

# Unlocking &P: agreement with conjoined objects in Kiunguja Swahili

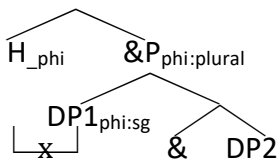
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## 1 Introduction

Object marking (OM) with conjuncts and a verbal suffix *-eni* reveal several things about the grammar of OM in Kiunguja (Zanzibari Kiswahili). Study based on 2 native speakers' judgments.

- (1) a. Ni-li-ona [<sub>&P</sub> ki-su na kalamu].  
1SSA-PST-see 7-knifu and 9pen  
'I saw a/the knife and a/the pen.'
- b. Ni-li-ki-ona ki-su \*(,) na kalamu. \*OM singular 1st conjunct  
1SSA-PST-7OM-see 7-knife and 9pen  
'I saw the knife \*(,) and the pen.'
- c. Ni-li-\*(ku)-ona wewe \*(,) na Rajab. personal pronoun must be OM  
1SSA-PST-2s.OM-see you and Rajab a doubled IndPron is optional  
'I saw you \*(,) and Rajab.' \*OM singular 1st conjunct
- d. [[<sub>VP</sub> ...<V> kisu ] [<sub>&P</sub> na kalamu]] (= (1)b)  
knife and pen

Restrictions (1)a-c manifest a common pattern cross-linguistically, giving rise to analysis in (2).

- (2)  &P structure from Johannessen (1993, 1998)  
&P is higher and closer than DP1, so 1st conjunct agreement fails  
Bosković (2009), Marušić et al (2007) a.o.

So what's going on in (3)? What is *-eni*, and why does it permit the 2sOM?

- (3) Ni-li-ku-on-**eni** wewe \*(na Rajab). Add *-eni*; OM doubles 2s FC  
1SSA-PST-2s.OM-see-ENI you and Rajab  
'I saw you and Rajab.'

*Eni*'s other functions: encoding 2PI addressee features in imperatives and exhortatives:

- (4) a. Amk-**eni**! b. Tw-end-e-**eni**! *-eni* in imperatives and exhortatives  
wake-ENI 1PL-go-SBJ-ENI  
'Wake up!' 'Let's go!' *to plural addressees*

These are core uses of *-eni* across Kiswahili varieties so I build the analysis from (4)a,b to (3).

• In imperatives and exhortatives, *-eni* is an Addressee head with 2<sup>nd</sup> PI features (modifying Zanuttini et al 2012). Note these are interpretable features that reflect discourse participants.

(5) [<sub>JussiveP</sub> Exhort [<sub>SpeakerP</sub> Spkr<sub>i1</sub> [<sub>AddresseeP</sub> Adr<sub>i2, iPL</sub> [<sub>VP</sub> *pro*<sub>uperson...</sub>]]] *exhortative with plural addressee*

• *ku-eni* (3) = (6): *v* selects AddrP. Distant from the discourse, its features are [*u*2<sup>nd</sup>, *u*PI], needing

valuation. Agreeing with &P in [PI], *-eni* unlocks it for clitic raising of 2<sup>nd</sup> pron (Agr unlocking: Rakawski & Richards 2005, Halpert 2018, Van Urk & Richards 2015, Branan & Davis 2018).

(6)  $v$  [AddrP *eni*\_{PI\_2} [VP V [&P.PL cl+you [& Rajab]]]] → [VP *ku*+V+*eni*+V\_{PI\_2} ... [&P.PL *e*+you [& Rajab]]]

- While OMs which have only class features are agreement, [+person] OMs are clitic pronouns.
- Third person isn't always the absence of person features, contra much prior research.

Roadmap

§1 Introduction

§2 *-Eni* in imperatives and exhortatives

§3 Derivation of *ku-* *-eni* construction

§4 Most OMs are agreement, but 2<sup>nd</sup> sing. *ku-* of *ku-* *-eni* can't be

§5 Other personal pronouns

§6 Conclusions

**2 -Eni as features of an Addressee head**

**2.1 Imperatives and exhortatives**

(7) a. Simama!  
stand  
'Stand up!' to singular addressee

b. Simam-**eni**!  
stand-ENI  
'Stand up!' to plural addressees

[Imperative]

(8) a. Tw-end-e!  
1 PL-go-SBJ  
'Let's (you and I) go!'

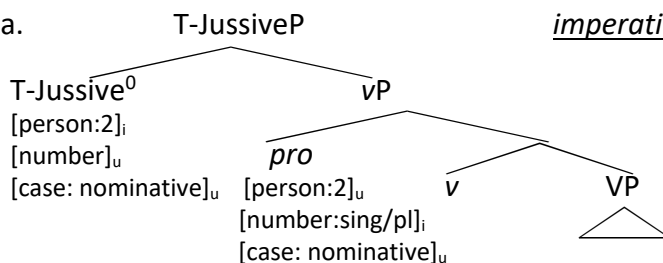
b. Tw-end-e-**eni**!  
1 PL-go-SBJ-ENI  
'Let's go!' to plural addressees

[Exhortative]

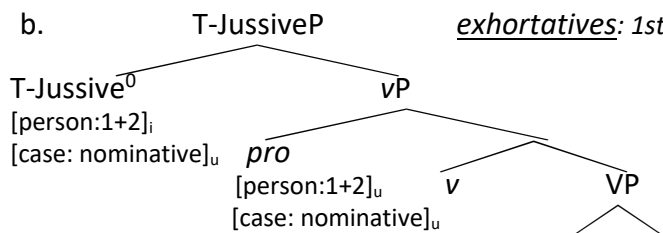
**2.2 A sketch of imperative and exhortative syntax and -eni**

(9) Zanuttini et al (2012:1246)

a. imperatives: [i2nd person] introduced on Jussive head  
null subject introduces s or pl



b. exhortatives: 1st Pl incl. addressee introduced on Jussive head



Problem: no place in (9)b for variation in the number feature of the addressee. The plural addressee reading correlating with *-eni* in exhortatives argues that addressee and speaker features should not be bundled as in (9)b, though corresponding to a single  $\theta$ -argument.

•Proposal #1: independent realizations for speaker and addressee features as in analyses of allocutive agreement systems (Zu 2018, Kaur 2020, Haegeman & Hill 2013, Speas & Tenny 2003, Miyagawa 2012, and McFadden 2017).

(10) Pette-k lan egin di-n [Basque; Oyharcabal 1993:92-3]  
 Peter-ERG work do.PFV 3.ERG-F  
 'Peter worked.' (said to a female friend)

(11) a. Hkying gade htu sə-ta? [Jingpo; Zu 2018:55]  
 time how.many point 2sg-WH  
 'What time is it?'

b. Nang gadai hpe ya kau sə-ta?  
 you whom have.given 2sg-WH  
 'Whom have you given it to?'

Zu (2018) and others locate Speaker and Addressee Phrases in the left periphery where they interface with the discourse domain.

(12) [Adapting Zu 2018]

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  graph TD
    SpeakerP --> Speaker["Speaker_{i\phi 1}"]
    SpeakerP --> AddresseeP
    AddresseeP --> Addressee["Addressee_{i\phi 2}"]
    AddresseeP --> TP
    TP --> Adr
    TP --> Subject["Subject_{i\phi N}"]
  
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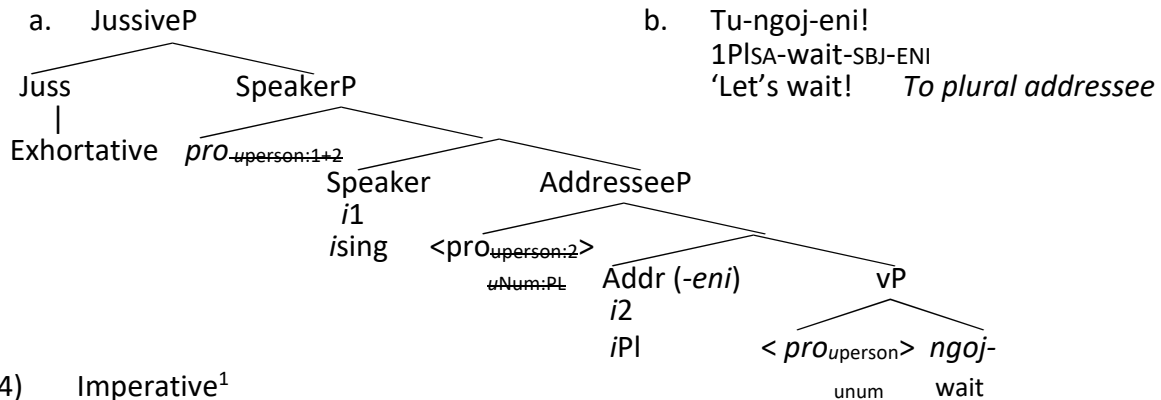
•Need to represent an addressee's singular/plural feature options in a Kiunguja exhortative motivates inclusion of an Addressee projection.

•But allocutive agreement is typically able to appear in **any** root clause, and **need not** encode features of a thematic argument, hence three independent  $\phi$ s in (12).

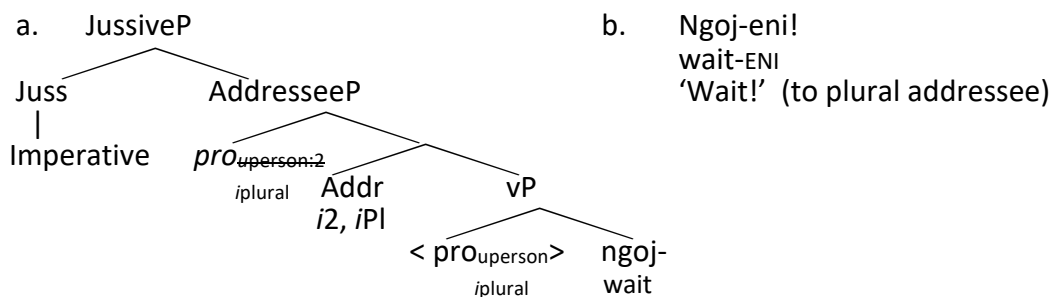
•Since Kiunguja *-eni* **always** encodes features of a  $\theta$ -argument and its distribution is highly restricted, AddrP would seem to be local to arguments and selected by few heads.

•Proposal #2: Kiunguja AddrP only appears if selected by the Jussive head or by *v*.

(13) Exhortative: interpretable person, number features collectively bind/value *pro* subject.



(14) Imperative<sup>1</sup>

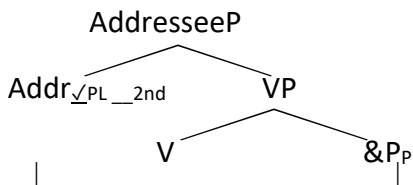


### 3 Ku- -eni derivation

• *v* can select AddrP with *-eni* head. Remote from the discourse *-eni*'s features are *u*<sub>2<sup>nd</sup></sub> *uPl*, needing valuation. By agreeing with &P in plurality, *-eni* unlocks it for probing the 1<sup>st</sup> conjunct *ku*. This Agree relation is possible because *-eni* has two separate probe features. It enables obligatory clitic raising, which yields *ku*'s surface position.

(15) Ni-li-\*(ku)-on-eni (wewe na Halima).  
 1SSA-PST-2s.OM-see-ENI you and Halima  
 'I saw you guys/you and Halima.'

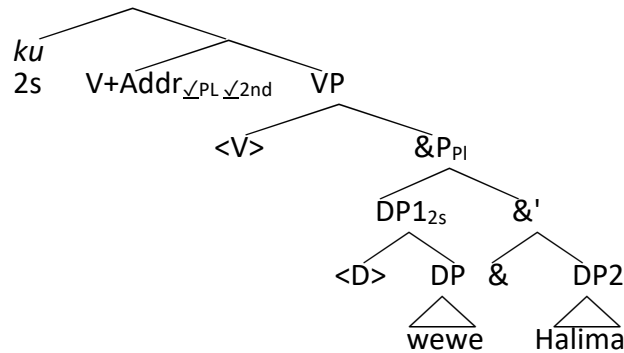
(16) a. Agree (Addr, &P):



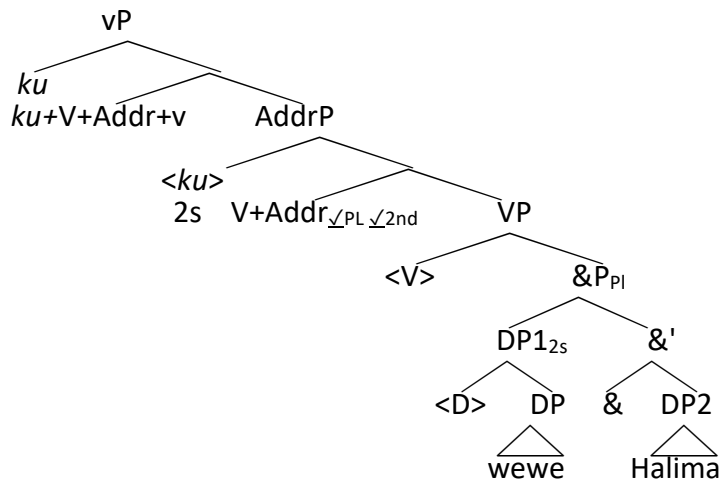
•&P is now unlocked by Agree (see Rakawski & Richards 2005, Halpert 2018, Van Urk & Richards 2015, Branam & Davis 2018 on agreement unlocking). *-eni* needs 2nd person valued.

<sup>1</sup> Kaur (2020) shows that allocutive agreement with the imperative subject is not compatible with Punjabi imperative verb forms, and proposes an approach in which Jussive and AddrP do not combine. In contrast, *-eni* does appear on plain imperative forms in Kiunguja; I leave this issue in cross-linguistic variation to future research.

- b. 2s clitic *ku* values *-eni's u2* and raises from &P to Spec, AdrP to en route to Spec, v.



- c. When *v* is merged, *V+Addr* raise and adjoin to it. *ku* raises again and then cliticizes phonologically to the complex *v*



- d. Final form
- 

(17) shows that the *wa*- OM, ambiguous between 2<sup>nd</sup> and 3<sup>rd</sup> plural readings, can value *-eni's* 2<sup>nd</sup> person agreement feature also. It follows that *wa* is not featurally underspecified; rather it comes in two flavors, one of them 2<sup>nd</sup> person. What matters about the OM combining with *-eni* is only that it have a 2<sup>nd</sup> person feature.

- (17) Ni-li-wa-ambi-*eni* wewe na Halima.  
 1SSA-PST-wa-tell-ENI you and Halima  
 'I told you and Halima.'

## 4 A rejected alternative: why the 2sOM (in *ku-* *-eni*) is not agreement

### 4.1 OMs and *eni* are associated with different heads H1, H2.

Alternative hypothesis: Agree (*eni*<sub>pl</sub>, &P) unlocks &P for simple agreement with DP1. *ku-* is not a clitic; it doesn't raise but spells out this second Agree relation.

But: following Julien (2002), Bantu verbal suffixes are structurally low and adjoin via head-movement; verbal prefixes are higher and undergo late procliticization.

It follows that *-eni* and *ku-* are not plausibly analyzed as agreement on the same head.

Agree (H, XP) does not unlock XP to probing by another head Y:

- (18) Once a probe P is related by Agree with a goal G, P can ignore G for the rest of the derivation (Richards 1998, Hiraiwa 2001, Rackawski & Richards 2005).

The movement derivation allows *-eni* to unlock and raise *ku-*, which can then raise again to the licit and presumably standard surface location of OMs. Personal pronouns are obligatorily OMs, so conjoining creates a grammatical challenge that the *-eni* derivation circumvents.

- (19) a. Ni-li-\*(**ku**)-ona (wewe).                      b. Wa-ta-\*(**tu**)-salimia (sisi).  
       1sSA-PST-2s.OM-see (2s.INDPRON)            3plSA-FUT-1pl.OM-greet (1pl.INDPRON)  
       'I saw you.'                                              'They will greet us.'

### 4.2 Noun class OMs pattern as AGR, doubling *wh/∇Q* & PI but not Sg DP1

- (20) a. Ni-li-\*(mw)-ona            m-toto.  
       1sSA-PST-\*(1OM)-see 1-child  
       'I saw a/the child.'
- b. U-li-\*(mw)-ona            nani?  
       2sSA-PST-\*(1OM)-see 1who  
       'Who did you see?'
- c. Ni-li-(m)-salimia            kila    mw-anafunzi  
       1sSA-PST-(1OM)-greet every 1-student  
       'I greeted every student.'

See Riedel (2009) for an agreement analysis, Baker & Kramer (2018) on (20)b,c as diagnostics.<sup>2</sup>

OK: 1<sup>st</sup> conjunct OM (FCOM) with conjoined plural DPs ((21)a,b).

<sup>2</sup> Baker & Kramer (2018) argue that clitic doubling *wh-* and  $\forall Q$  are impossible in Amharic because they would violate Weak Crossover, while Preminger (2019) argues that clitic doubling can repair WCO violations. The facts of agreement with conjuncts provide a less controversial argument that Kiunguja noun class OMs are agreement.

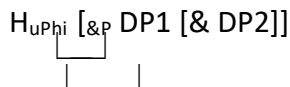
- (21) a. Ni-li-(ya)-nunua ma-sanduku na vi-kapu.  
 1SSA-PST-(6OM)-buy 6-suitcase and 8-basket  
 'I bought suitcases and baskets.'
- b. Ni-li-(vi)-nunua vi-kapu na ma-sanduku.  
 1SSA-PST-(8OM)-buy 8-basket and 6-suitcase  
 'I bought baskets and suitcases.'
- c. \*Ni-li-vi-nunua ma-sanduku na vi-kapu.  
 1SSA-PST-8OM-buy 6-suitcase and 8-basket  
 [Intended: I bought baskets and suitcases.]

FCA with a post-verbal expression is well-documented when the 1<sup>st</sup> conjunct (henceforth DP1) is plural, as in the Serbo-Croatian (22).

- (22) a. Juče su uništena sva sela i sve varošice. [SC VS order] FCA  
 yesterday are destroyed.pl.neut all villages.neut and all towns.fem
- b. Juče su uništene sve varošice i sva sela.  
 yesterday are destroyed.pl.fem all towns.fem and all villages.neut
- c. \*Juče su **uništene** sva sela i **sve varošice**. \*LCA  
 yesterday are destroyed.pl.fem all villages.neut and all towns.fem
- d. \*Juče su **uništena** sve varošice i **sva sela**.  
 yesterday are destroyed.pl.neut all towns.fem and all villages.neut

Explaining agreement with plural DP1:

(23) Bosković 2009: Multiple Agree with &P and DP1<sub>plural</sub> yields FCA in [VS] contexts.



Agree (H, &P) yields plural agreement  
 H probes DP1: successful plural agreement with both goals  
 + first conjunct's gender

Also common (contral Taraldsen et al 2018): gender AGR with [DP<sub>sing</sub>+DP<sub>sing</sub>] fails. (24) is Slovenian (Corbett 1983); (25) is Serbo-Croatian (SC; from Boskovic 2009). Plural or dual agreement succeeds, but gender is default masculine with conjoined neuter nouns.

- (24) to drevo<sub>neut</sub> in gnezo<sub>neut</sub> na njem mi bosta ostala masc.dual v spominu  
 that tree and nest on it to-me will remain in memory
- (25) \*Jedno tele i jedno pašče su juče prodana  
 one calf<sub>neut</sub> and one dog<sub>neut</sub> are yesterday sold<sub>pl.neut</sub>

Kiunguja: OM of an appropriate plural class cannot double conjoined singular common nouns.

Table 1: Swahili Genders (Carstens 1991)

Gender A	Stems of classes 1/2
Gender B	Stems of classes 3/4
Gender C	Stems of classes 5/6
Gender D	Stems of classes 7/8
Gender E	Stems of classes 9/10

- (26) a. Ni-li-(\*wa-)salimia      m-sichana na    m-vulana.  
 1<sub>SSA</sub>-PST-(2<sub>OM</sub>-)greet    1-girl      and    1-boy  
 'I greeted a/the girl and a/the boy.'
- b. Ni-ta-(\*i-)ona                  m-ti    na    m-lima.  
 1<sub>SSA</sub>-FUT-(4<sub>OM</sub>-)greet    3-tree and    3-mountain  
 'I will see a/the tree and a/the mountain.'
- c. Ni-li-(\*ya-)beba                yai      na      ji-we.  
 1<sub>SSA</sub>-PST-(6<sub>OM</sub>-)carry    5egg    and    5-stone  
 'I carried an/the egg and a/the stone.'
- d. Ni-li-(\*vi-)pika                ki-azi    na    ki-tunguu  
 1<sub>SSA</sub>-PST-(8<sub>OM</sub>-)cook    7-potato    and    7-onion  
 'I cooked a/the potato and a/the onion.'
- e. Ni-li-(\*zi-)nunua                sahani hii    na    ile    sufuria.  
 1<sub>SSA</sub>-PST-(10<sub>OM</sub>-)buy    9plate 9this and    9that 9pan  
 'I bought this plate and that pan.'

Unlike in Serbian and Serbo-Croatian, there isn't a default choice of plural OM that can be employed with conjoined singulars in Kiunguja (see (27)).

- (27) \*Ni-ta-**zi**-ona                mti    na    mlima      /    kiazi    na    kitungu / yai    na    jiwe  
 1<sub>SSA</sub>-FUT-**10<sub>OM</sub>**-see    3tree and 3-mountain/7potato and 7onion/ 5egg and 5stone  
 msichana    na    mvulana.  
 1girl          and 1 boy

[Intended: I will see the tree and the mountain/the potato and the onion/the egg and the stone/the boy and the girl.']

### 4.3 An implication for noun class agreement

Assuming that in Kiunguja, Agree (H, &P) can in the *ku-eni* case unlock &P for Agree (H, DP<sub>1<sub>sing</sub></sub>), why not here? The difference: *-eni* has two highly specific probe features; OM is a uPhi bundle.



(28) a. Ni-ta-(\*i-)ona m-ti na m-lima.  
 1SSA-FUT-(4OM-)see 3-tree and 3-mountain  
 'I will see a/the tree and a/the mountain.'

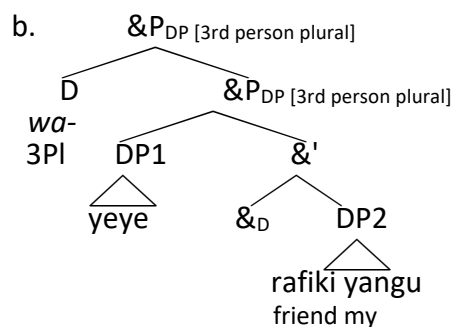
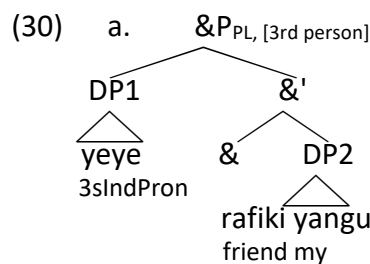
b. OM:  $v_{u\phi i}$  = a non-specific phi-probe      c. *-eni*<sub>u2, uPI</sub>

**5 Another way [+person] OMs are different from NC OMs**

(29) a. Ni-li-wa-salimia \*(,) [m-sichana na m-vulana].  
 1SSA-PST-(2OM-)greet 1-girl and 1-boy  
 'I greeted a/the girl and a/the boy.'

b. Ni-li-\*(wa-)ona [Juma/yeye na m-ke w-ake]. *Speaker #1: pause after V*  
 1SSA-PST-(2OM-)see 1Juma/3sInd.Pron and 1-wife 1-3SPOSS *Speaker #2: no pause*  
 'I saw Juma/him and his wife.'

- [+human] common nouns have only the Gender A features of noun classes 1/2.
- Names and pronouns have true 3<sup>rd</sup> person features, hence (29)a vs. b.
- Interpretable features of a conjunct are inherited by &P (see (30)a; Boskovič 2009).
- &P has the category and other properties of its conjuncts; when it conjoins DPs, it is itself a DP.
- This means that &P may be a Big DP out of which there is clitic doubling (see (30)b).



Thus there are two *wa-* OMs – one with class 2 features (gender and number only), and one with 3<sup>rd</sup> plural features (note: 3<sup>rd</sup> person features are not an absence of person here).

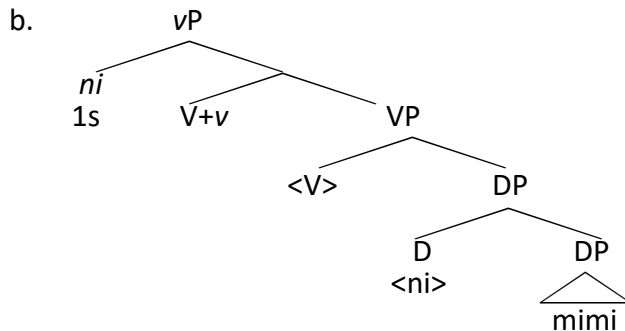
This clitic doubling analysis assimilates the case of *wa-* doubling a conjunct in (29)b with *ku-* of *ku--eni* and extends to (31).

(31) A-li-\*(tu)-ona [mimi na Zeyana]. *Both speakers: no pause needed after the verb*  
 1SA-PST-1P1OM-see 1sIndPron and Zeyana  
 'He saw me and Zeyana.'

It permits us to view the OMs that have person features as a class with consistent properties.

- All OMs with person features are clitics in Kiunguja.

- (32) a. A-li-ni-ona                      mimi.  
 1SA-PST-1SOM-see-ENI      1sIndPron  
 'He saw me.'



## 6 Conclusions

The Kiunguja verbal suffix *-eni*: a plural Addressee head present in imperatives & exhortatives.

The Addressee head has unvalued features in the *ku- -eni* construction; probing for values it unlocks &P out of which a 2s clitic personal pronoun raises onto the verb. Other cases of OMs doubling personal pronouns support the conclusion that Kiunguja [+person] OMs are different from the rest; I've argued they are clitic pronouns while noun class OMs are agreement.

The *ku- eni* construction is an apparent violation of Kiunguja's general ban on agreement with singular conjuncts but with a twist, since there are arguably 2 probe features involved. It is a genuine violation of the Coordinate Structure Constraint which I've proposed is made possible by the relation *Agree* (*-eni*, &P). The unlocking property of agreement has been argued for various agreement relations in other languages (Rakawski & Richards 2005, Halpert 2018, Van Urk & Richards 2015, Branan & Davis 2018), though as far as I know, not for violations of the Coordinate Structure Constraint.

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