#### Derivational morphemes in Xochistlahuaca Amuzgo

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## 1 Introduction

Observations from Xochistlahuaca Amuzgo (XA) spoken in Guerrero state by about 4,000 people will be shown to challenge Smith Stark and Tapia Garcia who describe Oaxacan Amuzgo derivation as nearly "non-existent" (1986:5-6). In this presentation, we will look at i) the derivational operations in which these morphemes are found using a lexicalist X-bar model (inspired by Herrera's 1995 work on Zoque) and ii) how pretonic reduction while resulting in strict CCV monosyllabic roots also helps to make derivation productive, creating proclitic/prefix material from former lexical roots that grammaticalize over time.

# 2 Derivational operations

Different operations are attested. Compounds may involve change in lexical class (as in below 'money') or not (as 'helicopter'). Class markers may appear obligatorily (as in 'worm') or derive a new word from a lexical root appearing independently elsewhere (as in 'grilled object'). Prefixation is particularly active in verbal derivation (as with the different verbal derivations from the adjective 'grilled'). The enclitic 'TE' or extended theme (or *tema extendido* in following with Amuzgo linguist Jair Apostol), serves to derive verbs from nouns like 'flesh' or adjectives like 'clumsy'.

	$[w?a^1 + hpdje^3 + tse^1]$		[tshɔ? <sup>2</sup> ·+nhẽ <sup>1</sup> ]	
Composition <sup>1</sup>	house + wind + shell		stone + thin	
	'helicopter'		'money'	
	$[ka^2 \cdot = ts\tilde{o}^3]$		$[ka^2 \cdot = t \int \tilde{e}^1]$	
Class marker <sup>2</sup>	ANIM = worm		ANIM = grilled	
	'worm'		'grilled object'	
	$[ma^2 - tsei^1 + ka^1]$	'to grill	transitive	
	PROG.SG-do + ANIM	(s.th.)'		
	$[ha^2-wi^1+t]e$	'to grill'	intransitive	
	PROG-become +			
	$[ha^2 - wi^1 + t]\tilde{e}^1 = p\tilde{e}^1 \cdot ]$		'to	
Prefixation*	PROG-become + grilled = TE		become	inchoative
	Ũ		grilled'	
	$[kwi^2 - wi^1 + ka^1 = t \int \tilde{e}^1]$		'to get	
	PROG-become + $ANIM$ = grilled		grilled'	antipassive
	[kwi <sup>2</sup> -wi <sup>1</sup> =tje <sup>1</sup> ]		'to be	passive
	PROG-become + grilled		grilled'	
	[aa2 <sup>2</sup> ]	$[se^2? - pe^1]$	$[se? + mpa^3 = pe^{1}]$	
Cliticization	[se? <sup>2</sup> ·]	flesh = TE	flesh + lung = TE 'be clumsy'	
Cliticisation	'flesh'	'be muscular		
		(animals)'		

<sup>1</sup> Data is taken from mid-century SIL archives (Bauernschmidt, 2014 manuscript) as well as original data elicited with the Endangered Language Alliance in New York City (2010-2013) and during fieldwork in 2016. \*Verbal data come from Apostol (2014).

<sup>2</sup> The ka = class marker appears before nouns and adjectives and is annotated as ANIM to suggest a generic animated meaning, though in fact, most nouns marked by the proclitic are animals and adjectives marked by ka = typically accord for animacy.

In Figure 1 below, the verbs 'be muscular' and 'be clumsy' are both derived from the noun 'flesh', though in the case of 'be clumsy,' the verb deadjectival from 'clumsy' (itself a denominal adjective). The use of X-bar as a model for derivation serves to clearly show multiple cycles below the word-level. It also assumes the headedness of the derivational morpheme TE.





### 3 Productivity and syllable reduction

Distinguishing between certain compounds, 'class markers' and 'prefixes' depends on prosodic and morphophonological insight, as well as measures of productivity. Below, we see the words for 'house' and 'animal' in independent form. These are also found in composition with other lexical roots that appear independently, as in the compounds for 'car', or 'cow', and in phonologically reduced forms as in the complex words 'church' and 'dog'.

	Independent	Composition	Class marker		
	[w?a <sup>1</sup> ]	$[w?a^1 + t j \tilde{o}^3 \cdot]$	$[wa^1 = ts?\tilde{o}^2 \cdot]$		
sg	'house'	house + fire	EDIFICE = heart		
	nouse	'car'	'church'		
	[l <sup>2</sup> ?a <sup>1</sup> ]	$[l^2?a^1+n?\tilde{o}^3\cdot]$	$[wa^1 = n?\tilde{o}^2]$	$[la^1 + ts?\tilde{o}^2 \cdot]$	$[la^1 + n?\tilde{o}^2 \cdot]$
pl	PL.house	PL.house + PL.fire	EDIFICE = PL.heart	PL.house + heart	PL.house + PL.heart
	'houses'	'cars'	'churches'	'churches'	'churches'
sg	[kio? <sup>1</sup> ] 'animal'	$[kio?^1 + \int k\tilde{\epsilon}^2]$	$[ka^2 + sue^{21}]$		
		animal + female	ANIM = dog		
	aiiiiai	'cow'	'dog'		
	[ŋ̊²-kio?¹]	$[\dot{\eta}^2 - kio?^1 + ntk\tilde{\epsilon}^2]$	$[ka^2 \cdot = lue?^{21}]$		
pl	PL-animal	PL-animal + PL.female	ANIM = PL.dog		
	'animals'	'cows'	'dogs'		

The gradience of prosody in the above ranges from full independent roots (e.g. 'house', 'animal') with lexical tone, phonemic vowel, lexical laryngeal quality to reduced forms of these same roots, with neutralization of laryngeal information and loss of lexical vowel and tone. Different patterns of plural marking show different statuses between lexical roots and so-called class markers, which are not (or are irregularly) inflected. In terms of productivity, compounds with full lexical roots are many but rarely occur with any one root in productive numbers. These observations correspond to grammaticalization in the sense that these word-

initial morphemes are now motivated and can be analyzed as part of a complex whole, though phonological reduction is also often part of this process (Lehmann, 1999).

A set of class markers can be observed in accordance with the above considerations (prosodic and morphophonological insight, measures of productivity). These indicate a generic category of meaning, typologically typical in Mesoamerica (Haspelmath 2001, Palancar 2016). Non-lexical inventories are evidently reductions of historical compositions, an example of a notable phenomenon of pretonic reduction visible at the lexical root level. In Proto-Amuzgo-Mixtecan cognates proposed by Longacre and Millon (1961), the \*CVCV couplet is reduced in Amuzgo to C(C)V, and synchronically, in its local group, Amuzgo stands apart typologically for its monosyllable lexical root, as shown below.

Mixtec	XA	
Chalcatongo: kúkà	∫ka?	'comb'
Yosondúa: nducha	ņtá	'water'
Santa Maria: <i>nūn</i> ì	na <sup>n</sup>	'sweet corn'
Copala Trique <i>yu³we<sup>35</sup></i>	tsue	'bedroll'

Though reduction is not always a necessary part of grammaticalization (and in fact is not in XA), pretonic reduction phenomena feed a gradient scale of morphemic material that become motivated for derivational purposes.

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