



Extraparadigmatic inflection in Seri

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Funded by the Arts & Humanities Research Council (UK) under grant AH/P002471/1 ('Seri verbs'). Their support is gratefully acknowledged. Thanks to all our Seri consultants, especially: Deborah Perales, Gabriel Hoeffler, Teresa Hoeffler, Karelia Perales, Genoveva Herrera, and Anamaria Morales.

Seri (isolate)

- Seri is spoken on the coast of Sonora (Mexico) in two villages: El Desemboque/Haxöl Iihom and Punta Chueca/Socaiix



- It is spoken by approximately 900 speakers (Ethnologue 2007)

Seri verbs

Moxima	sahmees	hizcoi	ih-yo-ohit.
yesterday	orange	DEM.PL	1SG-RLS.YO-eat
'Yesterday I ate these oranges.'			

Moxima	sahmees	hizcoi	ih-yo-ohitim.
yesterday	orange	DEM.PL	1SG-RLS.YO-eat.PLUR
'Yesterday I ate these oranges (over time).'			

Moxima	sahmees	hizcoi	ha-yo-iitoj.
yesterday	orange	DEM.PL	1PL-RLS.YO-eat.PL
'Yesterday we ate these oranges.'			

Moxima	sahmees	hizcoi	ha-yo-iitolca.
yesterday	orange	DEM.PL	1PL-RLS.YO-eat.PL.PLUR
'Yesterday we ate these oranges (over time).'			

Seri verbs

- Two cross-classifying features; see Marlett (1988, 2016) and Moser & Marlett (2010)

		event number	
		neutral	multiple
subject number	singular	iyoohit 'one eats something'	iyoohitim 'one eats something over time'
	plural	iyoiitoj 'several eat something'	iyoiitolca 'several eat something over time'

		event number	
		neutral	multiple
subject number	singular	iyopanx 'one runs'	iyopanozxm 'one runs over time'
	plural	iyopancojc 'several run'	iyopancoxla 'several run over time'

Seri verbs

- Allomorphy

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subject number	singular	iyopanx 'one runs'	iyopanozxm 'one runs over time'
	plural	iyopancojc 'several run'	iyopancoxla 'several run over time'

No one-to-one mapping

- For every exponent_x, it is not possible to associate it_x with one bundle of features

SG NEUTRAL	SG MULT	PL NEUTRAL	PL MULT	
-tteepx	-tteepx-tim	-tteepzaj-c	-tteepzal-ca	'sit on'
-taxnij	-taxanl	-taxnal-ca	-taxnal-coj	'scold'
-tanamj	-tanaml-c	anaml-coj	anaml-cam	'hurry'
-tazaain-im	-tazaiin-im	azaail-cam	azaail-cam	'anchor'
-tahipxa	-tapxaaal-ca	-tahipxal-ca	-tahipxal-ca	'roll up'
-tpoc	-tpoct-im	-tpocl-im	-tpocal-am	'fall'
-tpazj-c	-tpaxlax	-tpazlax	-tpazlax-lca	'be scattered'
-tineezil-ca	-tineezil-im	-tineezil-coj	-tineezil-am	'be raspy'

-tim

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SG NEUTRAL	SG MULT	PL NEUTRAL	PL MULT	
-tteepx	-tteepx-tim	-tteepzaj-c	-tteepzal-ca	'sit on'
-taxnij	-taxanl	-taxnal-ca	-taxnal-coj	'scold'
-tanamj	-tanaml-c	anaml-coj	anaml-cam	'hurry'
-tazaain-im	-tazaiin-im	azaail-cam	azaail-cam	'anchor'
-tahipxa	-tapxaal-ca	-tahipxal-ca	-tahipxal-ca	'roll up'
-tpoc	-tpoct-im	-tpocl-im	-tpocal-am	'fall'
-tpazj-c	-tpaxlax	-tpazlax	-tpazlax-lca	'be scattered'
-tineezil-ca	-tineezil-im	-tineezil-coj	-tineezil-am	'be raspy'

-c 

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-tahipxa	-tapxaal-ca	-tahipxal-ca	-tahipxal-ca	'roll up'
-tpoc	-tpoct-im	-tpocl-im	-tpocal-am	'fall'
-tpazj-c	-tpaxlax	-tpazlax	-tpazlax-lca	'be scattered'
-tineezil-ca	-tineezil-im	-tineezil-coj	-tineezil-am	'be raspy'

-ca 

8

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-taxnij	-taxanl	-taxnal-ca	-taxnal-coj	'scold'
-tanamj	-tanaml-c	anaml-coj	anaml-cam	'hurry'
-tazaain-im	-tazaiin-im	azaail-cam	azaail-cam	'anchor'
-tahipxa	-tapxaal-ca	-tahipxal-ca	-tahipxal-ca	'roll up'
-tpoc	-tpoct-im	-tpocl-im	-tpocal-am	'fall'
-tpazj-c	-tpaxlax	-tpazlax	-tpazlax-lca	'be scattered'
-tineezil-ca	-tineezil-im	-tineezil-coj	-tineezil-am	'be raspy'




-coj 

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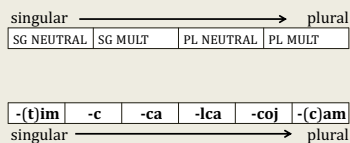
SG NEUTRAL	SG MULT	PL NEUTRAL	PL MULT	
-tteepx	-tteepx-tim	-tteepzaj-c	-tteepzal-ca	'sit on'
-taxnij	-taxanl	-taxnal-ca	-taxnal-coj	'scold'
-tanamj	-tanaml-c	anaml-coj	anaml-cam	'hurry'
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-tineezil-ca	-tineezil-im	-tineezil-coj	-tineezil-am	'be raspy'

-tim  -c  -ca  -coj 

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Incrementality of the exponents

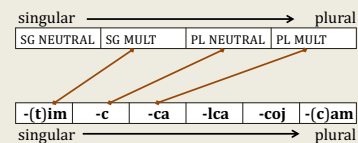
- The system is not completely random however, because both the paradigm cells and the exponents *mostly* follow an implicational scale :



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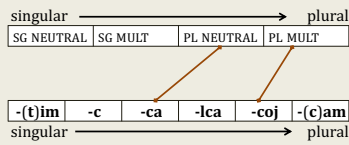


SG NEUTRAL	SG MULT	PL NEUTRAL	PL MULT	
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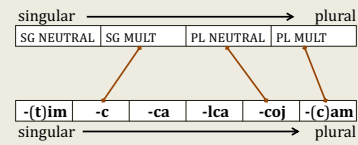


SG NEUTRAL	SG MULT	PL NEUTRAL	PL MULT	
-taxnij	-taxanl	-taxnal-ca	-taxnal-coj	'scold'

13

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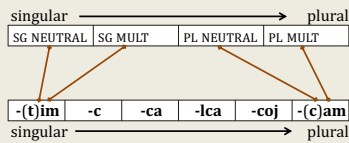


SG NEUTRAL	SG MULT	PL NEUTRAL	PL MULT	
-tanamj	-tanaml-c	anaml-coj	anaml-cam	'hurry'

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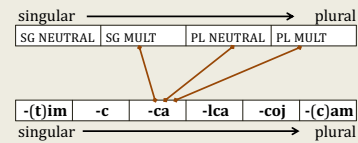


SG NEUTRAL	SG MULT	PL NEUTRAL	PL MULT	
-tazaain-im	-tazaiin-im	azaail-cam	azaail-cam	'anchor'

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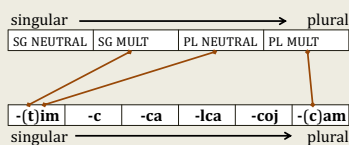


SG NEUTRAL	SG MULT	PL NEUTRAL	PL MULT	
-tahipxa	-tapxaal-ca	-tahipxal-ca	-tahipxal-ca	'roll up'

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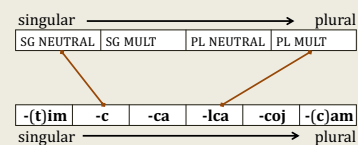


SG NEUTRAL	SG MULT	PL NEUTRAL	PL MULT	
-tpoc	-tpoct-im	-tpocl-im	-tpocal-am	'fall'

17

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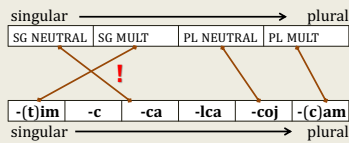


SG NEUTRAL	SG MULT	PL NEUTRAL	PL MULT	
-tpazj-c	-tpaxlax	-tpaxlax	-tpaxlax-lca	'be scattered'

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Incrementality of the exponents

- The system is not completely random however, because both the paradigm cells and the exponents *mostly* follow an implicational scale :



SG NEUTRAL	SG MULT	PL NEUTRAL	PL MULT	
-tineezil-ca	-tineezil-im	-tineezil-coj	-tineezil-am	'be raspy'

-(t)im is an outlier

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Problems with the shape of the paradigm

- The formal trappings of the paradigm are complex, but so long as we have the features or 'content paradigm' (Stump 2015) are sorted out, it can be accounted for.
- But our recent fieldwork has shown that the 2x2 matrix of features is not quite right.

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Verbs with extra forms

- Some verbs have an extra form in the paradigm. Often these are causatives:

Kika quih poosilca coi hehe quih iiqui iyahizj.
 Kika DEF rope.PL DEF.PL stick INDEF [3POSS]toward 3;3.RLYO.CAUS.tie
 'Kika attached the ropes to the stick.'

Kika quih poosilca coi hehe quih iiqui iyahizalim.
 Kika DEF rope.PL DEF.PL stick INDEF [3POSS]toward 3;3.RLYO.CAUS.tie.MULT
 'Kika attached the ropes to the stick.'

→ **Kika quih poosilca coi hehe quih iiqui iyahizlca.**
 Kika DEF rope.PL DEF.PL stick INDEF [3POSS]toward 3;3.RLYO.CAUS.tie.?
 'Kika attached the ropes to the stick.'

Sentences with a singular object

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Verbs with extra forms

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 'Kika attached the rope to the stick.'

Kika quih poosj quih hehe quih iiqui iyahizalim.
 Kika DEF rope DEF stick INDEF [3POSS]toward 3;3.RLYO.CAUS.tie.MULT
 'Kika attached the rope to the stick.'

* **Kika quih poosj quih hehe quih iiqui iyahizlca.**
 Kika DEF rope DEF stick INDEF [3POSS]toward 3;3.RLYO.CAUS.tie.?
 'Kika attached the rope to the stick.'

Sentences with a plural object

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Verbs with extra forms

- Thus the extra form indicates a plural object with a singular subject

'The ropes are attached to the stick.'
 'Kika made [the ropes be attached to the stick].'

- This option is not typically available for underived transitives

	SG	SG MULT	SG, PL OBJ	PL	PL MULT
'be attached (intr)'	-ihizj	-ihizalim		-ihizlcoj	-ihizalam
'attach (tr)'	-ahizj	-ahizalim	-ahizlca	-ahizlcoj	-ahizalam

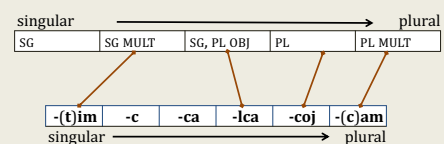
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Verbs with extra forms

- That makes perfect sense that this feature should appear with causatives if we think of the intransitive subject incorporated as an internal object.

SG made [do X]	PL made [do X]
SG made [PL do X]	PL made [PL do X]
SG made [SG do X] multiple times	PL made [SG do X] multiple times
SG made [PL do X] multiple times	PL made [PL do X] multiple times

- But mostly this feature is not exploited.
- Nor is it strictly in opposition to SINGULAR.
- And it has no unique exponent, but draws on the common set of number markers, towards the left-hand side of the hierarchy:



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Verbs that share forms

- Some plural subject forms (typically of intransitives) can be used with singular subjects!
- But when they do, they take on a particular meaning.

	SG	SG MULT	SG	PL	PL, MULT
'burn (intr)'	quitaj	quitalin	quitalc	quitalc	quitalcoj
'snap (intr)'	quiifz	quiifazi	quiifilca	quiifilca	
'have ridges (intr)'	caaol	caaolim	caaolj	caaolj	caaolam
'be chunky'	cocapnij		cocapnalca	cocapnalca	cocapnalca
'burn (intr)'	canoj	canolim	canolj	canolj	canolam
'have seeds (intr)'	quihic		quihijc	quihijc	

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Verbs that share forms

- Some plural subject forms (typically of intransitives) can be used with singular subjects!
- But when they do, they take on a particular meaning.

Siimet zo yitalc.
Bread INDEF.SG RLYO.burn
'A bread has burned (a little)'. SC: if it has burning stains

Siimet coi yitalc.
Bread DEF.PL RLYO.burn
'The breads have burned.'

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Reevaluation of the features: extra forms

- It looks less like the cross-classification of two features than one feature with a few values, which we can derive by resolution rules over the two arguments.
- We posit that singularity of the intransitive subject is neutralized in the process.

subject (patient) number (INTR)	SG	PL	SG	PL
subject (agent) number (TR)	SG		PL	
combined features	SG, SG	SG, PL	PL, SG	PL, PL
feature resolution	SG	SG+	PL	PL+
which we can call...	singular	pauca	plural	greater plural*

*See Corbett (2000)

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Reevaluation of the features: extra forms

- When combined with verbal number that still leaves us with too many cells.

	neutral	multiple
singular (SG)		
pauca (SG+)		
plural (PL)		
greater plural (PL+)		

- We posit some further conditioned feature deletion:

SG+ MULT → SG+ *motivation? Perhaps there's a limit to how*
PL MULT → PL+ *many types of plurality you can combine.*
PL+ MULT → PL+

- That means that there is cumulative exponence of verbal plurality (MULT) and argument number only in case of a singular subject:

singular	→			plural
SG	SG+	PL	PL+	
	SG MULT			

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Reevaluation of the features: shared forms

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Siimet coi yitalc.
Bread DEF.PL RLYO.burn
'The breads have burned.'

- The shared form slots into the same position (SG+) as the 'extra' form of the causatives:

	form	-itaj	-italim	-italc	-italcoj
intr.	interpretation	sg sbj neutral	sg sbj mult	sg sbj, pl result	pl sbj neutral
	features	SG	SG MULT	SG+	PL
					PL+
caus.	interpretation	sg sbj neutral	sg sbj mult	sg sbj, pl obj	pl sbj neutral
	form	-ahizj	-ahizalim	-ahizlca	-ahizlcoj
					-ahizalam

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Summary

- Most of the formatives are mark some kind of incremental quantification, but are otherwise underspecified, so we need the notion of an independent 'content paradigm' in order to interpret them.
- But the size of the paradigm appears to fluctuate, so both the form and content paradigms are moving targets.
- To nail things down we have reevaluated the feature system. Prior analyses treated it as a 2x2 system of subject and verbal number. We suggest that, apart from the SG MULT cell, the various aspects of plurality resolve to a single four-valued number feature, whose incrementality is mirrored in a morphological scale.
- Previously unexplained 'extra forms' occur with a singular subject but have a plurality requirement that can be realized on an internal argument or as a semantic effect whereby the property denoted by the predicate applies to a plurality of sub-parts of the singular subject.
- These forms slot in somewhere between singular and plural along the scale (next to subject plural and possibly sharing a form with it).
- For future work: what licenses this extra SG+ form and what determines its interpretation? What determines the selection of forms? (A question for the rest of the system, for that matter.)

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¡Haxahtiipe!

