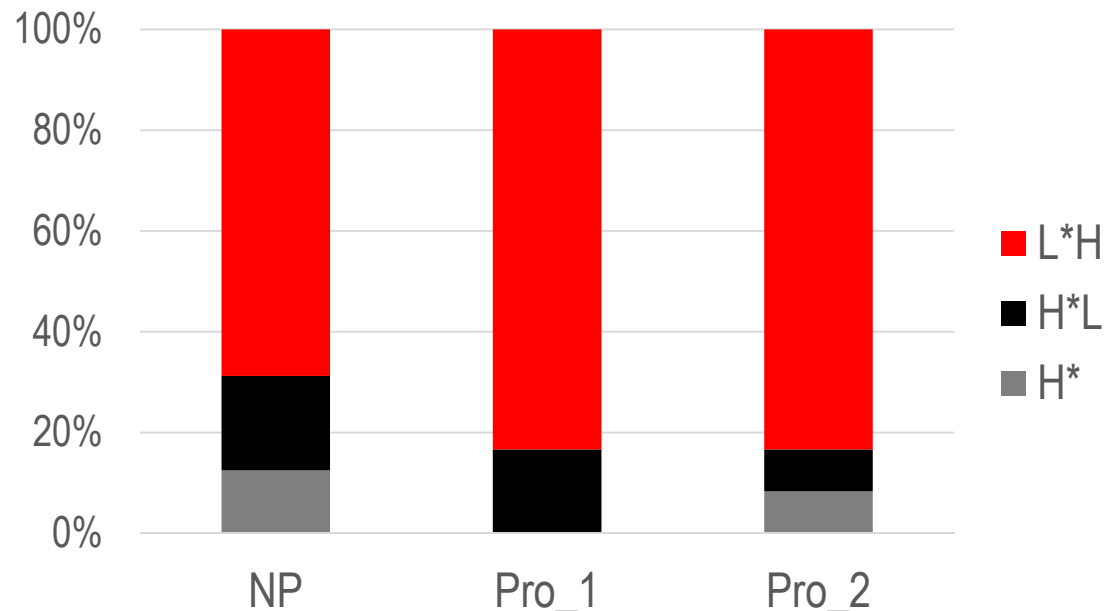
■ Empirical study – Results

General results on the distribution of sentence accents
(all expected and not surprising):

- NPs containing lexical words receive full accents
(→ subject and objects).
- Variation of pitch accent types both within and between speakers
(→ different pitch contours).
- Some variation on verb accentuation
(cf. (5), Kratzer & Selkirk 2007, Féry & Kügler 2008, Truckenbrodt 2012).

Empirical study – Results

- Accent distribution of first constituent



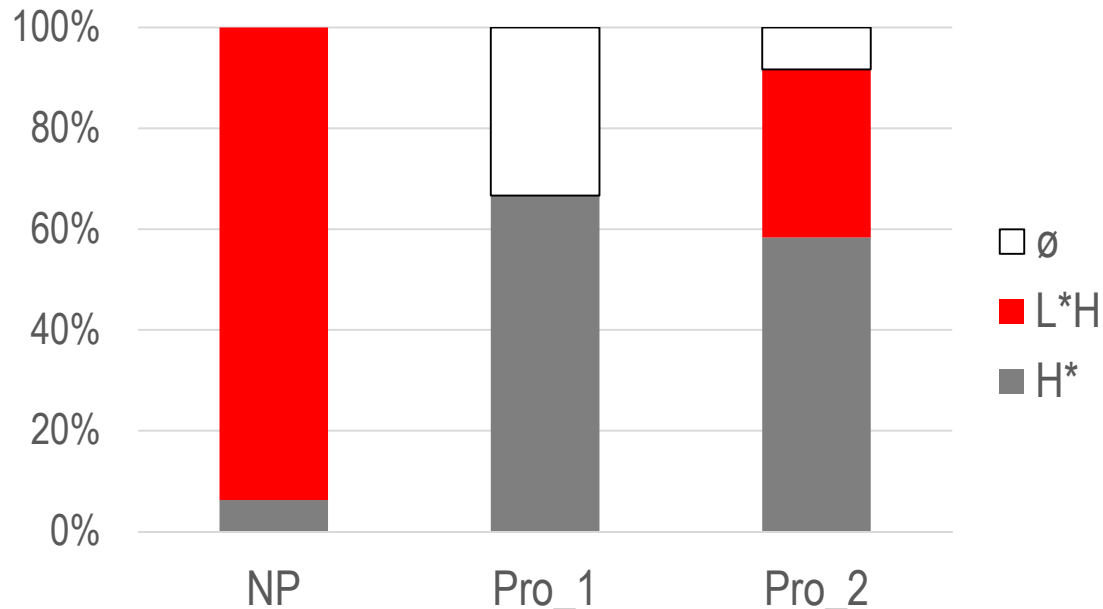
L*H

Die Schüler wurden von **einer Lehrerin** / **ihr** nach Hause geschickt.

‘The students were sent home by a teacher.’

Empirical study – Results

- Accent distribution of second constituent – target: pronoun



L*H

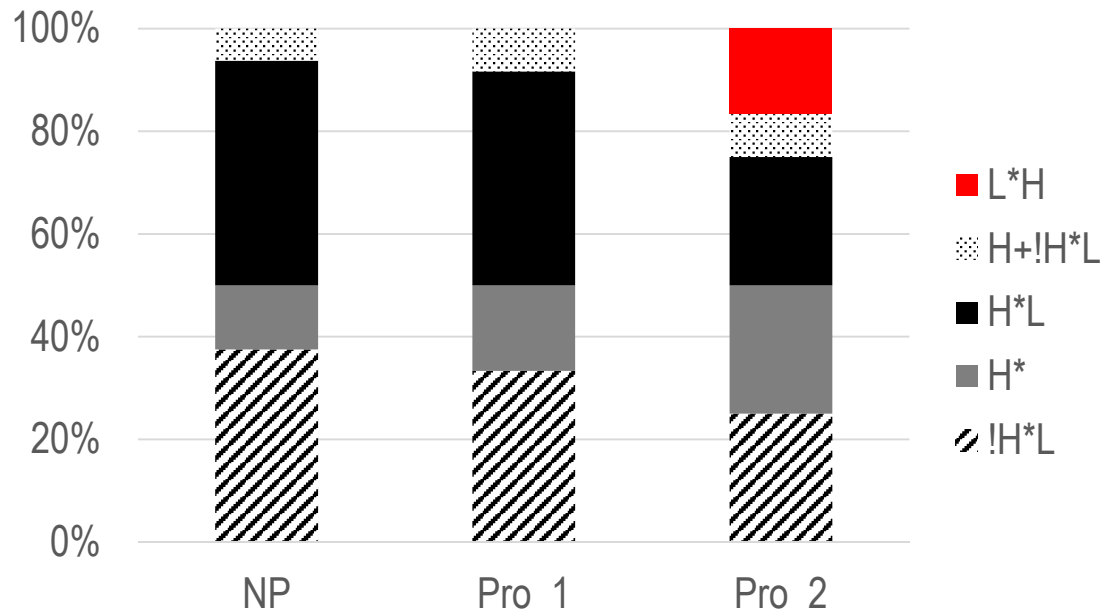
L*H / H*

Die Schüler wurden von **einer Lehrerin** / **ihr** nach Hause geschickt.

‘The students were sent home by a teacher.’

Empirical study – Results

- Accent distribution of third constituent



L*H

L*H

H*

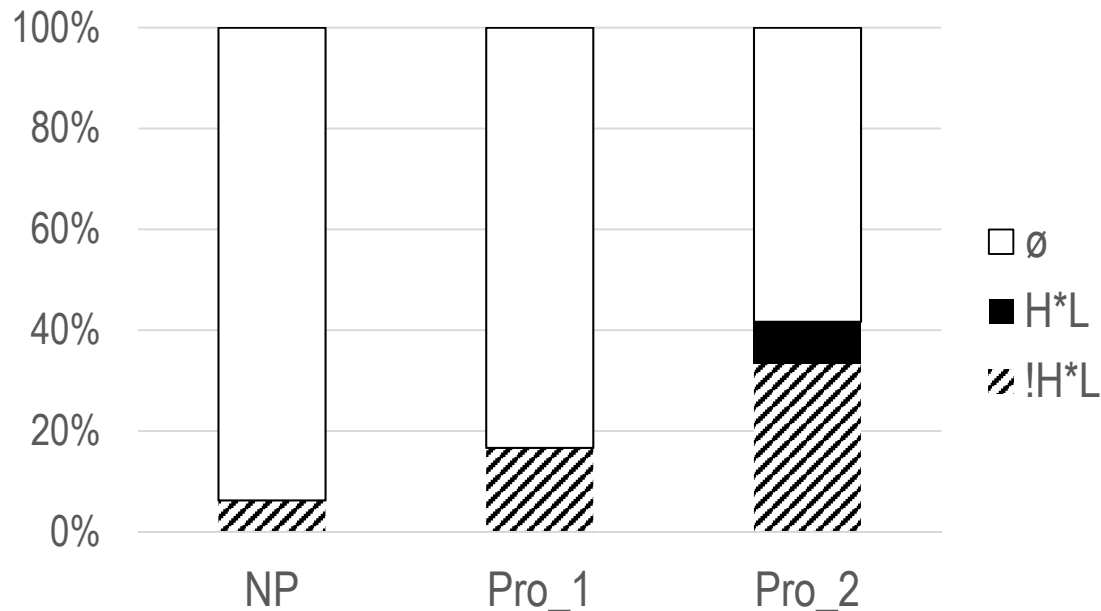
H*L/!H*L

Die Schüler wurden von **einer Lehrerin** / **ihr** nach Hause geschickt.

'The students were sent home by a teacher.'

Empirical study – Results

- Accent distribution of fourth constituent (verb)



L*H

L*H

H*

H*L/!H*L ∅

Die Schüler wurden von **einer Lehrerin** / **ihr** nach Hause geschickt.

‘The students were sent home by a teacher.’

Discussion

(Q1): Are pronouns generally left unaccented in German?

- No!
- Pronouns may carry a pitch accent (approx. 65% of the cases).
- Compared to a full NP constituent in the same position:
NP – L*H (95%) / Pronoun – H* (~65%)
- In 40% of the cases, the pronoun has no accent.
- Considerable variation to take into account for prosodic phrasing.

Discussion

(Q2): If pronouns are accented, does the size in terms of syllables of the pronoun play a role in the accentuation of pronouns (cf. Serbian)?

- There is a tendency for disyllabic pronouns to be accented more likely than monosyllabic pronouns (65% – 90%).
- It does not seem to be the case that there is a categorical distinction between monosyllabic and disyllabic pronouns as in Serbian (Zec 2002).
 - Tendency needs to be explored in more detail.
 - Data on pronouns such as “*jemand / niemand*”.

Discussion

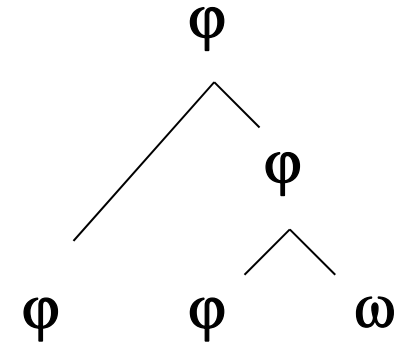
(Q3): How are pronouns phrased prosodically, if accented – do they constitute a prosodic word, and/or do they form a prosodic head of a φ -phrase?

- The presence of an accent may speak in favour of the presence of a φ -phrase (cf. Kratzer & Selkirk 2007, Ladd 1996; Féry and Samek-Lodovici 2006; Selkirk 2006).
- However, the proposal of **minor and major prosodic phrases**, and thus the **distinction between obligatory and optional pitch accents** may be more appealing to account for the accent patterns on pronouns in German (cf. Kratzer & Selkirk 2007).

Discussion – Phrasing

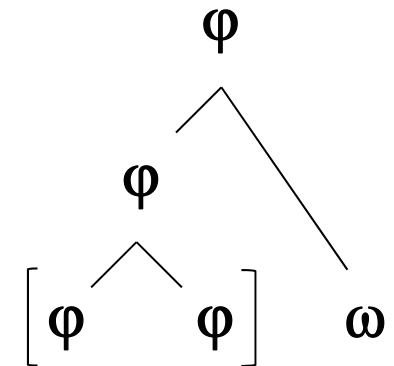
(11)

x
 x
 ((von einer (Lehrerin)_ω)_φ ((nach (Hause)_ω)_φ (geschickt)_ω)_φ)_φ

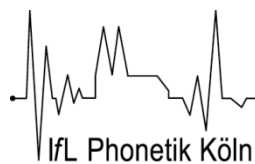


(12) a.

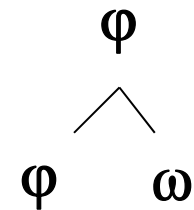
(x)
 x
 ((von (ihr)_ω)_φ (nach (Hause)_ω)_φ (geschickt)_ω)_φ



b.



x
 x
 ((von ihr nach (Hause)_ω)_φ (geschickt)_ω)_φ



Discussion – Phrasing

(12) a.

		x		
	(x)	x		
	x	x		x
(((von (ihr)ω)φ	(nach (Hause)ω)φ)φ	(geschickt)ω)φ

- “But there are other pitch accents – in English, Dutch, German, and other languages – which have no particular meaning contribution. These pitch accents appear to be epenthetic tonal elements whose function, if any, is to enhance the head of a prosodic constituent.” (Kratzer & Selkirk 2007: 128)
- I would propose that these pitch accents appear optionally on pronouns in German if these are prosodically phrased as a prosodic word.

Conclusions

- Syntax-Phonology-Mapping is not a simple matter of presence or absence of pitch accents in German.
- Prosodically light elements such as pronouns may receive an accent.
- These accents may
 - be interpreted as “epenthetic” (cf. Kratzer & Selkirk 2007),
 - carry less prominence than bitonal rising or falling accents (cf. Baumann & Röhr 2015).
- “ACCENT” is thus not like “accent”.
- Pronouns are optionally phrased as prosodic words. If so, they carry an optional and less prominent pitch accent.



Vielen Dank !

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