

Parameterizing sentential stress in Persian, Turkish, and Armenian

Introduction: Persian (PS), Turkish (TU), Western Armenian (WA), and Eastern Armenian (EA) share many typological features in common, especially in their syntax and sentential stress. I catalog some major differences between their stress placement rules. Specifically:

- PS stress is assigned in the left of the VP while ; Turkish (TU) and Western/Eastern Armenian (WA/EA) stress is assigned pre-verbally.
- PS and EA ignore definite/specific direct objects; while they are treated the same in TU and WA
- PS, TU, and WA treat indirect objects like bare direct objects; EA ignores them
- Manner adverbs show signs of construction-specific phonology

The differences can't be reduced to single factors like phase position but are more holistic. Data is collected from multiple sources coupled with personal elicitations. Persian: (Mahjani, 2003; Sadat-Tehrani, 2007; Kahnemuyipour, 2009; Hosseini, 2014); Turkish: (?Issever, 2006; Üntak-Tarhan, 2006; Kamali, 2011; Günes, 2015; Nakipoğlu, 2019); Western Armenian: (Sigler, 1997); Eastern Armenian: (Tamrazian, 1994; Megerdumian, 2009; Dum-Tragut, 2009; Yeghiazaryan, 2010).

Stress in transitive constructions: In simple transitive constructions, the 4 lects have unmarked SOV word order. The direct object (DO) can be a bare noun (1). It is interpreted as a generic noun, takes sentential stress, and is pseudo-incorporated. The distribution and stress of non-specific indefinite objects is the same (2). All four lects have subject pro-drop.

	1			2		3		4		
	S	O	V	Indf O	V	Def O	V	Indf Spec O	V	
PS	Ali	<u>ketâb</u>	xund	<u>yek ketâb</u>	xund	ketâb-ra	<u>xund</u>	yek ketâb-ra	<u>xund</u>	
EA	Ali-n	<u>girk^h</u>	<u>kardats^h</u>	<u>mi girk^h</u>	<u>kardats^h</u>	girk ^h -ə	<u>kardats^h</u>	mi girk ^h -ə	<u>kardats^h</u>	
WA	Ali-n	<u>kirk</u>	gartats	<u>kirk mə</u>	gartats	<u>kirk-ə</u>	gartats	<u>kirk mə</u>	gartats	
TU	Ali	<u>kitab</u>	okudu	<u>bir kitab</u>	okudu	<u>kitab-ı</u>	okudu	<u>bir kitab-ı</u>	okudu	
		'Ali read books'		'Ali read a book'		'Ali read the book'		'Ali read a (certain) book'		

The languages start to vary when the object is definite (3). In PS and EA, the direct object is *unstressed*. Stress is instead on the verb. In contrast in TU and WA, the definite direct object keeps stress. The distribution of specific indefinites is the same (4). One could analyze this variation as due to different syntactic structure, but this is premature and unfounded. In each of the four lects, the definite DO has been argued to be structurally higher than the bare object, whether at spec-vP or spec-AgrOP.

Stress in ditransitive constructions: In all 4 lects, the default order is S-IO-DO-V when the DO is bare and the IO is indefinite (5). In TU, WA, and EA, stress stays on the bare object. But in PS, stress shifts to the IO. Crucially, the (in)-definiteness of the IO does not matter when the DO is bare. If the IO is definite, word-order and the position of nuclear stress stays the same (6).

	5					6				7			
	S	Indf IO	DO	V		Def IO	DO	V		Def DO	Def IO	V	
PS	Ali	<u>be yek</u> <u>madrase</u>	ketâb	dâd		<u>be</u> <u>madrase</u>	ketâb	dâd		ketâb-ra	<u>be</u> <u>madrase</u>	dâd	
EA	Ali-n	mî dəpɾofʰs ^h -i	<u>girk^h</u>	təvav		təpɾofʰs ^h -i-n	<u>girk^h</u>	təvav		girk ^h -ə	dəpɾofʰs ^h -i-n	<u>təvav</u>	
WA	Ali-n	təbɾofʰs-i mə	<u>kirk</u>	dəvav		təbɾofʰs-i-n	<u>kirk</u>	dəvav		kirk-ə	<u>təbɾofʰs-i-n</u>	dəvav	
TU	Ali	bir okul-a	<u>kitap</u>	verdim		okul-a	<u>kitap</u>	verdim		kita-ı	<u>okul-a</u>	verdim	
		‘Ali gave books to a school’				‘Ali gave books to the school’				‘Ali gave the book to the school’			

If the DO is definite or even specific indefinite, then word-order can vary between S-IO-DO-V and S-DO-IO-V (7). This is especially for Turkish where it is unclear which is the default word order for these constructions. Crucially, stress is sensitive to word order position. In TU, WA, EA, stress is on the preverbal argument; while in PS, stress is on the leftmost verbal argument. The only caveat is that in PS, the definite DO is never stressed; stress retracts to the IO. Further, PS is sensitive to the definiteness of the DO but not of the IO. An IO can take stress regardless of its specificity; all that matters is its position.

Manner adverbs: manner adverbs further complicate the picture and show signs of construction-specific phonology. In PS, manner adverbs are placed at the left edge of the VP after any definite DOs (8) and before IOs (9). Stress falls on the adverb. In contrast, TU-WA-EA differentiate between morphologically simplex vs complex adverbs. In TU, simplex adverbs can either be preverbal (10) or pre-bare object (11). In EA, they can be pre-verbal (10), pre-bare object (11), or pre-indefinite object (12). In WA, they can only be pre-verbal (10)–otherwise the Adv is interpreted with narrow focus (11). They are stressed in the 3 lects and never precede definite objects

	8					9						
	S	Def DO	Adv	Def IO	V	S	Adv	IO	DO	V		
PS	Ali	ket ^a b-ra	<u>sari</u>	be	madrase	dâd	Ali	<u>sari</u>	be	madrase	ket ^a b	dâd
		‘Ali gave the book to the school fast				‘Ali gave books to the school fast						

	10			11				12				13			
	S	Adv	V	Adv	O	Adv	V	Adv	Indf O	Adv	V	Def O	Adv	V	
TU	Ali	<u>hızlı</u>	okudu	<u>hızlı</u>	kitap		okudu		bir kitap	<u>hızlı</u>	okudu	kitab-ı	<u>hızlı</u>	okudu	
WA	Ali-n	<u>arak</u>	gartatʰs	<u>arak!</u>	kirk		gartatʰs		kirk mə	<u>arak</u>	gartatʰs	girk-ə	<u>arak</u>	gartatʰs	
EA	Ali-n	<u>arag</u>	kardatʰs ^h	<u>arag</u>	girk		kardatʰs ^h		<u>arag</u>	mi girk ^h		kardatʰs ^h	girk-ə	<u>arag</u>	kardatʰs ^h
		‘Ali read fast’		‘Ali read nooksfast’				‘Ali read a book fast’				‘Ali read the book fast’			

Complex adverbs have freer distribution, similar to sentential adverbs, and are not st Further generalizations and similarities are found in complex predicate formation, sentential adverbs, intransitives, and passivization.

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