Distributivity as incremental plurality

Matthew Baerman,¹ Jérémy Pasquereau,¹ Carolyn O'Meara² ¹Surrey Morphology Group, University of Surrey; ²National Autonomous University of Mexico

1 Introduction

Verbs in Seri (isolate; Mexico) have up to five forms distinguishing different number values.¹ The individual exponents (suffixes and stem modifications) have no fixed value within the system, but appear to mark incremental degrees of plurality along a single scale, employing for the most part the same morphological means as found with nominal plurality (Baerman 2016). Previous studies (Marlett 1988, 2016, Cabredo, Pasquereau, and O'Meara 2018) have suggested that this paradigm is the realization of two cross-classifying features, subject number (SINGULAR vs PLURAL) and event number (NEUTRAL vs MULTIPLE), where MULTIPLE indicates that the event is extended over time, or iterated or distributed over subevents.

(1) a.	a.	singular subject neutral		plural subject neutral	
		ih-yo-ohit		ha-yo-iit-oj	
		1sg.tr-rlsyo-eat ²		1pl-rlsyo-eat.pl-pl	
		'I ate something.'		'We ate something.'	
	c.	singular subject multiple	d.	plural subject multiple	
		ih-yo-ohit-im		ha-jo-iit-olca	
		1sg.tr-rlsyo-eat-mult		1pl-rlsyo-eat.pl-pl	
		'I ate something (over time).'		'We ate something (over time).'	

However, recent fieldwork has shown that there are more distinctions than can be accounted for by this system, and we propose incorporating a third feature, distributivity. Distributive marking is well known from other languages of North America (Mithun 1999); what makes the Seri system noteworthy is that the category has no unique expression, but rather, it is conflated with subject number, where distributivity is manifested as one increment of plurality above the baseline. Unlike subject and event number, which are reliably marked, distributivity is only exceptionally distinguished, licensed by conditions which remain somewhat obscure.

¹ Other inflectional features – e.g. TAM and subject person – are prefixally marked and orthogonal to this paradigm.

² The gloss RLSYO stands for 'realis-YO', which is a tense-mood value (Marlett 2016).

2 Contexts for distributive marking

Deriving a transitive causative from an intransitive frequently licenses a distributive distinction: the subject plurality of the base verb in effect becomes object plurality of the derived transitive causative. For example, from the intransitive verb *-oiij* 'be tubular' (singular subject) \sim *-oiilc* 'be tubular' (plural subject), a causative can be formed in which the plural form indicates a plurality specifically of the object, provided the subject is singular (2). This we interpret as distributive.

(2) Gabriel quih hesen pac i-y-ah-oiilc.
Gabriel DEF ironwood INDEF.PL 3;3-RLSYO-CAUS-tubular.PL
'Gabriel made the ironwood logs into tubes.' (distributive)

Where there are multiple objects, distributivity may apply to any of them. For example, with the verb 'tie' (causative of 'be attached'), it applies either to the object (3a) or indirect object is plural (3b). Note that the marking of distributivity is optional: the singular form of the verb found in (4c) would be acceptable in (4a, b) too.

- (3) a. Kika quih poosj quih hehet pac iiqui iyahizlca.
 Kika DEF rope DEF stick.PL indef.PL [3POS]towards 3;3.RLSYO.CAUS.tie.PL
 'Kika attached the rope to a few sticks.' (distributive)
 - b. Kika quih poosilca quih hehe quih tazo iiqui iyahizlca.
 Kika DEF rope.PL DEF stick DEF one [3POS]towards 3;3.RLSYO.CAUS.tie.PL
 'Kika attached the ropes to one stick.' (distributive)
 - c. Kika quih poosj quih hehe quih tazo iiqui iyahizj.
 Kika DEF rope DEF stick DEF one [3POS]towards 3;3.RLSYO.CAUS.tie
 'Kika attached the rope to one stick.' (neutral)

With intransitive (non-causative) verbs, what is normally a plural subject form (4a) can be used with a singular subject (4b). In this case the plurality inherent to the form is interpreted as distributed over the subject, i.e. a single bread is burned in multiple places.

(4) a.	Siimet	coi	yitalc.	b. Siimet	ZO	yitalc	
	bread	DEF.PL	RLSYO.burn.pl	bread	INDEF.SG	RLSYO.burn.pl	
	'The breads have burned.' (PL SBJ)			'The brea	'The bread has burned (a little).' (distributive)		

This construal of distributivity may itself be absorbed into a transitive configuration through causative derivation, as in (5), where the same plural verb form as in (2) is used, with the property of 'being tubular' distributed over a singular object ('ironwood').

(5) Gabriel quih hesen z iyahoiilc.
Gabriel DEF ironwood INDEF.SG 3;3.RLSYO.CAUS.be_tubular.PL (distributive)
'Gabriel made an ironwood log into tubes.' SC: if it's a big log, a trunk

3 Morphology

Number marking in the Seri verb involves dozens of polyfunctional allomorphs whose sole consistent function is to mark incremental plurality. For example, the suffixes -*c*, -*ca*, -*coj* and -*cam* in (6) can be either neutral or multiple, depending on the verb, but along a scale of -*c* < -*ca* < -*coj* < -*cam*, the ones to the right always indicate a greater degree of plurality. An exception to this is the suffix -*(t)im*, which is a dedicated SINGULAR SUBJECT MULTIPLE marker.

(6)	plural subject neutral	plural subject multiple		
	-teepzaj-c	-teepzal-ca	'sit in'	
	-axnal-ca	-axnal-coj	'scold'	
	-anaml-coj	-anaml-cam	'hurry'	
	-azaail-cam	-azaiil-cam	'anchor'	(note stem alternation)

With a singular subject, the distributive is characterized as being somewhere in the scale between a SINGULAR SUBJECT NEUTRAL form and a PLURAL SUBJECT NEUTRAL form. Consider the two verbs in (7), from Moser & Marlett (2010), for which a distributive distinction has not been identified. The plural subject suffixes reflect a number scale of -ca < -coj < -am. The verb 'tie' (7) has all three suffixes, with the lowest on the scale being used for singular subject distributive (see example 3).

(7)	SG NEUT	SG MULT	PL NEUT	PL MULT	
	yihinej	yihinel-im	yihinel-ca	yihinel-coj	'be exposed'
	iyoqueetij	iyoqueetil-im	iyoqueetil-coj	iyoqueetil-am	'lift partially'

(8)	SG NEUT	SG MULT	SG DIST	PL NEUT	PL MULT	
	yahizj	yahizal-im	yahizl-ca	yahizl-coj	yahizal-am	'tie'

With plural subjects we find no comparable distinction of distributivity. Plural subjects have at most two forms, one which is neutral and the other which can be interpreted either as multiple or as distributive, or indeed as both. When all three types of plurality coincide: subject plurality, event plurality (multiple) and distributivity, they are systematically conflated and realized by a form which expresses the maximal degree of plurality.

4 Parallels with nominal plurality

The same system of plural markers (minus the explicitly verbal SG MULT suffix -(*t*)*im*) are found with nouns. Comparison with possessed nouns is particularly instructive: these may distinguish two plural forms. The maximally plural form marks plurality of EITHER possessor or possessed item, while the one which expresses a lesser degree of plurality is used specifically for a singular possessor and plural possessed item. This intermediate form is not only morphologically comparable to the verbal distributive, when such nouns are verbalized (a regular process), they must be interpreted as such; thus, the form in (9b) with its plural object (thus distributive) contrasts both with the SINGULAR NEUTRAL *iyasleepec*, and the SINGULAR MULTIPLE *iyasleepejquim*.

(9)	a. noun	b. derived verb		
	i-sleepejc	i-y-a-sleepejc		
	POSS-place.behind.ear.PL	TR-RLSYO-CAUS-place.behind.ear.pl		
	'places behind his/her ears'	'S/he removed lice from them' (from behind their ears)		

5 Conclusion

Seri verbs distinguish three kinds of plurality, compressed into a single scale of incremental number marking. While subject and event plurality are reliably distinguished, distributivity emerges intermittently as an extra distinction within this system, partly by exploiting available slots in the hierarchical number marking system, and partly through coercion with subject-verb mismatches; the exact conditions are still a matter for investigation. A striking property of this system is that although distributivity is orthogonal to subject number, it is expressed as a degree of plurality along the same scale: singular subject distributive is expressed as being more plural than an unmarked (neutral) singular subject, but less plural than a plural subject, thus comparable to a paucal in a nominal number system.

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