

The Itelmen inclusive imperative: Treetops, clusivity, allomorphy*

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1. Introduction

Many languages have a (dedicated) means to express a plural inclusive imperative (hortative) with multiple addressees: *Let's go, y'all!* In some languages, these forms are special within the verbal paradigm in combining both **1PL** and **2PL** affixes in ways that these are not otherwise combined (Dobrushina and Goussev 2005, Goussev 2005). For example, in Russian and some Turkic languages, such as Sakha (iso 639 sah), the plural inclusive imperative involves apparent extended exponence of plural, with the **2PL** marker added to the **1PL** imperative (1c,f). In the Chukotko-Kamchatkan language Itelmen (iso 639 itl), which normally marks intransitive subjects at both prefix and suffix positions (1g-h) the **2PL** subject suffix in the (previously undocumented) composed inclusive imperative replaces the **1PL** subject suffix, and combines with a **1PL** subject prefix (1i):¹

(1)	a.	id- em go-1PL	b.	id-i- te go-IMP-2PL	c.	id- em-te go-1PL-2PL	Russian
	d.	bar- iax go-1PL	e.	bar- ij go-IMP-2PL	f.	bar- iaj-ij go-1PL-2PL	Sakha
	g.	m(ə)n-ił-k(ičen) 1PL.IRR-go-1.SBJ 'Let's go!'	h.	q-ił-sx 2PL.IRR-go-2PL.SBJ 'Go! (pl. addr.)'	i.	m(ə)n-ił-sx 1PL.IRR-go- 2PL.SBJ 'Let's go (pl. addr.)!'	Itelmen

*I am first and foremost grateful to the members of the Itelmen community who have so generously shared their knowledge of their language with me. For feedback on the work presented here, I thank audiences and seminar participants at NELS 56, Языки от Сибири до Аляски, AsyaFest, SinFoniJa, IMM 22, Harvard, Masaryk U., Queen Mary U. London, U. Conn and U. Penn. This project grew out of work funded by the National Endowment of the Humanities (PD-260979-18).

¹Sources: Russian: Khrakovskij and Volodin (1986), Sakha: Dobrushina and Goussev (2005), Ubrjatova et al. (1982:320), Itelmen: author's field notes, also Bog = Bobaljik et al. (2023), Joch = Worth (1961), V76 = Volodin (1976), Vol (Volodin 2008), and *PIRS* = Volodin et al. (2021). Abbreviations are as per Leipzig Glossing conventions, plus: $x > y$ = portmanteau SUBJECT(x) acting on OBJECT(y).

In this paper I suggest that properties of these composed plural inclusive imperatives have consequences for three broader theoretical issues (I elaborate on these below):

- **Clusivity:** I argue that the presence or absence of an inclusive person category is a parameter (Zwicky 1977), and not merely an instance of syncretism (morphological neutralization of an underlying contrast) in languages without inclusive morphology (contra Ackema and Neeleman 2018:30).
- **Treetops/Performative Hypothesis:** I argue that contextual parameters such as [AUTHOR, ADDRESSEE] are not always syntactically projected in the “treetops” (Wiltschko 2021, Miyagawa 2022, Krifka 2023 a.o.), or that if they are, they are not generally accessible to control morphology on the verb, and that it is a specialized IMPERATIVE projection that makes an ADDRESSEE feature morphosyntactically accessible (cf. Zanuttini 2008 and related work).
- **Agreement:** I argue that the Itelmen facts in particular are best understood if not all agreement morphology is the result of agreement (“probe–goal” relations in many current approaches), but instead involves an admixture of agreement and contextual allomorphy (as argued for Itelmen in Bobaljik 2000 and Fenger 2024).

Specifically, I propose that composed inclusive imperatives have a complex structure with an imperative operator above the main clause, as in Zanuttini (2008). This imperative operator introduces an ADDRESSEE-PL feature in addition to the AUTHOR-PL feature at the subject position, leading to a composed inclusive interpretation in languages that otherwise lack an inclusive person category. The apparent extended exponence of PLURAL in fact marks two distinct (but overlapping) pluralities. The arguments here are not that alternative approaches would be incompatible with the observations, but instead that other approaches would be compatible both with the observed state of affairs and with (loosely speaking) its opposite. The proposal here aims not only to provide a description of the observed facts, but to a certain extent also an account of why the patterns are as they are, and not otherwise. Under the proposal here, the claim that the second plural is introduced by the imperative operator explains why languages may have composed inclusives in the imperative but lack them in declaratives, but not the other way around (Dobrushina and Goussev 2005). Similarly, the proposal will also facilitate an account of two properties specific to Itelmen: why Itelmen combines a prefix and a suffix instead of simply stacking the 2PL suffix on top of the 1PL imperative forms (as happens in the other languages) and why Itelmen uses a 1PL subject prefix and a 2PL subject suffix, rather than a 2PL prefix and a 1PL suffix: **q-it-k*.

2. Background - Itelmen agreement

Chukotko-Kamchatkan verbal morphology consists of a rich inventory of both prefixes and suffixes. The primary focus of this paper concerns agreement, which includes the most peripheral affixes (both prefixes and suffixes) in the inflected verb. To a first approximation, agreement morphology largely conforms to the schema in (2) (Bobaljik and Wurmbrand 2002).

Itelmen inclusive imperative

- (2) PREFIX - STEM - SUFFIX
- | | | | |
|----------------|---|---|------------------------------|
| <i>Subject</i> | } | { | <i>Subject(Intransitive)</i> |
| <i>Mood</i> | | | <i>Object(Transitive)</i> |

At a minimum, finite verbs include (i) a prefix (possibly zero) which marks person and number of the subject, for which there are two series that vary by mood: indicative versus what I will call *irrealis* (whose distribution includes imperatives, jussives, negative future, optatives and other contexts), and (ii) a suffix (often internally complex) which, in the basic case, marks either the object (of a transitive verb) or the subject (of an intransitive verb). Illustrative examples from the indicative paradigm are given in (3-4). In the transitive verbs in (3) the prefix marks the subject and the suffix the object. In the intransitive verbs in (4), the person and number of the subject are marked by both the prefix and the suffix.²

- | | | | | | | |
|-----|----|----------|----------------|----|----|--------------------|
| (3) | a. | t'- | əłčku -(y)in | b. | Ø- | əłčku -βum |
| | | 1SG.SBJ- | see -2SG.OBJ | | | 2SG- see -1SG.OBJ |
| | | | 'I saw you.' | | | 'I saw you.' |
| (4) | a. | t- | k'ot- -k(ičen) | b. | Ø- | k'ot- -sx |
| | | 1SG.SBJ- | come -1SBJ | | | 2SG- come -2PL.SBJ |
| | | | 'I came.' | | | 'I came.' |

When the object is third person, the suffix complex includes portmanteaus conditioned jointly by features of both the object and the subject (and sometimes mood). The example in (5), taken from a text that includes composed inclusive imperatives, provides a minimal pair in consecutive clauses – both instances of the verb *ləm-* ‘kill’ have a 3PL object, but the suffixes are completely different, as a function of the differing subjects.

- (5) laʔlq ʔəm-sx[ŋ]iʔn? *skazem desjat* n-ʔəm-čeʔn
 how.many kill-2_{PL.SBJ}-2>3_{PL.OBJ} say 10 1_{PL.SBJ}-kill-1>3_{PL.OBJ}
 ‘How many did y’all kill? Let’s say we killed 10.’ (Bog: 218)

This basic pattern holds across Chukotko-Kamchatkan and cross-cuts case alignment: Itelmen has no case marking on direct arguments (subject and direct object) while the Chukotkan languages have an ergative case alignment. In all of the languages (with some complications) prefixes represent subject agreement regardless of the case of the subject (*t-* marks 1SG for transitive (3a) and intransitive (4a) verbs alike). By contrast suffixes quite generally distinguish subject- from object-marking of the same features (compare 1SG.OBJ *-βum* in (3b) to 1(SG)SBJ *-k(ičen)* in (4a)). In other words, although the pattern in (2) may suggest an absolutive pattern in the suffixes, there are (virtually) no individual suffixal exponents that pick out arguments in absolutive function (Volodin and Vakhtin 1986, Bobaljik 1998).

The same pattern holds in the irrealis mood, marked primarily by a different series of person-number prefixes (there is no separate irrealis marker). With a 1PL or second person subject, the irrealis includes the imperative (or hortative) among its uses. The intransitive

²Examples for which no other source is indicated come from the author's field notes, and represent the Sedanka dialect. Transcription is broad but allophonic and likely imperfect in detail. There is variation across, and sometimes within, speakers, as well as across dialects, but variation not germane to the main points here is ignored. Many sources indicate an initial velar element /ɣ/ in various suffixes, as in (3a), but this is more properly a glide or approximant ([ɰ]) if present at all, and may well be excrescent. Resolving this and other points is not relevant to the morphosyntactic issues addressed here. Russian code-switching or loans are italicized in examples, as in (5).

imperatives in (6a-b) are recognized in all grammatical descriptions, and conform to the basic pattern for intransitives, whereby the subject is marked twice, once at the prefix and again at the suffix. The form in (6c) is striking, in that it combines a 1PL prefix and a 2PL suffix. Other than a passing mention in Ono (2021:95–96), such composed forms that combine different person marking for prefix and suffix have gone unrecognized in prior descriptions yet are well attested in texts spanning the 20th Century (Bobaljik et al. 2023, Worth 1961, Volodin 2008), including those collected by the authors of the prior descriptions.

- (6) a. *m(ə)n-ɪl-k(ičɛn)* b. *q-ɪl-sx* c. *m(ə)n-ɪl-sx*
 1PL.IRR.SBJ-go-1.SBJ 2.IRR.SBJ-go-2PL.SBJ 1PL.IRR.SBJ-go-2PL.SBJ
 ‘Let’s go!’ ‘Go!’ ‘Let’s go!’ (PL.ADDR)

Such composed forms occur in the imperative only and are completely unattested in the indicative. This is not due to a lack of exponents – while the 1PL irrealis prefix *m(ə)n-* combines with the 2PL suffix to form an inclusive, a parallel combination of 1PL indicative prefix Southern: *n-*, Sedanka: *nt-* with a 2PL suffix to form an inclusive is unattested, although it is entirely clear what it would be: Southern **n-ɪl-sx*, Sedanka **nt-ɪl-sx*. Minimal contrasts occur in early texts. The following examples are drawn from a narrative collected by Waldemar Bogoras in 1901 (Bobaljik et al. 2023) about an imagined hunting trip, where the narrator uses a conversational trope of the form: (now that) we’ve done X, let’s do Y. From context it is clear that the subject is inclusive in both clauses, but only the imperatives signal this through morphologically composed forms (forms marked with a * are what the corresponding composed inclusives would be in the indicative, but are unattested):

- (7) qat *n-niŋ-kičɛn* [**n-niŋ-sx*], xalč *mn-ənta-qzu-sx*
 already 1PL-load-1PL.SBJ 1PL-load-2PL HORT 1PL.IRR-CROSS-ASP-2PL
 ‘We’ve loaded up. Let’s go across!’
- (8) *desjat n-ləm-čɛʔn* [**n-ləm-sxŋiʔn*], xalč čβanoke *mn-əntxla-qzu-sxŋiʔn*
 10 1PL-kill-1>3PL 1PL-kill-2PL>3PL HORT to.camp 1PL-take-ASP-2PL>3PL
 ‘We killed 10. Let’s take them to camp.’

This is not an isolated fact of Itelmen but seems to represent a cross-linguistic generalization. In a survey of the formation of inclusive imperatives, Goussev (2005) and Dobrushina and Goussev (2005) find that a small number of languages form inclusive comparatives by combining independently occurring first and second person affixes. In all the cases they report, these combinations are limited to the imperative, and parallel constructions are absent from indicatives. Examples from Russian and two Turkic languages are given in (9):³

³This pattern appears to be cross-linguistically rare and in Goussev’s survey appears limited to possibly limited to a geographically contiguous set of languages including Russian (alone among the Slavic languages) and a number of Turkic languages, to which we may add Udmurt (Masliukov 2024) as well as Itelmen. The Turkish composed inclusive is attested much earlier than the Russian forms, at last as early as Middle Turkish in the 13th Century (Erdal 2004:237). This suggests that the Russian form could be a contact-induced calque from Turkic. Beyond North Asia, Lameen Souag (p.c.) draws attention to parallel forms in Berber (see Souag

(9) *Composed Augmented Imperatives:*

	1 _{PL}	2 _{PL}	1 _{PL} +2 _{PL}	
a.	-em	-te	-em-te	[Russian]
b.	-yax	-yŋ	-yay-yŋ	[Sakha]
c.	-aly	-yŋ	-aly-yŋ	[Turkmen]

This is the first asymmetry this paper aims to account for:

(10) *Asymmetry I*

- a. There are languages that have a composed inclusive only in the imperative,
- b. but not the reverse (only in the indicative) (Dobrushina and Goussev 2005:191)

Note that Itelmen conforms to this asymmetry, but with an additional twist. In Russian and Turkic, the 2_{PL} marker is stacked on top of the 1_{PL} to form the composed inclusive. In Itelmen, rather than stacking, the 1_{PL} prefix is combined with a 2_{PL} suffix that replaces the (otherwise redundant) 1_{PL} suffix.⁴ As noted above, for transitive verbs, the suffix agrees with the object, or is a portmanteau agreeing with object and subject. In the composed inclusive imperative, the entire suffix complex is replaced with the complex that would occur with a 2_{PL} subject. The composed inclusive verb in (8) has the complex suffix -sx-ŋiʔn 2_{PL}>3_{PL} (cf. (5)) rather than the otherwise expected 1_{PL}>3_{PL} -čeʔn. Additional pairs drawn from a variety of texts show 2_{PL}>X portmanteaus alongside corresponding 1_{PL}>X portmanteaus with the same verb from the same sources:

(11)	Attested 2 _{PL} >3		1 _{PL} >3		
	mən-čanzo-sx	let's follow (it)	mən-čanzo-čen	Bog.	Class
	mán-lam-sxen	let's kill them	mán-lam-čeʔn	Joch	I
	x[ǎ]n-əntxla-s[x]ŋin	let's take him	x[ǎ]n-əntxla-kičen	Vol.	Class
	mn-əntxla-qzu-sxŋiʔn	let's take them	mn-əntxla-qzu-kičeʔn	Bog.	II

This gives two further questions specific to Itelmen:

(12) *Asymmetries II-III*

- a. Why does Itelmen make use of suffix replacement, rather than stacking?
- b. Why is the composed form a 1_{PL} prefix and 2_{PL} suffix rather than the reverse *2_{PL} prefix and 1_{PL} suffix?

These questions don't have trivial answers. If Itelmen were (by analogy to Russian, for example as a calque) to simply stack the 2_{PL} suffix on top of the 1_{PL} imperative form(s)

2013:46–47). Goussev's survey notes other strategies for composing inclusive imperatives not considered here.

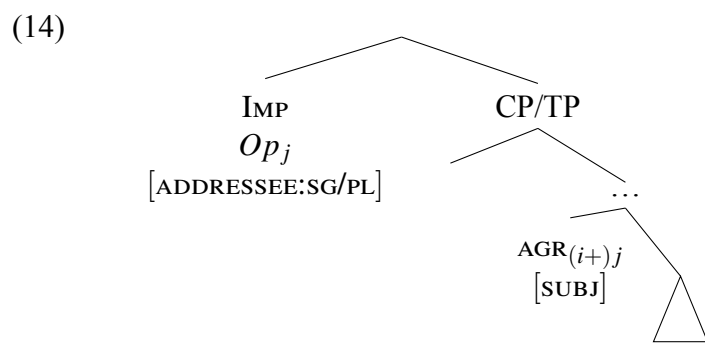
⁴This observation argues against the view (Ono 2021:95–96) that these forms are a simple calque of the Russian (*po-*)*id-em-te* forms, in particular as regards the transitive suffix inventory.

the intransitive composed imperatives would be as in (13a-b). (The alternation between the short *-k* and long *-kičen* first person suffixes is, so far as is currently known, free.) Such forms are unattested. The examples in (13c-d) suggest that this is not a phonological restriction: the clusters that would arise are well formed and attested in other words. Note moreover that there is also no general prohibition on suffix stacking – the **2PL** subject marker does occur outside other agreement affixes, notably it occurs outside the first person object markers in the transitive paradigm, both in the indicative (13e) and the imperative (13f).

- (13)
- | | |
|--|--|
| <p>a. *[mn-il-k]-sx
1PL.IRR-go-1.SBJ-2PL</p> <p>c. q-ŋiksx-č
2.IRR-sleep-2SG (<i>PIRS</i>)</p> <p>e. Ø-anja-qzo-miŋ-sx
2-praise-ASP-1SG.OBJ-2PL (V76:366)</p> <p>f. q'-omsx-qzu-βum-sx
2.IRR-leave-ASP-1SG.OBJ-2PL (AS1)</p> | <p>b. *[mn-il-kičen]-sx
1PL.IRR-go-1.SBJ-2PL</p> <p>d. usqensx
hops (<i>PIRS</i>)</p> |
|--|--|

3. Capturing the Cross-Linguistic Asymmetry

I propose that a relatively straightforward means of characterizing such composed plural inclusive imperatives is to adopt something like the proposal in Zanuttini (2008) as in (14) where the structure of an imperative involves a syntactically projected imperative operator somewhere at the high periphery of the clause, which syntactically characterizes the imperative clause type.



The key properties that this representation is intended to convey are the following: First, I assume that the imperative clause type is universally addressee-directed, and therefore ϕ -features of the addressee, such as number, gender, honorification and the like, may be encoded on the imperative operator (although only number is relevant in the languages under consideration here). Second, although I make no pretense to more than hand-waving at the fine-grained semantics of imperatives (see, for example, Kaufmann 2012), I take it as a part of the meaning of an imperative that the addressee must be included in the subject

of the proposition that is the complement of the imperative operator, which I indicate in (14) by co-indexation of the imperative operator and the subject agreement. That is, in my use of the term, the category of IMPERATIVE includes 2SG,2PL and 1PL inclusive imperatives, but excludes 3SG,3PL hortatives or jussives, as well as 1SG forms. Some authors (e.g., Khrakovskij and Volodin 1986, Goussev 2005) draw the terminological cuts differently, but all recognize the substantive grouping of 1PL inclusive imperative with 2SG,PL imperative in terms of addressee involvement in the imperative action. In all of the languages with composed inclusives, the suffix stacking or other composition occurs only with the 1PL imperatives and never with, e.g., third person jussives/hortatives – the morphological composition tracks the semantic distinction of addressee involvement as subject (as codified here) and not merely addressee involvement in bringing about a state of affairs (*Let there be light! Have them come back later!* etc.).

For the languages like Russian and Turkic that show morphological stacking, it is tempting (but not necessary for the analysis) to see the combination of the two suffixes as directly reflecting the two heads posited in the structure: the 1PL suffix in the normal agreement position, and the 2PL suffix as introduced by the imperative head (for Russian, cf. Kasenov 2024, Zanon Forthcoming).⁵

The inclusive meaning on this proposal is arrived at compositionally: the first person plural marking has its regular meaning, indicating that the subject is a group that contains the AUTHOR, and the additional second person plural morphology, made available by the imperative head/operator entails that the subject contains a plural ADDRESSEE. Two assumptions do the work here to upgrade this description of the construction to(wards) an explanation of the cross-linguistic generalization in (10):

First, we assume that in these languages, there is no person category of inclusive. It is well established that there are fundamentally two types of person system across the world's languages (see Zwicky 1977, Filimonova 2005, Harbour 2016 a.o.), one with three person categories, and one that has a further inclusive versus exclusive contrast as sketched in (15). Evenki plural subject pronouns illustrate a 4-way system drawing an inclusive-exclusive contrast, while English has only a three-way distinction, with the inclusive meaning subsumed under the general 1PL. As Zwicky observed, no language systematically uses only second person forms to express the inclusive meaning (his hypothetical but unattested **syon*) even though these form a natural class (inclusion of ADDRESSEE).

⁵The absence of doubling of 2PL in a regular plural imperative (when the subject agreement has 2PL features and so does the imperative) might thus appear to be another instance of Kinyalolo's Constraint (Kinyalolo 1991, Carstens 2005) whereby (roughly) the lower of two agreement nodes in the same word with the same features from the same controller is not expressed.

(15) *Clusivity (Zwicky 1977) – Parameter or Syncretism?*

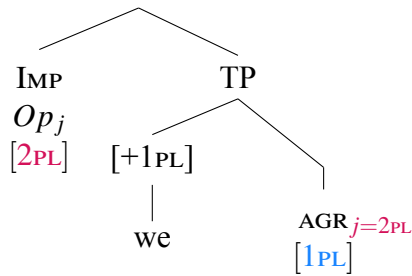
Referents	a. Clusivity Evenki	b. General we English	c. *syou *n/a*
AUTH (not ADDR)	bu	we	*swe
AUTH and ADDR	mit	we	*syou
ADDR (not AUTH)	su	you	*syou
neither	nungartyn	they	they

As Zwicky stressed (see also Harbour 2016), this generalization holds at the level of the minimal categories needed to describe the complete morphological system of a language—individual morphological (sub-)paradigms may show patterns of syncretism that neutralize the distinction between inclusive and 2_{PL} in some instances, as famously across Algonquian, where prefixes show a **syou*-type grouping, but once suffixes are included, the verbal system as a whole draws a four-way distinction. The contrast between Algonquian prefixes and suffixes shows that syncretism may selectively neutralize underlying contrasts in various ways, for example, yielding a generalized 1_{PL} morpheme in a language that has an underlying inclusive-exclusive contrast (i.e., elsewhere in its person paradigms). This raises the question: is the difference between Evenki and English a point of parametric variation in the inventory of person features: Evenki has an inclusive category but English does not? This is the view taken by Zwicky (1977), Harbour (2016), Bobaljik and Sauerland (2023) and others.⁶ Or should we assume, as Ackema and Neeleman (2018) contend, that all languages have the same inventory of person categories, including an inclusive, but most languages, like English, show syncretism in the morphological exponent inventory, neutralizing an in-principle expressible featural contrast?

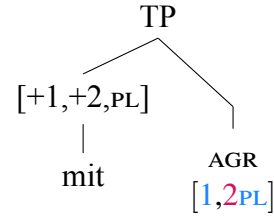
While the facts considered here could be described on either approach, the parametric account offers a significant step towards an explanation of the generalization in (10): we assume that Russian, the Turkic languages, and Itelmen lack an inclusive-exclusive opposition in their person categories—they are in relevant respects like English. It is only in a structure like (14) that the 1_{PL} (subject) and 2_{PL} (imperative) features end up related to the same subject agreement node, via the co-indexing *j* allowing for forms with an inclusive interpretation, but one that is necessarily syntactically composed. The difference between an Evenki-like system and the ones considered here that have only a composed inclusive, is sketched in (16):

⁶For this point (but see below) we need not take a specific stand on what the inventory of person features is, for which there are various proposals. It is mostly sufficient that all language can derive a three-way contrast among [1]=AUTHOR v. [2]=ADDRESSEE v. [3]=neither, and that what is parametrized is the conjunction [1+2]=INCLUSIVE. See Bobaljik and Sauerland (2023) for some discussion.

- (16) Composed Inclusive
Itelmen, Russian, Siberian Turkic



- (17) True Inclusive
Evenki etc.



Of course, for the asymmetry to be captured, it must also be ensured that the structure like (16) is only available in imperatives and not otherwise. This is straightforward if it is only the imperative operator that introduces addressee features high in the tree and coindexes these with the subject agreement (as in Zanuttini 2008). While this may seem reasonable, it appears to be possibly at odds with a long tradition of representing context coordinates, in particular the ϕ -features of the AUTHOR, ADDRESSEE high in the syntactic “treetops” (to borrow a term from Miyagawa 2022). This proposal has its roots in the syntactic implementation of the performative hypothesis (Ross 1970), the idea (very roughly) that there is universally an unpronounced syntactic superstructure that represents the speech act (declarative – *I tell you*, interrogative – *I ask you*, imperative – *I order you*). Versions of this syntactic representation of the Speech Act posit a superstructure in some form or another as in (18) (cf. Wiltschko 2021, Miyagawa 2022, Krifka 2023, Baker 2024, a.o.).

- (18) Treetop Syntax: Speech Act Participants in the left periphery?
[AuthP ...[AddrP ...[CP ...

The proposal here is ultimately incomplete without an engagement with that literature which I cannot provide here. What I contend for now is that the distribution of composed inclusives, specifically their cross-linguistic restriction to imperatives but not indicatives (declaratives or questions) requires either rejecting an overly general syntacticization of the performative hypothesis, or finding some means of ensuring that the (addressee number) features in these projections are only accessible to the agreement morphology (represented by the j index above) in imperatives.⁷ Perhaps the superstructure is there, but it is the imperative operator that is needed to permit (in some unspecified way) the coindexation across the higher and lower domains. Again, it is not that the facts could not be described under (18) but the task as I see it is to ensure that composed inclusives of this sort are limited to the imperative.

4. Capturing the Itelmen asymmetries

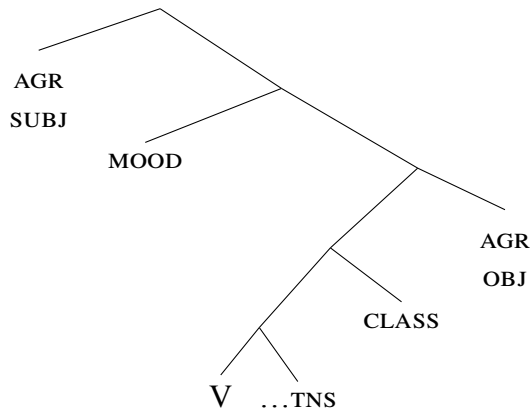
I will now sketch an argument to the effect that the Itelmen-specific asymmetries, in addition to the cross-linguistic asymmetries, can be explained as a consequence of (14). Space

⁷Putting aside important questions about allocutive agreement and perhaps honorification.

does not permit more than a sketch of this argument, but the main contention is that the questions in (12) find straightforward answers if person and number agreement is not only the result of “probe–goal” dependencies, but also involves contextual allomorphy conditioned by person and number features on a remote node. Specifically, the observed forms of the inclusive imperative more or less fall out when (14) is implemented within the theory of Chukotko-Kamchatkan agreement presented in Bobaljik (2000), while under a probe–goal only approach to agreement, the unattested mirror-image effects would be just as easy to describe.

In Bobaljik (2000) I proposed that the Chukotko-Kamchatkan verb generally, and Itelmen specifically, has a structure that includes two agreement heads: the higher one corresponds to the prefixes and (in probe–goal terms) probes for the subject, while the lower one corresponds to the suffix complex and probes for the object.

(19)



For the suffix portmanteaus, rather than enriching the probe structure, I proposed that the suffixes, though primarily object agreement, show contextual allomorphy determined by features higher in the tree, namely subject person and number and mood. For example, rules of exponence (vocabulary items in DM) for suffix agreement would include the following among others:

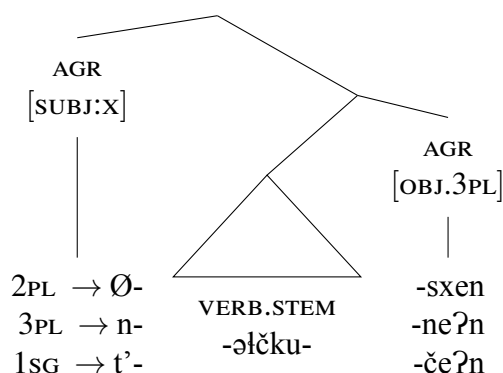
- (20)
- | | | | | | | | |
|---------|---|-------|-----------------|-------|---|-----------|-----------------|
| OBJ:1SG | → | -βum | | OBJ:Ø | → | -sx | / [2PL ...[__ |
| OBJ:3PL | → | -sxen | / [2PL ...[__ | OBJ:Ø | → | -k(ičeʔn) | / [1PL ...[__ |
| OBJ:3PL | → | -neʔn | / [3 ...[__ | OBJ:Ø | → | -(ʏ)iʔn | / [PL ...[__ |
| OBJ:3PL | → | -čeʔn | / __ | | | | |

That the suffixes show portmanteaus while the prefixes do not is explained by limiting contextual allomorphy for morphosyntactic features to outwards-sensitive contexts: only features higher in the tree, by hypothesis, can serve as the contexts for allomorphy (pace Carstairs 1987). The key evidence for this proposal comes from the markers of conjugation class II – a handful of verbs fall into this class and take an additional element at the point marked CLASS in (19) – this element is a primary exponent of conjugation class (it has no other known function) but it shows allomorphy for person and number of subject and

object and mood. All these contexts are permitted since they are all higher in the tree than class. Note that at least some of these allomorphic interactions extend beyond adjacent nodes (indicated by the “...” in (20)).⁸ The theory extends to the curious double-marking in intransitives. Just as portmanteau suffixes arise with third person objects (where, arguably, the probe fails to find a person feature), so too can one think of intransitive clauses as instances where the object-seeking probe fails to receive feature values via probing, and this unvalued agreement target shows a range of portmanteaus conditioned by features higher in the tree (exponents in the right-hand column in (20)).

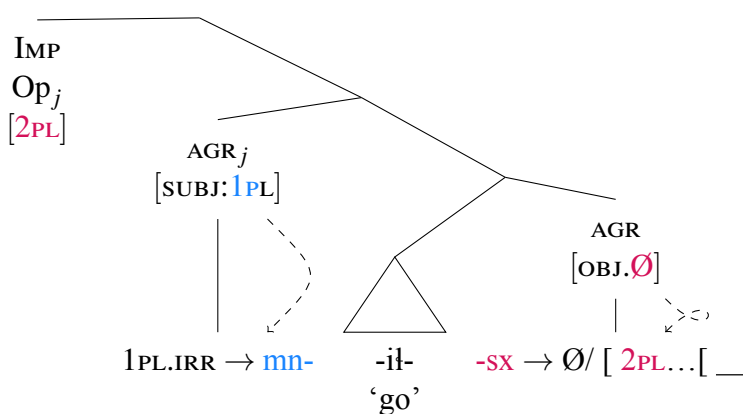
The theory in action is schematized in (21) – exponents at the subject agreement node are selected based on features at that node, while those at the object agreement node are selected by the rules in (20), some of which care only about the object’s features, but others of which must look higher in the tree to choose among competing allomorphs.

(21)



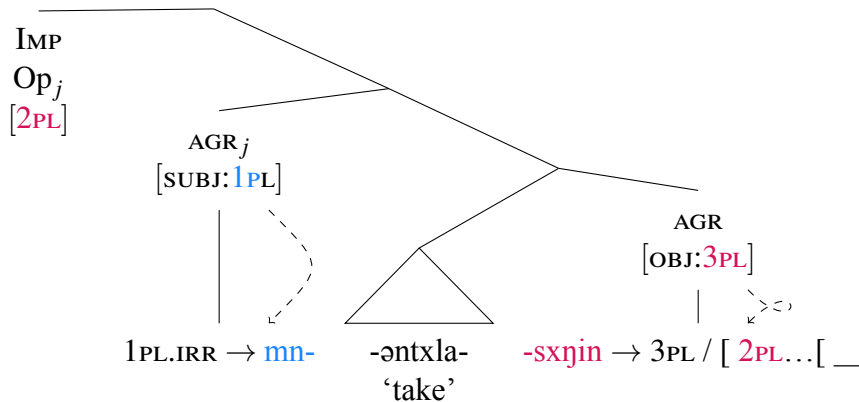
With this in place, consider now the consequences of adding an imperative node, with AD-DRESSEE:PL on top of a complex verb with a 1PL subject – that is, the syntax I proposed above underlies composed inclusive imperatives. The trees given here illustrate intransitive (22) and transitive (23) clauses.

(22)



⁸Following Carstairs (1987), Bobaljik (2000) considers a possible loophole under adjacency – only non-adjacent interactions might be regulated by the inwards-outwards asymmetry.

(23)



The answers to the questions in (12) now fall out as contingent facts about Itelmen. Adding the imperative operator affects the suffixes, but not the prefixes, because (as in Bobaljik 2000) only the suffixes show outwards-sensitive, non-adjacent contextual allomorphy.⁹ The 2PL(>X) suffixes can be chosen in place of the 1PL(>X) suffixes, giving the effect of suffix “replacement” rather than stacking, because Itelmen independently has an appropriate inventory of suffixes that show allomorphy for c-commanding person and number features. There is no opportunity for this to happen in the other languages considered, since they lack the kind of portmanteau and double-intransitive marking that motivate the positing of contextual allomorphy in the Chukotko-Kamchatkan suffixal agreement morphology.

5. Conclusions

Goussev (2005) and Dobrushina and Goussev (2005) observed that 1PL imperatives are always preferentially interpreted as inclusive, even in languages that otherwise lack an inclusive category, and that there are languages with an inclusive form only in the imperative, but the reverse, where inclusive forms are exclusively in the indicative, is not found. These observations can be readily understood if the inclusive interpretation in such cases is compositionally derived, via the combination of a 1PL subject (the subject includes the AUTHOR) with an imperative operator (as in Zanuttini 2008 and related work) (which entails that the ADDRESSEE is part of the subject of the relevant predicate). Together these yield an inclusive interpretation without an inclusive category, thus this explanation is only available if one assumes with Zwicky (1977) and many others that the presence/absence of a clusivity distinction is a true point of cross-linguistic variation in feature inventories, and not merely a matter of syncretism. In some languages, like Russian and Sakha, the composition is transparent in the morphology, with a 2PL imperative suffix stacked on top of a 1PL suffix. Newly observed forms in Itelmen constitute a slight twist on this pattern, in that they combine 2PL and 1PL affixes to make a composed plural inclusive imperative, but rather than stacking

⁹While allomorphy does not require adjacency, there is some upper locality bound on outwards-sensitivity. For example, a matrix clause argument does not trigger allomorphy on suffixes in embedded clauses, so the process is at a minimum clause-bound. A further question is whether the trees above represent words – complex X^0 structures – or phrases (XP), which relates to other questions about the locality of allomorphy.

the affixes, the composed forms show replacement of **1PL** suffixes (but not prefixes) with corresponding **2PL** suffixes. The prefix–suffix asymmetries in this corner of Itelmen morphosyntax in turn can be readily understood if we understand the morphosyntax of Itelmen agreement in terms of the proposal in Bobaljik (2000) which takes some agreement to be the primary exponent of the features of subjects and objects, but takes the portmanteau suffixes and redundant suffixal marking of intransitive subjects to be the combination of primary exponence and contextual allomorphy. The directional (inwards- vs. outwards-sensitivity) asymmetries in possible contexts for allomorphy proposed in Bobaljik (2000) yield the observed prefix–suffix asymmetries in the composed inclusive imperatives. To be sure, there are numerous details to be worked out and more to say about the picture sketched here, but let’s leave that for a future discussion.

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