

## Object Preference, Object Shift, & Omnivorous Number: The View from Phorhépecha Clitics

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**Intro.** We investigate three interrelated puzzles involving the robust system of agreement in Cheranástico Phorhépecha (Michoacán, Mexico). Firstly, Phorhépecha has agreement clitics whose form is sensitive to the person and number features of both the subject and the direct object in transitive sentences. In particular, these clitics demonstrate a **participant object preference** in agreement; the person features of participant objects are always exponed on the clitic, while subject person features are only exponed when the object is in the 3rd person. The second puzzle we investigate is that clitics display **omnivorous number agreement** when the object is a participant: if the object is a participant, the clitic occurs in its plural form when *either or both* the subject and object are plural. Thirdly, when the object is in the 3rd person, the clitic no longer exhibits omnivorous number agreement; instead, **the verb agrees with the object in number** - thus, verbal object agreement and clitic object agreement are in complementary distribution. Further, we argue that while Bejar & Rezac's (2009) Cyclic Agree solution for participant object preference and omnivorous number does not explain the exceptional behavior of 3rd-person objects in Phorhépecha. Instead, we derive (1) participant object preference, (2) omnivorous number agreement, and (3) the complementary distribution of clitic omnivorous number and verbal object agreement by a different route - from object-over-subject movement, the locality of Agree, and the phasehood of  $vP$ .

**Participant Object Preference.** Phorhépecha clitics can cliticize to multiple classes of words and have multiple possible licit positions within a clause, although second position is the unmarked and most frequent (Chamoreau 2014). Further, clitics display a preference for participant objects: when an object is a participant, the clitic expones the object's person feature, regardless of the person features of the subject.

(1) **1SUBJ > 2OBJ**

wiNachakwaru=**kin** ji wandaapa-s-ka.  
loudly=2OBJ:SG I called-PST-1/2SUBJ

'I called you loudly.'

(2) **3SUBJ > 1OBJ**

wandaapa-s-ti=**tsin**.  
called-PST-3SUBJ=1OBJ:PL

'They called us.'

The clitic attaches to an adverb in (1) and to the verb in (2). Crucially, the clitic invariably agrees with a participant object, regardless of whether the subject is also a participant (1) or 3rd person (2). We argue that clitics' object-agreement preference arises because participant objects obligatorily undergo phrasal movement to an outer specifier of  $vP$  (i.e., above the subject), making participant objects always structurally closer to the clitic, which bears a person probe.

(3) [ $vP$  DP.OBJ<sub>1/2</sub> [ $vP$  DP.SUBJ  $v$  [**•D•, •PART•**] [ $VP$  ... <DP.OBJ>]]] (4)  $*\pi$ : $\square$ \* [ $vP$  DP.OBJ<sub>1/2</sub> [ $vP$  DP.SUBJ

$v$  bears a list of ordered features (Müller 2010) (3). The first feature is a structure-building [D] feature, which triggers merger of the subject DP in Spec, $vP$ . The second feature is also structure-building and causes  $v$  to attract a participant ([+part]) argument to its specifier: this feature is satisfied by object shift to the *outer* specifier of  $vP$  (crucially, above the subject). After the participant object has moved to Spec, $vP$ , a functional head with a person probe is merged above  $vP$  (4). We propose that this head is realized as a clitic in Phorhépecha (Sportiche 1996). After it is merged, the probe searches for a goal, the structurally closest of which is the shifted object. Having been valued by the object, the  $\pi$ -probe cannot Agree with the subject (4).

**Omnivorous Number Agreement.** Along with a participant-object preference, clitics exhibit omnivorous number agreement (Bonet 1995, Nevins 2011) when the object is a participant: clitics appear in their plural forms when the subject, object, or both are plural:

(5) Inde=**tsin** xe-s-ti.  
3.DEM=1OBJ:PL see-PST-3SUBJ

'They saw me, He saw us, They saw us.'

(6) Inde=**rin** xe-s-ti.  
3.DEM=1OBJ:SG see-PST-3SUBJ

'He saw me.'

The sentence in (5) has three possible interpretations because number agreement is omnivorous: =*tsin* shows up as long as there is at least one plural argument. Contrast (5) with (6), the latter of which has only one interpretation since both arguments are singular. Omnivorous number, we argue, arises due to a number

probe on the clitic, which is specified for a plural ([PL]) feature. After participant object shift takes place, both subject and object are in the search domain of said probe, so plurality of either one can satisfy it.

(7) ... \*#:□\*<sub>[PL]</sub> π [<sub>vP</sub> DP.OBJ [<sub>vP</sub> DP.SUBJ ... [<sub>VP</sub> ...

The number probe on the clitic searches for any DP that bears plural ([PL]). If an object that has undergone object shift is plural, it will value the probe's plural feature, since it is the structurally closest goal. If, however, the shifted object is singular, the probe will bypass it and continue the search for a suitable goal. If the lower subject is plural, it values the probe's feature (7).

**Exceptional 3rd-person Objects.** We assume *vP* is a phase and therefore VP-internal arguments are inaccessible to probes higher than *vP*. Given this assumption, our analysis predicts that clitic probes, whose specification derives object preference and omnivorous number, cannot access 3rd-person objects. This prediction is borne out: unlike participant objects, 3rd-person objects do not participate in omnivorous number (and are in fact not agreed with at all by the clitic).

(8) Ima=∅      x-aa-s-ti.                      (9) Ima=ks      xe-s-ti.  
 3.DEM=3SG see-3PL:OBJ-PST-3SUBJ      3.DEM=3PL see-PST-3SUBJ  
 'He saw them.'                                      'They saw him.'

If omnivorous number agreement surfaced in (8-9), the clitic forms would be identical, contrary to evidence. Thus, the same feature that creates the configuration for object preference (the structure-building feature which attracts participant objects to Spec,*vP*) also explains the distribution of omnivorous number. Under a Cyclic Agree analysis, the probe on *v* would always find the object first, making it unclear why the clitic preferentially agrees with the subject's [PL] feature when the object is 3rd-person.

**Object Agreement.** 3rd-person objects are inaccessible to the clitic probes because they are separated by the *vP* phase. Conversely, if there were an agreement probe on *v* itself, we would predict it can *only* agree with 3rd-person objects, never with participant objects, which vacate *vP*: this prediction is borne out.

(10) Ima=∅      x-**aa**-s-ti.                      (11) Inde=tsin      xe-s-ti.  
 3.DEM=3SG see-3PL:OBJ-PST-3SUBJ      3.DEM=1OBJ:PL see-PST-3SUBJ  
 'He saw them.'                                      'They saw me, He saw us, They saw us.'

The verb displays object agreement (the suffix in bold) but *only* with 3rd-person objects, never participants. We argue verbal object agreement diagnoses the position of the object: the low (linearly before tense and subject agreement) object agreement probe can only find a goal if the object has not undergone object shift.

(12) [<sub>vP</sub> DP.SUBJ *v*<sub>[•D•, •PART•]</sub> [<sub>VP</sub> ... [ DP.OBJ<sub>3</sub>]]      (13) \*#:□\* \*π : □\* [<sub>vP</sub> DP.SUBJ *v* [<sub>VP</sub> ... DP.OBJ<sub>3</sub>]]

*v* satisfies its [•D•] feature by triggering the external merger of the subject, but its [PART] feature remains unvalued because the object is 3rd person and no object shift occurs (12). We assume unsatisfied features do not cause a crash (Preminger 2014). *v* then probes for a #-goal, which it finds in the 3rd-person object that remains in its base position. We argue if the number probe on *v* is valued by [PL] on the object, it is exponed as the -aa suffix in (10). Verbs never display object agreement with participant objects because they are never potential goals for the number probe (having moved out of the c-command domain of *v* before the relevant probe begins its search).

**Conclusion.** Patterns of participant object preference and omnivorous number in Georgian and Algonquian have been fruitfully analyzed through the Cyclic Agree framework. Uniquely, Phorhépecha omnivorous number does not extend to 3rd-person objects. We propose languages like Phorhépecha instantiate a different route to omnivorous number and object preference, one that involves object-over-subject movement restricted to participant objects. The analysis also explains the unusual complementary distribution of omnivorous number and object agreement in the language. As long as Merge can be ordered before Agree on the same head (Müller 2010, Georgi 2017), participant objects can vacate *vP* before the number probe on *v* begins its search.