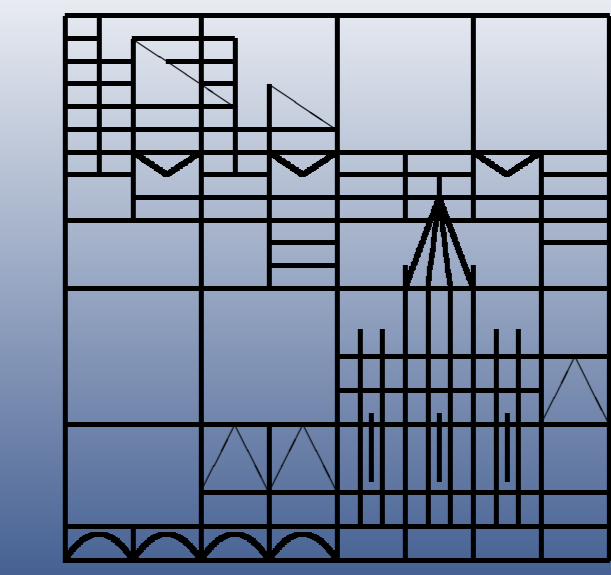


# Pashto Endoclitics



## Introduction

- Pashto endoclitics are subject to both prosodic and syntactic constraints (Tegey 1977), challenging a syntax-dependent view of prosody (e.g. Selkirk 1984) and the *Principle of Lexical Integrity* (Bresnan and Mchombo 1995) as the clitics can appear inside a morphological word.
- One possible analytical route: *Lexical Sharing* (Wescoat 2009, Broadwell 2008).
- Another possible approach: an architecture that views syntax and prosody as independent but interacting dimensions of grammar (Bögel et al. 2009). Instead of regarding the prosodic projection as being based on the syntactic tree, prosody and syntax are viewed as equal partners trying to align with one another.

### Two models of architecture

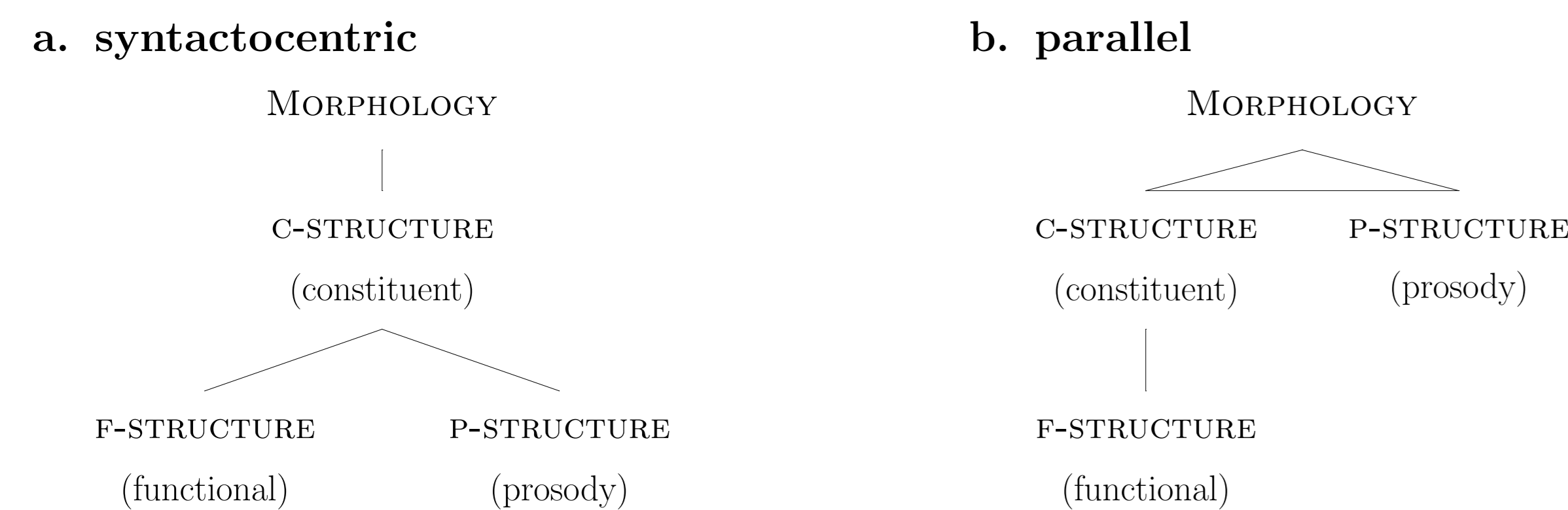


Figure 1: Two models of architecture

## The data

- Iranian language spoken in Afghanistan and parts of Pakistan.
- Clitics are quite common; some challenge the general understanding of the interaction of morphology, syntax and phonology.

Pers. Pronoun	Number	Modal	Translation	Adverbial	Translation
me	1. Sg	ba	will, should, may	xo	indeed, really
de	2. Sg	de	should, let	no	then
ye	3. Sg				
am / mo	1. Pl				
am / mo	2. Pl				
ye	3. Pl				

Table 1: group of possible endoclitics as described by Tegey (1977)

- The above listed clitics behave the same way with regard to their position.
- If two or more of these clitics cooccur, they are placed in a fixed template.

## Second Position Clitics

Pashto clitics seem to be second position clitics (Tegey 1977).

- (1) angur ye rawrə  
grapes he brought  
'He brought grapes' (Tegey 1977, 138)

- Clitics are placed after the first constituent of a sentence.  
→ coordinated elements (noun coordination): "interruption" is not permitted.

- Clitics may not appear outside the subordinate clause in which they functionally originate.

These facts suggest that there are mainly syntactic constraints responsible for the positioning of the clitics. They are clearly no simple affixes, but independent lexical items.

However, consider example (2), where the clitic appears at the very end of the sentence, even though Pashto is a fairly rigid verb-final language.

- (2) ra ta te ra , zolawəl de  
me for from.it here collect you  
'You were collecting them for me from it (and bringing them) here.' (Tegey 1977, 119)

**Reason:** the elements in front of the verb do not bear lexical stress.

**Conclusion:** the clitics are also subject to prosodic constraints (e.g. Hock 1996, Roberts 1997).

## Endoclitics

Importance of prosody even more obvious when looking at verb-initial sentences:

- Pashto is an argument-drop language — sentences can consist of only a verb and a clitic

**Endoclitics** appear in these short sentences in the context of an *aspect-caused stress shift*

- the perfective is formed with the help of a verb-internal stress shift.
- with regard to this stress shift, Pashto verbs fall into three classes:

### Class 1 — monomorphemic verbs

**impf.:** verbs bear stress on the last foot; the clitic is placed after the verb.

**perf.:** perfective prefix *wə* bears main stress; the clitic occurs after the prefix.

imperfective	perfective
təxnawəla <u>me</u>	wó <u>me</u> təxnawəla (*wótəxnawəla <u>me</u> )
tickle I	PERF I tickle
'I was tickling (her).'	'I tickled (her).'

Table 2: class 1 verbs and stress shift

### Class 2 and 3 — bimorphemic verbs

- form perfective by means of a stress shift from the last to the first foot of the verb.
- class 2: formed by a derivational prefix and a root.
- class 3: complex predicates consisting of an adj., adv. or a noun and a light verb.

imperfective	perfective
təlwahə <u>me</u>	tél <u>me</u> wəhə (*télwəhə <u>me</u> )
push I	? I push
'I was pushing (it).'	'I pushed (it).'

Table 3: class 2 verbs and stress shift (same as class 3)

Generally class 2 verbs are viewed as ONE unit. However, the prefix might be a clitic with an own terminal node (even more likely with class 3 verbs). If we view a clitic as a postlexical element with its own syntactic node, then we would get a representation similar to the following:

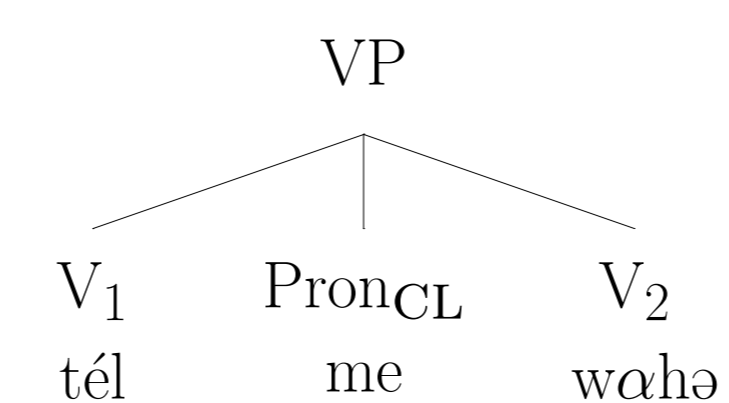


Figure 2: syntactic representation if the "prefix" is viewed as a clitic

### The "special class"

- Adopting properties of all three classes:
  - \* form the *perfective* with the prefix *wə*
  - \* can have alternative stress in the *imperfective*
- Initial consonant: no special behavior, clitic is placed after the verb.
- Initial *a*- vowel: clitic is placed after the foot bearing main stress.

imperfective	
stress on <b>second</b> foot	stress on <b>first</b> foot
axistələ <u>me</u>	á <u>me</u> xistələ
buy I	? I buy
'I was buying them.'	'I was buying them.'

Table 4: stress shift and clitic distribution within "a-verbs"

**The problem:** *a*-verbs violate the *Principle of Lexical Integrity*, which prevents any syntactic process from interfering with morphology. There have been several approaches to the problem, two of which are:

1. The *a*- was probably a prefix/clitic in the past, thus the verbs should be analyzed as bimorphemic verbs (Kaisse 1981, Anderson 2005).  
→ This cannot be confirmed diachronically for all *a*-verbs  
→ The *a*- no longer has a recognizable prefix-function.

2. The clitic is generated in the lexicon and is part of the verb.

- prevents the violation
- inefficient — inflates morphology

And there is evidence that the clitic was inserted into the verb postlexically...

## Vowel coalescence

The phonological process of *vowel coalescence* proves that the clitic is inserted **postlexically** (Tegey 1977):

- **Perfective** *a*-verbs display vowel coalescence

- \* The adjacency of the perfective prefix *wə* and the *a*- causes a fusion: *wə*-.
- \* Vowel coalescence is still present after clitic insertion!

Vowel coalescence			
without clitic			with clitic
tə ye wəxla	(*wə axla)	wə	ye xla
you it buy		PERF	it buy
'You buy it.'	(Tegey 1997, 149)		'You buy it.'

Table 5: vowel coalescence and clitic insertion

## Conclusion

- Clitics are inserted into the morphological word postlexically.
- Clitics are subject to prosodic constraints in that their placement depends on stress.  
→ Prosody seems to be able to place a clitic postlexically after an accent-bearing element.

**Consequence:** prosody overrules syntax and forms the morphological word.

- Phenomenon is in line with the "parallel" architecture that allows an interaction, but DECOUPLES syntax and prosody (Bögel et al.2009).

**And what about the violation of the *Principle of Lexical Integrity*?**

→ The principle affects the morphology-syntax interface → can be evaded (overruled) by prosody.

## Analysis

Assuming that prosody and syntax are independent, but interacting dimensions of grammar, we can then conclude that prosody can operate on the morphological word and include a clitic AFTER the lexicon and BEFORE the syntactic representation (Figure 3).

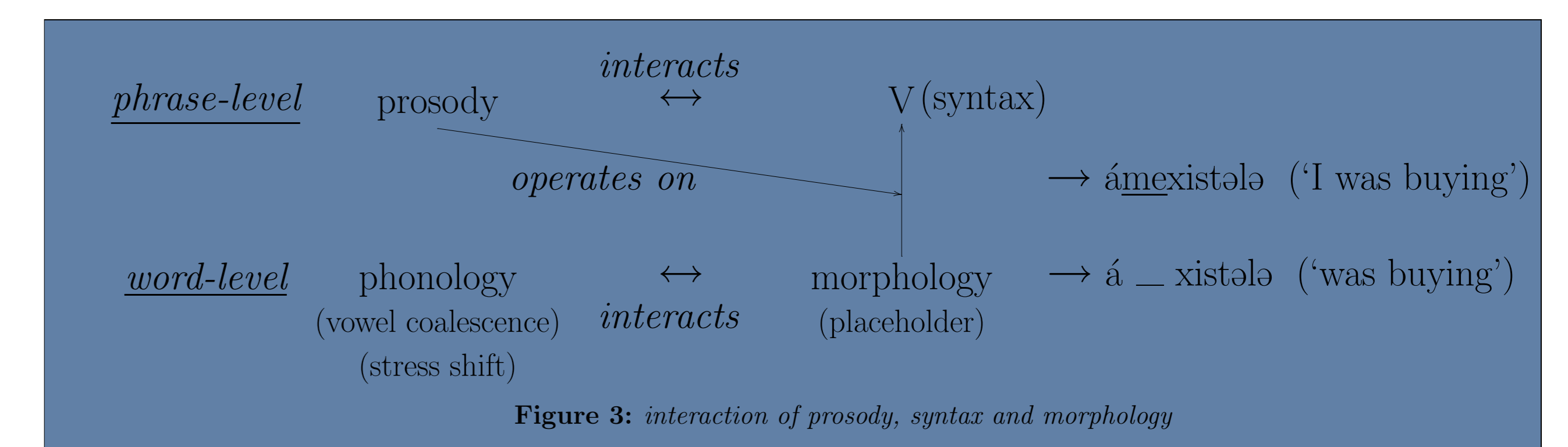


Figure 3: interaction of prosody, syntax and morphology

Within the morphology-phonology component, the verb receives aspect-dependent stress. As a consequence, the position after the first stressed foot obtains an optional placeholder. If the verb is the host for the clitic, the clitic is inserted into the placeholder position; otherwise the placeholder is deleted. This leads to the following representations:

- (3) a.) Example:      b.) Syntactic representation:      c.) Prosodic representation:



For further information and references please refer to the handout