Negative concord is multiple agreement: imperatives in Washo*

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1. Introduction

This paper offers evidence for an agreement-based approach to negative concord from Washo, a Native American isolate. Washo displays negative concord (NC) morphology on possibly many elements in the context of negation. For example, the negative concord suffix $-\eta a$ may appear below only in (1), along with the verbal suffix $-\acute{e:s.}^1$

(1) Adél-ŋa wá?-ŋa ?-áŋali?-é:s-i
 Adele-NC here-NC 3-reside-NEG-IND
 'Adele doesn't reside here.'

(Hanink 2019:3)

(2) Adél(*-ŋa) wá?(*-ŋa) ?-áŋali?-i Adele-NC here-NC 3-reside-IND 'Adele resides here.'

In this paper I revise the preliminary agreement-based analysis of negative concord in Washo put forward by Hanink (2019), arguing that NC is best analyzed as the result of multiple agreement between a negative operator in Spec, NegP and possibly many elements in its c-command domain (Zeijlstra 2004). The core evidence for the proposal comes from the existence of true negative imperatives (Zanuttini 1994) in the language, building on argumentation in Zeijlstra 2006. I show that the analysis accounts for both imperatives and QP-internal negative concord in Washo, licensed in the context of phrasal negation. From a

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¹Glosses: ACC: accusative; DEP: dependent mood; DS: different subject; IND: independent mood; IMP: imperative; NC: negative concord; NEG: negation; NM: nominalizer; OBL: oblique; PL: plural; REC.PST: recent past; TRANS: transitory. The orthography is adapted from Jacobsen 1964; symbols deviating from the IPA are: c [ts]; š: [ʃ]; y: [j]. Uncited data come from the author's fieldwork.

broader perspective, the Washo data contribute to our understanding of the range of attested negative agreement phenomena and provide novel data for an agreement-based account of negative concord that applies uniformly to both sentential and phrasal domains.

2. Proposal for Washo

In this section I briefly summarize the data from Washo as well as previous semantic and syntactic accounts of negative concord. I also present the agreement-based proposal for Washo based on Hanink 2019 and sketch how this analysis fares with the basic cases.

2.1 Background

Negative concord describes the co-occurence of negative dependents with an independent expression of negation (see Giannakidou and Zeijlstra 2017 for a recent overview). For instance, in the Italian example in (3), the negative element *niente* is licensed by negative *non*, and is ungrammatical without it. So-called '*n*-words' (Laka 1990) such as *niente* are negative dependents that crucially do not introduce their own semantic negation.

(3) Gianni *(non) ha visto niente
Gianni not has seen n-thing
'Gianni hasn't seen anything.'

(Giannakidou and Zeijlstra 2017:7)

I adopt going forward the definition for *n*-words from Giannakidou 2006, given below.

- (4) An expression α is an *n*-word iff: (Giannakidou 2006:2)
 - a. α can be used in structures containing sentential negation or another α -expression yielding a reading equivalent to one logical negation;
 - b. α can provide a negative fragment answer.

The suffix $-\eta a$ passes the criteria for counting as an '*n*-morpheme' in that it is licensed only by the negative suffix $-\dot{e}$:s and doesn't contribute any additional semantic negation.² This suffix is in a sense optional, and its presence does not affect the meaning (5a-b).³

- (5) a. da?mó?mo? pú:lul-a l-í:gi-yé:s-i
 woman car-OBL 1/3-see-NEG-IND
 'I don't see the woman in the car.'
 - b. da?mó?mo?-ŋa pú:lul-a-ŋa l-í:gi-yé:s-i
 woman-NC car-OBL-NC 1/3-see-NEG-IND
 'I don't see the woman in the car.'

²To my knowledge, fragment answers are not attested in Washo, though this research is ongoing.

³By 'optional', I mean that I have not been able to identify meaning differences during elicitation. For example, this suffix is not sensitive to focus contrasts, but might contribute emphasis; see Hanink 2019.

2.2 **Previous accounts**

Broadly speaking, previous accounts of negative concord can be divided between semantic and syntactic proposals. On the semantic side, it has been proposed for example that *n*-words are indefinites bound existentially under scope of negation (i.a. Ladusaw 1992, 1994, Acquaviva 1997, Giannakidou 1997, Richter and Sailer 1998), or that they are universal quantifiers that outscope negation (i.a. Szabolcsi 1981, Giannakidou 1997, 2000, Sells 2006). While such accounts capture the generalization that *n*-words are not semantically negative (see Zanuttini 1991, Ladusaw 1992, Haegeman 1995), some problems posed for either view from Washo are that (i) the suffix *-ŋa* may appear on any non-verbal sentential element (including e.g., definites (5b)), and (ii) this suffix does not have any observed effect on scope relations (see Hanink 2019 for an overview).

On the other hand, syntactic approaches contend that negative concord is instead the result of agreement (Watanabe 2004, Zeijlstra 2004, Penka 2007, Haegeman and Londahl 2010). For instance, Zeijlstra (2004) proposes an account of Multiple Agree (Hiraiwa 2001) between the controller Neg, bearing [iNEG], and possibly many negative dependents bearing [uNEG]. Hanink (2019) adopts this approach, as schematized in (6) for the Washo example in (1) in which both *Adele* and *?wá?* bear [uNEG], checked by [iNEG] on -*é*:s.

(6) $[_{\text{NEGP}} \text{ Adele}_{[u\text{NEG}]} \text{ wá?}_{[u\text{NEG}]} [_{\text{NEG}} ?áŋal-é:s_{[i\text{NEG}]}]]$

Zeijlstra adopts a definition of Agree following Chomsky (2000, 2001) as in (7):

- (7) α can agree with β iff:
 - a. α carries at least one unvalued and uninterpretable feature and β carries a matching interpretable and valued feature.
 - b. α c-commands β .
 - c. β is the closest goal to α .
 - d. β bears an unvalued uninterpretable feature.

One benefit of this class of syntactic approaches is the ability to predict locality effects in negative concord. Agree operations may not cross a CP-boundary due to minimality effects, predicting that the intervention of such a boundary should block negative concord from occurring outside the clause hosting negation (which is not the case in e.g., NPIlicensing). This prediction is borne out, as shown in the following example from Italian:

 (8) *Non ho detto [che nessuno e arrivato] NEG have.1SG said that N-body has arrived
 Intended: 'I didn't say that anybody has arrived.' (Zeijlstra 2004:266)

Hanink (2019) offers initial evidence for an agreement-based approach to NC in Washo by showing that it is likewise subject to locality effects such as clause-boundedness:⁴

(9) [sí:su(*-ŋa) šéšim-i-š-ge] di-dámal-é:s-i
 bird-NC 3.sing.PL-IND-DS-NM.ACC 1/3-hear-NEG-IND
 'I didn't hear the birds singing.'

In the next section however, I revise Hanink's (2019) preliminary proposal and put forward instead an analysis along the lines of (10) for Washo on the basis of true negative imperatives in the language, in which a negative operator ($OP\neg$) in Spec, NegP is the controller of agreement, rather than Neg⁰ itself (Zeijlstra 2006).⁵

(10) $[_{NEGP} OP \neg_{[iNEG]} [_{TP} Adele_{[uNEG]} ?wá?_{[uNEG]} ?áŋal] [_{NEG} -é:s_{[uNEG]}]]$

3. True negative imperatives

Zeijlstra (2006) modifies his (2004) proposal on the basis of *true negative imperatives* (TNIs, Zanuttini 1994), described as such in cases where an imperative verb form may be negated. On the basis of the behavior of negative imperatives cross-linguistically, Zeijlstra argues that languages vary according to whether it is Neg or OP¬ controls agreement. For instance, Spanish requires the subjunctive in cases when an imperative is negated (11), while Polish imperatives felicitously occur with the sentential negation maker *nie* (12).

(11)	Spanish	(12)	Polish
	No leas/*lee		Nie pracuj
	NEG read.2.SUBJ/read.2.IMP		NEG work.2.SG.IMP
	'Don't read!'		'Don't work!'

Han (2001) argues that a feature [IMP] is hosted on imperative verbs, and that this feature may not be c-commanded by negation because imperative force cannot be negated. On the basis of her arguments, Zeijlstra (2006) argues that, in a language like Spanish, Neg hosts *i*NEG: This leads to the use of the subjunctive in negative imperatives, as Neg would otherwise c-command $V_{[IMP]}$, causing a semantic violation. The possibility of TNIs in Polish on the other hand implies that semantic negation is encoded by a negative operator in Spec, NegP, rather than by Neg instead. In accordance with the Head Movement Constraint (Travis 1984), the restriction on c-command can then be obviated by consecutive head movement of V+Neg to C, the locus of the imperative, in languages where semantic negation is encoded by OP¬. If the complex V+T+Neg necessarily moves to C (triggered by a matching imperative feature on C), then negation no longer c-commands the imperative.

⁴Many embedded clauses in Washo are nominalized, as here.

⁵Washo is an optional tense language, see Bochnak 2016.

4. True negative imperatives in Washo

Crucially, Washo is a language with true negative imperatives: The normal negation suffix -é:s (13) is also able to form negative imperatives, as in (14).

(13)	l-élšim -é:s -i	(14)	ga-báŋkuš -é:s
	1-sleep-NEG-IND		IMP-smoke-NEG
	'I'm not sleeping.'		'Don't smoke!'

I therefore follow Zeijlstra (2006) on the proposal that $OP\neg$ hosts *i*NEG, and controls agreement in Washo. This explains the availability of TNIs: Head movement allows $V_{[IMP]}$ to escape the scope of negation; while Neg appears to c-command $V_{[IMP]}$ on the surface, the *u*NEG feature of the negative suffix *-é:s* is in fact checked by *i*NEG on $OP\neg$ before consecutive head movement occurs from V-T-Neg-Mood. This head movement is schematized in (15), and is further reflected by the suffixal morphology of Washo according to the Mirror Principle (Baker 1985). The compex head in Mood then c-commands the *i*NEG feature in Spec, NegP, avoiding the problem of negation c-commanding a verb bearing [IMP].

(15) *Head movement of* $V_{[IMP]}$



4.1 Mood hosts the imperative

I diverge slightly from Zeijlstra (2006) in treating the locus of imperative force in Washo as Mood, rather than C (as in (15)). Zeijlstra adopts his proposal for the imperative on the basis of the following projection hierarchy:

(16) CP > NegP > TP > vP i.a. Rivero 1994, Rivero and Terzi 1995

He contends moreover that imperatives universally take scope from C. However, imperatives in Washo are in complementary distribution not with C but with other mood markers,

for example the default 'independent' mood -i; 'dependent' mood -a? (for more on this distinction in Washo, see Hanink and Bochnak 2018).

(17) [_{CP} l-émlu -ya -š] ?-íme?-leg -i
1-eat -DEP -DS 3-drink-REC.PST -IND
'He was drinking while I was eating.'

Note also that Mood⁰ is null in Washo. The imperative prefix is agreement, varying according to the person feature of the (in)direct object (Jacobsen 1964).

(18)	third person object	(19)	9) first person object		
	g- éšil		bámc'i l- éš i l		
	2/3 -give		sugar 2/1-give		
	'Give it to him.'		'Give me the sugar.'		

If C is present in imperatives in Washo, it is null. There is evidence for C in embedded clauses: Washo allows embedded imperatives, for example, inside an adjunct as in (20).

(20)	[_{CP} g-élšim-lel-a-š]	m-áŋal	l-á:da?éšip-i
	IMP-sleep-TRANS-DEP-DS	2-house	1/3-clean-IND
	'I'll clean your house while take a nap.'		

In (20), the presence of the different subject marker suffix -š in the embedded clause signifies the presence of C (see Arregi and Hanink 2018); head movement of $V_{[IMP]}$ therefore occurs through T and Mood all the way to C.

4.2 Morphology

On the current analysis, the negative concord suffix *-ŋa* can be conceived of as a dissociated morphem, Agr. I follow Iatridou (1990), Marantz (1992) and Noyer (1997) on the assumption that there are no Agr morphemes in the syntax to host the NC morpheme, but rather Agr is inserted postsyntactically. This means that the feature [NEG] on negative dependents triggers Agr-node insertion and feature copying, as schematized in (21):

 $(21) \qquad X_{[\rm NEG]} \rightarrow [\ X_{[\rm NEG]} \ Agr \]$

The elevant rule for vocabulary insertion in Agr when [NEG] is present is then as follows:

(22) [NEG] \leftrightarrow - ηa

5. Extending the account to phrasal negation

In this final section I show that the present account can be extended to account for cases of phrase-internal negative concord (cf. DP-internal negative concord in West Flemish, Haegeman and Zanuttini 1991). In Washo, the suffix $-\dot{e}$:s may also appear on quantifier phrases (cf. Haegeman 2002 on West Flemish). This type of phrasal negation is exemplified below with *guté:ši?* 'too many' in (23).

(23) ...wáta-ya guté:ši?-é:s pá:?m-a? river-OBL too.many-NEG 3.fall.into.water-DEP
'...while not too many [pinenuts] fall into the river.' Washo Archive

In contrast to the (non-)effects of the NC suffix $-\eta a$, the location of negation has an effect on scope. For instance, when $-\dot{e}:s$ occurs on the universal quantifier *mi?le?*, the sentence receives wide scope negation (24). When it occurs as a suffix on the verb on the other hand, the universal quantifier takes higher scope (25).

- (24) $[_{QP} t' anu mi?le-w-é:s] p'im-ewe?-i person all-PL-NEG 3.exit-hence-IND 'Not everyone went out.' <math>(\neg > \forall)$
- (25) $[_{QP} t'anu mi?le-w] p'im-ewe?-é:s-i$ person all-PL 3.exit-hence-NEG-IND 'No one went out.' ($\forall > \neg$)

Importantly for our purposes, QP-internal negative concord is licensed when negative $-\dot{e}$:s occurs on the quantifier, as shown on *t'ánu* 'person' in (26)-(27).

- (26) NC on QP-internal NP
 - a. [QP t'ánu-ŋa t'é:k'e-w-é:s] baŋáya ?-é?-i person-NC many-PL-NEG outside 3-be-IND
 'Not many people are outside.'
 - b. [QP t'ánu-ŋa mí?le-w-é:s] baŋáya ?-é?-i person-NC all-PL-NEG outside 3-be-IND
 'Not everyone is outside.'

The suffix $-\eta a$ is moreover only licensed internally to this phrase; it may not occur for example on $b\dot{a}\eta aya$ which would otherwise be allowed in the context of sentential negation.

 No NC outside QP in phrasal negation
 [QP mí?le-w-é:s] baŋáya(*-ŋa) ?-é?-gap'il-i all-PL-NEG outside-NC 3-be-around-IND
 'Not everyone is around outside.'

These locality effects are as expected on an agreement account. Such examples can be accounted for if negation again projects its own phrase in which $OP\neg$ occupies a specifier position, in accordance with the Neg Criterion (Rizzi 1991). In this way, the operator's *i*NEG feature is able to check all *u*NEG-features phrase-internally. This is schematized in (28) for (26b), in which $OP\neg$ controls agreement – as in sentential negation – and Q headmoves to Neg to derive the suffixal nature of *-é:s* (see Hanink 2020 for arguments that Q selects for DP, as in Matthewson 2001). The treatment here of phrasal agreement is therefore consistent with the wider proposal for negative concord presented in Section 4.



6. Conclusion

I have argued above for a revised view of the proposal for negative concord put forward in Hanink 2019. Based on the behavior of imperatives in Washo, I have proposed a Multiple Agree-based account that accounts for the existence of true negative imperatives along the lines of Zeijlstra 2006 by proposing that $OP\neg$ is the controller of agreement, rather than Neg itself. I have also shown that the proposal offers a unified account of sentential and phrasal negation in Washo, both of which exhibit local negative concord licensing effects.

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