

# A Scales-and-Parameters account of morphologically conditioned accentual exceptions

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### Introduction

I propose here a novel approach to **morpheme-specific exceptions** in **lexical and mixed accent systems**.

I introduce the Scales-and-Parameters (S&P) theory of word accent and show that it provides a uniform account for both regular and exceptional accent location *within and across* lexical accent systems with dominant accented morphemes and phonological weight-sensitive systems with exceptional morphemes (**mixed systems**).

**Standard Uzbek** (Eastern Turkic, Uzbekistan) has many minimal pairs for accent, e.g., (1)-(2) → *Lexical accent system*

- (1) a. e'tik boot (2) a. joz-'ma written (by hand)  
b. 'etik ethics b. joz-'ma write-NEG

**The accent rule:** *Accent falls on the rightmost lexically accented morpheme in the word; otherwise, accent is final.*

(3) *Default final accent in Uzbek*

- kij'lok village  
kij'lokar'miz our villages  
kij'lokarimizdagilar those in our villages

- (4) boʃ-la-'moq begin-VERBALIZ-INF  
/boʃ/, /-moq/ *lex. accented*; /-la/ *lex. unaccented*

### Pre-accenting morphemes

- (5) a. 'kel-di come-PAST b. kel-'di-da come-PAST-INTENS  
(5a): /-di/ *lex. unaccented*; (5b): /-di/ gets word accent  
→ /-da/ is *preaccenting*

### Exceptional patterns: Accentual Dominance

- (6) a. 'qaer-da what-LOCATIVE  
b. 'alla-qaer-da some-what-LOCATIVE (\*'alla-'qaer-da)

(6a): The root [qaer] has the word accent - either (i) because it has a *lex. accent* in the UR, or (ii) because it receives a *lex. accent* from the preaccenting /-da/.

(6b): Accent is predicted to fall on the root [qaer] (rightmost lexically accented), but actually falls on the prefix [alla-].

→ [alla-] is an **accented dominant** prefix → **ACCOUNT?**

### The research goal

Propose a *single* accentual grammar that *uniformly* accounts for the accent rule and the accentual exceptions within a given accent system (here, Uzbek).

### Diacritic weight

1. **Morphemes can attract/repel word accent** (like syllables)

→ “**diacritic weight**” (instead of lexical accents).

Accent-attracting: **diacritically heavy** (hd).

Accent-repelling: **diacritically light** (ld).

2. **Phonological & diacritic weight are two types of weight:**

- Both syllables and morphemes attract/repel word accent.  
- In some systems, accent is assigned with ref. to both (Mari).

3. Weight is an **ordinal** variable. → Weight scales (cf. phono weight scales)

**Diacritic weight scale:** *A language-specific scale that orders (classes of) morphemes according to their respective diacritic weight.*

**Prediction:** *There exists a lgge with a diacritic weight scale.*

### The diacritic weight scale of Uzbek

**3 classes of morphemes:**

(i) Dominant accented; (ii) Attracting; (iii) Repelling

To show that these form a scale:

(i) The binary relation HEAVIER-THAN holds among these classes;

(ii) The HEAVIER-THAN relation is *irreflexive, transitive and antisymmetric*.

(7) a. 'kel-di come-PASS; b. 'qaer-da what-LOC

→ The class (ii) is **heavier than** (iii).

(8) 'alla-qaer-da some-what-LOCATIVE (\*'alla-'qaer-da)

→ The class (i) is **heavier than** (ii) and (iii).

→ The HEAVIER-THAN relation is **transitive**. (Also, irreflexive and antisymmetric.) → This relation a **scale**.

(9) **Diacritic weight scale** of Uzbek:  $sup_d > h_d > l_d$

(10) **The Diacritic Weight Grid of Uzbek**

sup <sub>d</sub>	h <sub>d</sub>	l <sub>d</sub>
*	*	*
*	*	
*		

### Accent assignment

• **Accent Grid:** a non-metrical, footless grid upon which the S&P parameter system assigns word accent.

• **Weight Projection Principle:** *Only the heaviest units in a given form are projected onto the Accent Grid.*

### The S&P parameters

1. Domain Size (Bounded/Unbounded) 2. Domain Edge (L/R)  
3. NF (Y/N) 4. NF Unit (Syll/Seg) 5. Weight (Y/N)  
6. Select (L/R) 7. Project Position (L/R)

(11) **Parameter settings for Uzbek**

Domain Size (*Unbounded*) NF (No) Weight (Yes)  
Select (**Right**) Project Position (**Right**)

### Derivations

- (12) a. **Forms with >1 heavy morpheme** /boʃ/, /moq/ h<sub>d</sub>, /-la/ l<sub>d</sub>  
b. **Forms with a diacritically superheavy** /'alla-/ sup<sub>d</sub>, /qaer/ h<sub>d</sub>, /-da/ preacc
- |                                     |  |                                     |  |
|-------------------------------------|--|-------------------------------------|--|
| * * * * *<br>* * * * *<br>* * * * * | Select ( <b>Right</b> )<br>Weight Projection | * * * * *<br>* * * * *<br>* * * * * | Select ( <b>Right</b> )<br>Weight Projection |
| Weight Grid                         |  | Weight Grid                         |  |
| /boʃ-la-moq/ [boʃ-la-'moq]          |  | /'alla-qaer-da/ [''alla-qaer-da]    |  |

### Comparing S&P and Accent Deletion

• **Accent Deletion** is **idiosyncratic**. Limited to exceptional (dominance) effects: it does not derive the **regular** accent patterns in lexical accent systems. **S&P** accounts for both **with the same parameter settings**.

• **Accent Deletion** deletes all lexical accents **non-locally**. **S&P** does NOT treat the exceptions non-locally, as it uses a **weight scale**.

• **Accent Deletion** is unable to account for exceptions in phonological WS systems with morpheme-specific exceptions (e.g., E. Literary Mari). **S&P** gives a uniform account of the accent rule and the exceptions in such systems because it treats syllables and exceptional morphemes in terms of the same representational object, *i.e.* Weight.

### Eastern Literary Mari (=ELM; Permian)

**The accent rule:** *Accent falls on the rightmost heavy syllable in the word; otherwise, accent is initial.*

- (13) a. ol'ma apple b. 'kid-ə]to hand-INESS

**2 types of exceptional suffixes**, e.g., (14) vs. (15)

- (14) a. jo'tʃa child b. jotʃa-'ge child-COM  
(15) a. 'kajək bird b. 'kajək-la bird-COMPAR

(i) Phonological weight and diacritic weight are types of “weight”.  
(ii) Weight allows for a scale.

**Prediction:** there is a language with a **hybrid** weight scale.

**Hybrid weight scale:** *A language-specific scale which orders syllables and morphemes according to their relative weight.*

I define “**weight**” as involving two weight types:

(i) Phonological, for all syllables that **meet the accent rule** (Class C, Class D) :  $h_p > l_p$

(ii) Diacritic, for morphemes containing a syllable that does **not respect the phonological accent rule** (Class A, Class B):  $h_d > l_d$

By pairwise comparison, establish:  $h_d > h_p, h_p > l_d$

(16) **Hybrid weight scale of ELM:**  $h_d > h_p > \{l_d, l_p\}$

(17) **Parameter settings for ELM**

Domain Size (*Unbounded*) NF (No) Weight (Yes)  
Select (**Right**) Project Position (**Left**)

**Diacr. heavy morphemes + phono heavy syllables**  
(18) \* \* \* \* \*  
\* \* \* \* \*  
\* \* \* \* \*

h <sub>p</sub>	h <sub>p</sub>	h <sub>d</sub>	h <sub>d</sub>	Weight Grid
*	*	*	*	
*	*	*	*	
*	*	*	*	
tʃodra-na-ge				
[tʃodra-na-'ge]	forest-1PI.POSS-COMIT			

**A phono heavy syllable + a diacr. light morpheme**

(19) \* \* \* \* \*  
\* \* \* \* \*  
\* \* \* \* \*

h <sub>p</sub>	l <sub>d</sub>	Weight Grid
*	*	
*	*	
*	*	
pørt-la		
[pørt-la]	house-COMP	