Agreement between arguments? Not really[*]

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Abstract

We present and analyze novel data on the northeast Caucasian language Archi illustrating a typologically unusual phenomenon of apparent agreement between 1st person pronouns and absolutive-marked arguments. Apart from their typological significance, these facts challenge current approaches to agreement, which hold that Agree relations can be established only between heads and phrases. The apparent agreement between a 1st person pronoun and an absolutive DP can be reduced to a more conventional agreement, namely, agreement between the absolutive DP and a series of *v* heads. We show that Archi has a contrast between strong and weak pronouns; the latter lack noun-class feature specification and must therefore copy a class feature from the closest *v*. In addition, Archi has complex pronouns (1st person inclusive) which are composed of 1st person exclusive pronouns and the focus marker -*ejt'u*. This focus marker is a D head which requires a noun-class feature and copies that feature from the closest *v* head.

1 Introduction

Agreement is traditionally understood as a relationship between an argument and a predicate. However, in some North-East Caucasian languages, pronominal arguments, as well as adverbs and particles, seem to agree with other arguments. This pattern appears in the Archi example below where the verb and the dative pronoun alike agree in noun class with the absolutive DP 'that woman':

(1) a. To-r   ɬ:onnol   **d-ez**   e‹r›χni.
         [that-II.SG woman.II.SG.ABS]   II.SG-1SG.DAT   ‹II.SG›forget.PFV
         'I forgot that woman.'

This pattern of apparent argument-argument agreement may seem to challenge existing theories. The goal of this paper is to demonstrate that the theory is safe. We present and analyze this apparently irregular pattern of argument-argument in Archi and demonstrate that it can be reduced to the commonplace argument-predicate agreement.

Our account of the Archi agreement pattern relies on two analytical components. The first pertains to the presence of several functional layers within the verb phrase (vP), some of which are headed by phonologically null functional elements. We argue that all verbal heads participate in agreement and can have their unvalued features successively checked by immediately adjacent *v* heads. This conception of a layered verb phrase offers novel support to the existing proposals according to which external arguments are introduced by functional heads other than the internal-argument-licensing head. The layered vP conception is thus not specific to Archi; Archi is just one of the attested languages. The second component of the analysis is specific to Archi and pertains to the contrast between strong and weak pronouns. Weak pronouns are the forms implicated in argument-argument agreement. With these two components in tandem, the argument-argument agreement of Archi is no longer mysterious.

The paper is organized as follows. In section 2, we present an overview of Archi, highlighting the grammatical properties relevant for this paper. A reader familiar with North-East Caucasian languages can skip this section and go directly to Section 3, which presents the challenging data at the core of this paper. Section 4 provides an account of Archi clause structure, and section 5 builds upon that structure to present our analysis of the unusual argument-argument agreement. We determine that Archi has two types of agreeing pronouns: monomorphemic weak pronouns and complex pronouns, which include an agreeing emphatic particle. Section 6 is a summary of our main conclusions.

2   *The basics of Archi*

Archi is a Lezgic language of the North-East Caucasian (Nakh-Daghestanian) family spoken by about 1,200 people in a single village in the highlands of Daghestan (Russian Federation). Most Archi speakers are bilingual in Archi and Russian; some speak Avar as well. Alexander (Aleksandr) Kibrik and his colleagues produced a detailed description of Archi in the 1970s (Kibrik 1977a, b, c); in 2004, members of the Surrey Morphology group returned to the community to continue work on this language (Chumakina et al. 2007). In the examples below, text titles refer to the texts collected and glossed by Marina Chumakina during her fieldwork in 2004-2012.

2.1   *Word classes and declension*
Archi has the following lexical classes: nouns, pronouns, adjectives, verbs, adverbs, postpositions, numerals, and (discourse) particles (Kibrik 1977b). Personal pronouns, which will be discussed below, contrast between 1st and 2nd person with an additional inclusive/exclusive distinction; 3rd person is expressed by a demonstrative (Kibrik 1977b: 124, 126-127) as is typical of NEC languages. Archi demonstratives are presented in Table 1 with all gender/number combinations shown. Unlike agreement on verbs, agreement on demonstratives and attributives does not distinguish noun class/gender in the plural:

Table 1: Archi demonstratives

I SG	II SG	III SG	IVSG	PL	GLOSS
ju-w	ja-r	ja-b	ja-t	j-eb	this, close to the speaker
jamu	jamu-r	jamu-m	jamu-t	jem-im	this, close to the hearer
to-w	to-r	to-b	to-t	t-eb	that, further away from the speaker
gud-u	god-or	god-ob	god-ot	gid-ib	that, lower than the speaker
ʁud-u	ʁod-or	ʁod-ob	ʁod-ot	ʁid-ib	that, higher than the speaker

Archi has an articulated system of cases, illustrated in Table 2, for the noun *baˤk'* 'ram'. Following Kibrik's work, we distinguish between non-spatial (abstract) and spatial (local) cases (for Archi, see Kibrik 1977b: 58-61; for a more general discussion, see Comrie and Polinsky 1998); here we will only be concerned with non-spatial cases. These non-spatial cases are not uniform. Absolutive, ergative, genitive, and dative appear to comprise the "core" (argument) cases (see Kibrik 1977b, c for the distinction between core and non-core cases in Archi), and we will use this label throughout our discussion. In all case forms except the absolutive, endings attach to the oblique stem, which formally coincides with the form of the ergative for most nouns (Kibrik and Kodzasov 1990). That other cases listed in Table 2 are in fact postpositional forms is possible, but nothing in the present discussion hinges on this characterization.

Table 2: Non-spatial cases in Archi

	SG	PL
ABSOLUTIVE	baˤk'	baˤk'-ur
ERGATIVE	beˤk'iri	baˤk'-ur-čaj
GENITIVE	beˤk'iri-n	baˤk'-ur-če-n
DATIVE	beˤk'iri-s	baˤk'-ur-če-s
CAUSALIS	beˤk'iri-š:i	baˤk'-ur-če-š:i
COMITATIVE	beˤk'iri-ł:u	baˤk'-ur-če-ł:u
COMPARATIVE	beˤk'iri-χur	baˤk'-ur-če-χur
PARTITIVE	beˤk'iri-qˤiš	baˤk'-ur-če-qˤiš
SIMILATIVE	beˤk'iri-qˤdi	baˤk'-ur-če-qˤdi
SUBSTITUTIVE	beˤk'iri-kł'ena	baˤk'-ur-če-kł'ena

2.2 Agreement

Archi has four noun classes (genders).[1] A fundamental design principle of Archi is that all DPs have a noun-class feature:

(2) *Noun-class Specification Principle*
   All Archi DPs, whether lexical or pronominal, must be specified for the [CL] feature

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[1] The number of noun classes across NEC languages ranges from three to eight; Lezgian, Udi, and Aghul do not have noun classes. For a more detailed discussion of nominal class systems in NEC languages, see Corbett (1991; 2005), Plaster et al. (2013).

Denotations of male and female humans are in class I and class II, respectively; all other nouns belong to classes III and IV. Archi nouns do not have any obvious phonological predictors of class membership, and the principles of noun class assignment in this language are not well understood. In the discussion below, we assume class assignments as given.[2]

(3) I   dozja 'grandfather', PL dozja-tːu
     II   doba 'grandmother', PL doba-tːu
     III noˤš 'horse', PL noˤš-or
     IV   nokɬ' 'house', PL nokɬ'-dor

There are two numbers, singular and plural. The four-way distinction in noun classes in the singular is neutralized to a two-way opposition in the plural: human (I and II) vs. non-human (III and IV); we will be glossing those as HPL and nHPL, respectively. If a group includes denotations from classes I/II and classes III/IV, plural agreement is always in the human class (HPL). Consider the following examples:

(4) a. doba-tːu   **ba-qˤa.**
        grandmother-PL.ABS HPL-come.PFV
        'Grandmothers came.'
     b. noˤš-or   **qˤa.**
        horse-PL.ABS   nHPL.come.PFV
        'Horses came.'
     c. doba-tːu-wu   noˤš-oːr-u   **ba-qˤa/*qˤa.**
        grandmother-PL.ABS-and horse-PL.ABS-and   HPL-come.PFV/nHPL.come.PFV
        'Grandmothers and horses came.'

Noun-class agreement is registered on verbs and adjectives. Verbal agreement can be encoded via prefixes or infixes (Table 3). Morphophonemic factors can prevent some verbs from carrying class agreement markers, the discussion of which is beyond the scope of this paper (see Chumakina and Corbett, in press).

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[2] In presenting language data here and below, we follow the Leipzig Glossing Rules. Additional abbreviations include: ABS–absolutive, ALL—allative, ATTR—attributive, COMIT–comitative, CONT–contessive, CVB–converb, DAT–dative, EL-elative, EMPH –emphatic, ERG—ergative, ESS–essive, EVID-evidencial, EXCL–exclusive, FIN–finalis, FUT–future, FOC—focus, GEN–genitive, HPL–human plural, INCL–inclustive, IPFV–imperfective, LOC–locative, MSD—masdar, nHPL–non-human plural, NEG–negative, NMLZ–nominalizer, OBL–oblique, PFV–perfective, PL –plural, PRS–present, PST–past, REFL–reflexive, SG-singular, SUP-superessive.

Table 3: Archi noun-class agreement exponents (as marked on verbs)

	SG	PL
I	w- / ‹w›[3]	b- / ‹b›
II	d- / ‹r›	
III	b- / ‹b›	Ø / ‹ Ø ›
IV	Ø / ‹ Ø ›	

The examples below illustrate noun class agreement on verbs and adjectives.

(5) a. Be:χu-t:u dozja   qʷˤa.
  be.tall-ATTR.I.SG grandfather.I.SG.ABS I.SG.come.PFV
  'A tall grandfather came.'

 b. Be:χu-t:u-r doba   da-qˤa[4].
  be.tall-ATTR-II.SG grandmother.II.SG.ABS II.SG-come.PFV
  'A tall grandmother came.'

 c. Be:χu-t:u-b noˤš   ba-qˤa.
  be.tall-ATTR-III.SG horse.III.SG.ABS III.SG-come.PFV
  'A tall horse came.'

 d. Be:χu-t:u-t nokɬ'   ak:u.
  be.tall-ATTR-IV.SG house.IV.SG.ABS IV.SG.see.PFV
  '(I) saw a tall house.'

 e. Be:χu-t:-ib dozja-t:u   ba-qˤa.
  be.tall-ATTR-PL grandfather-PL.ABS HPL-come.PFV
  'Tall grandfathers came.'

 f. Be:χu-t:-ib doba-t:u   ba-qˤa.
  be.tall-ATTR-PL grandmother-PL.ABS HPL-come.PFV
  'Tall grandmothers came.'

 g. Be:χu-t:-ib noˤš-or   qˤa.
  be.tall-ATTR-PL horse.III-PL.ABS nHPL.come.PFV
  'Tall horses came.'

 h. Be:χu-t:-ib nokɬ'-dor ak:u.
  be.tall-ATTR-PL house.IV-PL.ABS nHPL.see.PFV
  '(I) saw tall houses.'

Only absolutive arguments can determine agreement; as illustrated in (6)b and (7)b, ergative and dative subjects can never be agreement controllers.

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[3] This exponent can be realized as a labialization of the following consonant, as in example (4a).

[4] When agreement is realized by a prefix on a consonant-initial verb, an epenthetic vowel is added. We follow the orthographic rule suggested by Alexander Kibrik and his colleagues (Kibrik 1977a, 1977b, 1977c) according to which the pretonic vowel is spelled the same as the stressed vowel (though in pronunciation, it is close to a schwa).

(6) a. To-r-mi   noˤš   darc'lirši   e‹b›t'ni.
       that-II.SG-SG.ERG horse.III.SG.ABS post.LOC   ‹III.SG›.tie.PFV
       'She tied the horse to the post.' (based on Kibrik 1977b: 195)

   b. *To-r-mi   noˤš   darc'lirši   e‹r›t'ni.
       that-II.SG-SG.ERG horse.III.SG.ABS post.LOC   ‹II.SG›.tie.PFV
       ('She tied the horse to the post.')

(7) a. To-w-mi:s   Ajša   d-ak:u.
       that-I.SG-OBL.SG-DAT Aisha.II.SG.ABS II.SG-see.PFV
       'He has seen Aisha (female).'

   b. *To-w-mi-s   Ajša   w-ak:u.
       that-I.SG-OBL.SG-DAT Aisha.II.SG.ABS I.SG-see.PFV
       ('He has seen Aisha.')

2.3   Basic clause types
Archi is a head-final, morphologically ergative language: subjects of intransitive verbs pattern with objects of transitive verbs and appear in the absolutive, and the subject of the transitive clause is ergative, as in (8)-(10). Certain verbs take dative subjects (10) or subjects in one of the locative (spatial) forms (Kibrik 1977b: 172-176).

(8) Buwa   **da**-qˤa.
    mother.**II.SG.ABS**   **II.SG**-come.PFV
    'Mother came.'

(9) Dija-mu   buwa   χir   a‹r›u.
    father.**I-SG.ERG**   mother.**II.SG.ABS** behind   ‹**II.SG**›make.PFV
    'Father brought Mother along.'

(10) Laha-s   buwa   d-ak:u.
     child.**SG.OBL-DAT** mother.**II.SG.ABS** **II.SG-**see.PFV
     'The child saw Mother.'

Root clauses have a relatively free word order, (11), while embedded clauses have a rigid verb-final order, (12).

(11) a. Zari   buwo: q'ʷarbikł'-mul   kunne.
        1SG.ERG   mother.II.VOC   sweet.IV-PL.ABS   IV.PL.eat.PFV
        'I, Mother, ate the sweets.' (Sisters: 81)

    b. Kło-qi   zari   ja-t:-u.
        IV.SG.give-FUT   1SG.ERG   this-IV.SG-and
        'I will give her that too…' (lit: 'Will give I that…') (Sisters: 58)

(12) a. Turali-ši   jat:i-ši   χa‹b›t:i-t:ib
        Tura.IN-ALL   up-ALL   ‹HPL›go.FUT-ATTR.PL
        χ:ams   b-ak:u-li   jij-me-s.
        bear.III.SG.ABS   III.SG-see.PFV-EVID   they-PL.OBL-DAT
        'When they were going uphill to Tura, they saw a bear.'

    b. *χa‹b›t:i-t:ib   turali-ši   jat:i-ši
        ‹HPL›go.FUT-ATTR.PL Tura.IN-ALL   up-ALL
        χ:ams   b-ak:u-li   jij-me-s.

bear.III.SG.ABS   III.SG-see.PFV-EVID   they-PL.OBL-DAT
('When they were going uphill to Tura, they saw a bear.')

The embedded clause in (12)a is headed by the participial form *χa‹b›t:i-t:ib* 'going', in the clause-final position. No other order is allowed for this clause. In comparison, the dative subject *jijmes* 'they.DAT' freely appears as the final element in the main clause.

Turning to ways of expressing possession in Archi, we observe a distinction between the external-possessor genitive and the adnominal (internal-possessor) genitive. External-possessor genitives appear in existential clauses with the possessor in the genitive and possessum (possession) in the absolutive, as illustrated in (13). In this structure, the genitive DP is a separate constituent of the root clause, and it is not part of the subcategorization frame of the unaccusative verb 'to be; to exist'. Such co-occurrence of a free-standing possessor form with an existential construction is typical of external-possessor constructions (Vergnaud and Zubizarreta 1992). Cross-linguistically, the external possessor can appear in a variety of forms, genitive being one of the attested possibilities.

(13)   Dija-n   noˤš   b-i.
       father.I.SG.OBL-GEN horse.III.SG.ABS   III.SG-be.PRS
       'Father has a horse.'

The Archi external-possessor genitive can appear either at the left or right periphery of a root clause. If both the possessum and possessor appear preverbally, the possessor must precede the possessum, which explains the ungrammaticality of (14)c:

(14)   a. Uš-mi-n   os   ł:onnol   e‹r›di.
           brother.I-SG.OBL-GEN one woman.I.SG.ABS   ‹II.SG›be.PST
           'Brother had a wife.'
       b. Os   ł:onnol   e‹r›di   uš-mi-n.
           one woman.I.SG.ABS ‹II.SG›be.PST   brother.I-SG.OBL-GEN
           'Brother had a wife.'
       c. *Os   ł:onnol   uš-mi-n   e‹r›di.
            one woman.I.SG.ABS   brother.I-SG.OBL-GEN ‹II.SG›be.PST
            ('Brother had a wife.')

In contrast, the adnominal use of the genitive, illustrated in (15)a, indicates an internal-possessor structure. The genitive *Patimatlin* 'Patimat's' in (15)a modifies the noun *laha* 'daughter', which appears in the ergative case and thus, is a subconstituent of the ergative. Unlike the external-possessor genitive, the internal-possessor genitive is inseparable from the head noun. For example, it cannot be extraposed to the right; compare the grammatical (14b) and the ungrammatical (15b). Unlike the external-possessor genitive, adnominal genitive forms are not limited to unaccusative existential clauses.

(15)a. [Patimat-li-n   laha]   χʷalli   a‹b›u.
        Patimat.II-SG.OBL-GEN child.II.SG.ERG   bread.III.SG.ABS ‹III.SG›make.PFV
        'Patimat's daughter made bread.'

b. *Laha   χ^{w}alli   a‹b›u
child.II.SG.ERG   bread.III.SG.ABS   ‹III.SG›make.PFV
Patimat-li-n.
Patimat.II-SG.OBL-GEN
('Patimat's daughter made bread.')

For the purposes of the present paper, we adopt the structures in (16) for external-possessor genitives where the possessor is base-generated as an argument of vP, as in (16)a and then moves to a higher projection, (16)b (but see Deal 2014 for an overview of other possible analyses of this phenomenon).

(16)   a. [$_{vP}$ DP$_{GEN}$ [$_{VP}$ DP$_{ABS}$ be] v]
      b. [$_{XP}$ DP$_{GEN}$ [$_{vP}$ ~~DP$_{GEN}$~~ [$_{VP}$ DP$_{ABS}$ be] v] x]

Evidence for the base-generation of the external-possessor genitive in the vP comes from its presence in untensed clauses such as masdar (verbal nominalization) clauses.[5] In (17), the predicate of the bracketed embedded clause is the masdar of the existential verb *i* 'be'.[6]

(17)   [Dija-n   duχriq^ʕ no^{ʕ}š   b-i-kul]
     father.I.SG.OBL-GEN   village.IV.SG.OBL.IN   horse.III.SG.ABS   III.SG-be-MSD
     pro sini.
          know.PRS
     'I know that Father has a horse in the village.'

As previously mentioned, that the external-possessor genitive moves to a higher projection in the clause is standardly assumed. Two possible accounts for this movement have been offered. It may be theta-role related (Lee-Schoenfeld 2006, Rodrigues 2010, Landau 2010) or case-related (Deal 2013). It is also possible that the external possessor dislocates for information-structural reasons. For Archi, we assume here that the genitive case is an inherent case in spec, *v* and leave the motivation for its movement to future research.

     This concludes our overview of Archi basic structures. In the next section, we examine the data which at first glance challenge existing theories of agreement.

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[5] *Masdar* is the term for non-finite forms (verbal nouns) frequently used in the literature on languages of the Caucasus, and we will continue its use in this paper to reflect the existing literature on Archi. We will return to the details of masdar constructions in Section 4.1 where we argue that they have a *v*P-sized structure. For the moment, we simply note that external-possessor genitives are possible in masdar clauses, in the absence of tense.

[6] The form *i* of the Archi copula verb 'be' is ambiguous between its untensed form and present tense form.

3   Agreement between DPs?

In addition to argument-verb agreement, Archi noun-class-agreement exponents can appear on non-verbal elements (see Corbett 2013; Bond and Chumakina 2015, for an overview). As with the standard argument-verb agreement, an absolutive argument always determines this agreement. In this section, we concentrate on agreement between the absolutive DP and a subset of first person pronouns when they appear in the dative, ergative, and genitive.

First person pronouns in the dative case, regardless of number, demonstrate agreement with the absolutive DP. Thus, in (18)a, the dative of the 1st person singular pronoun agrees in noun class with the DP 'that woman'; (18)b, c show a similar agreement pattern in the plural with the exclusive and inclusive 'we' respectively:

(18) a. To-r   ł:onnol   **d-ez**   e‹r›χni.
          [that-II.SG woman.II.SG.ABS]   II.SG-1SG.DAT   ‹II.SG›forget.PFV
          'I forgot that woman.'
      b. To-r   ł:onnol   **d-el**   e‹r›χni.
          [that-II.SG   woman.II.SG.ABS]   II.SG-1PL.EXCL.DAT   ‹II.SG›forget.PFV
          'We (EXCLUSIVE) forgot that woman.'
      c. To-r   ł:onnol   **d-ela‹r›u**   e‹r›χni.
          [that-II.SG   woman.II.SG.ABS]   II.SG-1PL.INCL.DAT‹II.SG›   ‹II.SG›forget.PFV
          'We (INCLUSIVE) forgot that woman.'

When a 1st person pronoun appears in the ergative, agreement with the absolutive is only present on the 1st person plural. Compare the following examples; in (19), the ergative form of 'we' shows class agreement with the DP 'TV', but in (20), the singular ergative pronoun does not display agreement:

(19) **Nena‹b›u**   b-is   tilivizor   mu
      1PL.INCL.ERG‹III.SG›   III.SG-1.SG.GEN   TV.set.III.SG.ABS   be.good
      a‹b›u.
      ‹III.SG›do.PFV
      'We fixed my TV.'
(20) **Zari**   b-is   tilivizor   mu   a‹b›u.
      1SG.ERG   III.SG-1.SG.GEN   TV.set.III.SG.ABS   be.good   ‹III.SG›do.PFV
      'I fixed my TV.'

First person genitive pronouns in the external-possessor position also agree with the absolutive:

(21) **B-is**   duχriqˤ   χˤon   b-i.
      III.SG-1SG.GEN   village.IV.IN   cow.III.SG.ABS   III.SG-be
      'I have a cow in the village.'
(22) a. Cimint   hinc   baran   e‹b›di-t'u
          cement.III.SG.ABS   now   like   ‹III.SG›be.PST-NEG
          b-olo.

III.SG-1PL.EXCL.GEN
    'We (EXCLUSIVE) did not have cement as (we do) now…' (Sisters:16)
b. Cimint   hinc   baran   e‹b›di-t'u
   cement.III.SG.ABS   now   like   ‹III.SG›be.PST-NEG
   la‹b›u.
   ‹III.SG›1PL.INCL.GEN
    'We (INCLUSIVE) did not have cement as (we do) now…' (based on: Sisters:16)

There can be more than one agreeing pronoun per clause, as shown in the example below:

(23) **Nena‹b›u**   ja-b   tilivizor   **b-ez**
     1PL.INCL.ERG‹III.SG›   this-III.SG   TV.set.III.SG.ABS   III.SG-1SG.DAT
     mu   a‹b›u.
     be.good   ‹III.SG›do.PFV
     'We fixed this TV set for me.'

Pronouns can appear in all abstract non-locative cases, but agreement with the clause-mate absolutive argument is only registered on pronouns in the core cases: ergative, dative, and external-possessor genitive. As we will argue below, only these cases (and the absolutive) are licensed in the vP. Second person pronouns never display agreement. Table 4 presents non-spatial case forms of 1st and 2nd person pronouns; the agreeing forms are shown in boldface.

Table 4: Archi 1st and 2nd person pronouns (agreement with the absolutive is shown only for the absolutive goal in singular)

	SG		PL		
	1ST PERSON	2ND PERSON	1ST PERSON		2ND PERSON
			EXCL	INCL	
ABSOLUTIVE	zon			nen‹t'›u	
ERGATIVE	zari	Un	nen	**nena-w**[7] **nena‹r›u** **nena‹b›u** **nen‹t'›u**	ž^wen
GENITIVE	**w-is** **d-is** **b-is** **Ø-is**	wit	**ulu** **d-olo** **b-olo** **Ø-olo**	**la‹w›u** **la‹r›u** **la‹b›u** **la‹t'›u**	Wiš
DATIVE	**w-ez** **d-ez** **b-ez** **Ø-ez**	was	**w-el** **d-el** **b-el** **Ø-el**	**w-ela-w** **d-ela‹r›u** **b-ela‹b›u** **el‹t'›u**	Wež
CAUSALIS	za-š:i	wa-š:i	la-š:i		ž^wa-š:i
COMITATIVE	za-ł:u	wa-ł:u	la-ł:u		ž^wa-ł:u
COMPARATIVE	za-χur	wa-χur	la-χur		ž^wa-χur

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[7] The four variants of pronouns given in the same cell illustrate four possible agreement forms (with the four noun classes in the singular).

PARTITIVE	za-qˤiš	wa-qˤiš	la-qˤiš	žʷa-qˤiš
SIMILATIVE	za-qˤdi	wa-qˤdi	la-qˤdi	žʷa-qˤdi
SUBSTITUTIVE	za-kɬ'ena	wa-kɬ'ena	la-kɬ'ena	žʷa-kɬ'ena

The distribution of agreeing pronouns is subject to a number of syntactic constraints. First, an agreeing pronoun cannot be a subconsituent of a larger clausal constituent, particularly clear in (24) where the ergative agrees with the coordination 'a beautiful girl and my brother' in class 1PL but cannot agree with either 'girl' or 'brother' individually.

(24) Nena‹b›u/ *nena-w/ *nena‹r›u mu-t:u-r
⟨HPL⟩1PL.INCL/1PL.INCL-I.SG/⟨II.SG⟩1PL.INCL be.beautiful-ATTR-II.SG
lo-wu w-is ušdu-wu χir a‹b›u.
child.II.SG.ABS-and I.SG-1SG.GEN brother.I.SG.ABS-and behind ⟨HPL⟩make.PFV
'We (INCLUSIVE) brought a beautiful girl and my brother.'

Second, pronominal XPs agree with the absolutive only. As (25)-(27) illustrate, dative, genitive, and ergative arguments can never control agreement. Example (25) illustrates an ungrammatical situation in which the genitive pronoun attempts to agree with its referent (the feminine speaker, i.e. class II). The dative and the ergative arguments in (26) and (27) similarly fail to determine agreement:

(25) a. **B-is** duχriqˤ χˤon b-i.
III.SG-1SG.GEN village.IV.IN cow.III.ABS III.SG-be
'I have a cow in the village.' (female speaking)
b. ***D-is** duχriqˤ χˤon b-i.
II.SG-1SG.GEN village.IV.IN cow.III.ABS III.SG-be
('I have a cow in the village.')

(26) a. **D-ez** Ajša d-ak:u.
II.SG-1.SG.DAT Aisha.II.SG.ABS II.SG-see.PFV
'I have seen Aisha (female).' (male speaking)
b. ***W-ez** Ajša d-ak:u.
I.SG-1.SG.DAT Aisha.II.SG.ABS II.SG-see.PFV
('I have seen Aisha.')

(27) a. **Nena‹b›u** hanžugur ʕummar
⟨III.SG⟩1PL.INCL.ERG how life.III.ABS.SG
b-a‹r›ča-r?
III.SG-⟨IPFV⟩carry.out-IPFV
'How are we to spend our life?' (based on T3:4)
b. ***Nen‹t'›u** hanžugur ʕummar
⟨1PL⟩1PL.INCL.ERG how life.III.ABS.SG
b-a‹r›ča-r?
III.SG-⟨IPFV⟩carry.out-IPFV
('How are we to spend our life?')

In sum, 1st person dative, ergative, and external-genitive pronouns agree with their clause-mate absolutive. This agreement is obligatory, does not depend on the tense of the

verb, and appears in both matrix and embedded clauses. Thus it appears to be a case of inter-DP agreement:

(28) *Argument agreement in Archi*
     First person pronouns in non-absolutive core cases agree with the absolutive argument[8]

To develop an analysis of this pattern, we must first produce a general account of case and agreement licensing in Archi. We construct this account in section 4; in section 5, we develop an explanation for (28) based on our understanding of Archi syntax.

4   Case licensing and agreement in Archi

4.1   Masdars (nominalizations)

Archi has a productive system of deverbal nominalizations, traditionally referred to as *masdars* (see fn. 5). Masdars have the following nominal properties: (i) they can appear in any argument position, (ii) they inflect for case with no restrictions on case forms, (iii) they can be pluralized, and (iv) they can be complements of postpositions (Kibrik 1977b: 311-313).
     Archi distinguishes two types of masdars, which differ in their process of formation. The first type is formed on the basis of a bare verbal root; this type is relevant for our discussion below. The second masdar type is formed from a root and its aspectual affixes and is essentially a clausal nominalization (Kibrik 1977b: 110-112).
     We analyze root-based masdars as vP-nominalizations with the following structure:

(29)

```
                      nP
                     /  \
                        n'
                       /  \
                     vP     n
                    /  \
                       v'
                      /  \
                    VP     v
                   /  \
                 DP     V
```
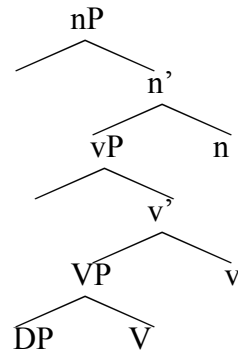
These masdars lack temporal or aspectual specifications and cannot host IP-level adverbs. However, their arguments bear the same case as the corresponding arguments of a finite clause. In particular, the sole argument of intransitive masdars (regardless of unaccusativity) appears in the absolutive case, (30). Masdars of agentive transitive verbs have an external argument in the ergative case and an internal argument in the absolutive case, (31). Masdars of affective verbs have a dative external argument and an absolutive internal argument, (32).

---

[8] The forms of 1SG ergative and 1 PL.EXCL ergative pronouns are an exception to this generalization.

(30) [Pat'i   dogi-li-t:i-š   d-ek-mul]   bo-qi.
     Pati.II.SG.ABS donkey.III-SG.OBL-SUP-EL   II.SG-fall-MSDR   say-FUT
     'I will tell (the story about) how Pati fell off a donkey.'
(31) [Rasul-li   tilivizor   b-uš-mul]
     Rasul.I-SG.ERG   tv.set.III.SG.ABS   III.SG-buy-MSDR.IV.SG.ABS
     b-ez   sini.
     III.SG-1SG.DAT   know
     'I know that Rasul bought a TV set.'
(32) [Rasul-li-s   ɬ:onnol   d-uχ-mul]   bo-qi.
     Rasul.I-SG.OBL-DAT   wife.II.SG.ABS   II.SG-find-MSDR   say-FUT
     'I will tell you how Rasul found/met (his) wife.'

The data in (30)-(32) indicate that all argument cases are available in non-finite contexts, i.e., all are licensed inside *v*P, rather than TP. Concomitantly, masdars agree with their absolutive argument in the same way as finite predicates. This property suggests that agreement between verbs and absolutive DPs occurs inside *v*P but not in TP, which implies that the *v* head is responsible for both case licensing and agreement in Archi.

Agreeing pronouns of the type described in section 3 are also found in masdar clauses, as illustrated in (33)-(34). These examples are titles of stories, a common context for masdars:[9]

(33) nena‹**b**›u   s:ud   **b-allej‹b›u**
     1PL.INCL.ERG‹III.SG›   judgment.III.SG.ABS   III.SG-for.free‹III.SG›
     b-a-mul
     III.SG-do-MSD
     '(a story of) how we judged for free'
(34) **d-**ez   ajša   d-it:a‹**r**›u   d-akʷ-mul
     II.SG-1SG.DAT   Aisha.II.SG.ABS   II.SG-early‹II.SG›   II.SG-see-MSD
     '(a story) of how I saw Aisha early in the morning'

4.2   Clause structure
All intransitive verbs in Archi take absolutive subjects. Within intransitives, at least three diagnostics may help distinguish between unergative and unaccusative verbs. First, intransitive verbs are divided into stative and dynamic verbs (see Kibrik 1977a: 100ff.), and this distinction roughly corresponds to the distinction between unaccusatives and unergatives. The two subclasses of verbs combine with different nominalizing suffixes (Kibrik 1977a: 94-95). Second, agent nominals in *–či*, a suffix corresponding roughly to the English *–er,* can only be formed from unergatives and transitive verbs (Kibrik 1977a: 93). Finally, event nominalizations differ depending on whether they are built from unergatives or unaccusatives (Kibrik 1977c: 180).

---

[9] Example (33) also includes an agreeing adverb, AGR-*allej*<AGR>*u.* The analysis of adverbial agreement is beyond the scope of this chapter; see Polinsky (2014) for a syntactic account of such agreement.

We assume that both unergative and unaccusative verbs have a *v*P dominating VP, as in (35). The *v*P of unaccusative verbs is defective: it does not have a specifier position where the external argument can be merged. We use standard representations for unergatives and unaccusatives; the absolutive is uniformly licensed low by the intransitive *v* head.

(35) a. unergative   b. unaccusative

```
              vP                                            vP
           /     \                                       /     \
     DP_ABS       v'                                   VP        v
               /     \                             /     \
             VP       v                       DP_ABS     V
             |
             V
```
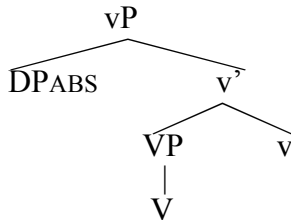
In transitive clauses, the subject appears in the ergative and the object, in the absolutive. Archi ergative subjects are merged higher than absolutive object arguments. Support for this generalization comes from control and binding facts.

First, an ergative can serve as the subject of an embedded control clause, as shown in the example below where the object of the matrix clause is part of the control chain:[10]

(36) ʕAli-mu$_i$ Rasul$_k$ u‹w›k'u
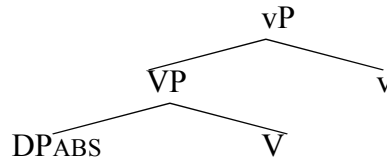   Ali.I-SG.ERG   Rasul.I.SG.ABS   ‹I.SG›force.PFV
      [PRO$_k$ žun‹t'›u$_i$ ħurmat-q'imat   a-s].
                   REFL.GEN‹IV.SG› respect.IV.SG.ABS   IV.SG.do-FIN[11]
      'Ali$_i$ made Rasul$_k$ [PRO$_k$ respect him$_i$].'
      NOT: 'Ali made Rasul be respected…'

Second, ergative subjects asymmetrically c-command absolutive arguments, as shown in the following example:

---

[10] The control clause includes a reflexive pronoun. Reflexive pronouns have a complex structure; they consist of a pronominal morpheme and the emphatic particle *ejt'u*. For instance, in (37), the oblique form of the 3rd person pronoun *inž* and the emphatic particle *–ejt'u* comprises the 3rd person reflexive pronoun *inža‹r›u* (Kibrik 1977b: 127-128). The emphatic particle agrees with the clause-mate absolutive argument, not with the antecedent of the reflexive pronoun; we discuss this particle in detail in section 5, below. For the purposes of this chapter, nothing hinges on the internal structure of reflexives, and we do not show their morphological decomposition below.

[11] Finalis (FIN) is the term used in Kibrik (1977b: 63, 69, 201ff.) for infinitival forms.

(37) a. Pat'i-mu   inža‹r›u   čučebo.
        Pati.II-SG.ERG   REFL.ABS‹II.SG›   wash.PFV
        'Pati washed herself.'
     b. *že‹r›u   Pat'i   čučebo.
        REFL‹II.SG›.ERG   Pati.II.SG.ABS   wash.PFV
        ('Pati washed herself.')

These diagnostics argue for the structure presented in (38). We propose that the ergative subject merges in the specifier of the transitive *v*, which is generated above the first *v* layer. Some researchers characterize that head as Voice (Kratzer 1996, Arad 2003, and PAPERS IN THIS VOLUME). Here we adopt the more traditional approach and treat the respective head as *v*; however, the analysis proposed below is equally compatible with either approach.

   We treat the ergative as a structural case, licensed in the specifier of that transitive functional head. In Archi, such a head can be projected only if the absolutive is already licensed. Thus, although we adopt the standard approach according to which case licensing is associated with particular functional heads, the availability of the ergative-licensing head only in the presence of an absolutive-licensing functional head brings our approach a step closer to configurational approaches to case (Marantz 1991/2000; Baker 2015; Levin and Preminger 2015).[12]

   The evidence in support of the structural status of the ergative includes at least the following facts: the ergative and the absolutive can equally undergo conversion to the adnominal genitive in event nominalizations,[13] and the ergative is not preserved under causativization or raising. The status of the ergative as a structural case is peripheral to our discussion, and we would like to underscore that more work is required to ascertain that definitively.

---

[12] Configurational case licensing is not tied to the presence of any functional heads and is based on a case hierarchy which distinguishes between inherent cases (selected by specific lexical items or classes of lexical items) and two types of structural cases: independent cases and dependent cases. After the inherent cases are assigned, the first structural case assigned to a caseless DP is the independent case: the absolutive. If another caseless noun phrase within a local (c-command) domain (which for Archi, is the entire layered vP) exists, that caseless noun phrase enters into a case competition relationship with the structural absolutive. The second absolutive cannot be licensed, and instead, the dependent case must be assigned. In an ergative language like Archi, the licensing of the dependent case targets the higher of the two noun phrases, and the resulting case is the structural ergative.

[13] These event nominalizations are structurally smaller than the masdars discussed in this chapter. While masdars can be compared to English gerunds and similarly, can include manner adverbials (cf. *mysteriously destroying the evidence*), low event nominalizations are comparable to English –tion nominalizations and can be modified only by adjectives (as in the English *the mysterious destruction of the evidence*).

(38) Ergative subject and absolutive object
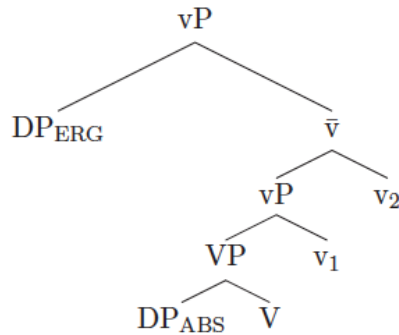
In addition to the standard transitive construction with the ergative subject, Archi has a special construction with predicates denoting psychological states, cognitive states, and perception where the experiencer appears in the dative, and the stimulus, in the absolutive. This structure, widely attested in NEC languages, is known as the "affective" construction; we adopt this term below (see Comrie and van den Berg 2006 for the distribution of this construction in NEC languages). For example,

(39) Laha-s   Rasul   w-akːu.
     child.I.SG.OBL-DAT   Rasul.ABS.I.SG I.SG-see.PFV
     'A/The boy saw Rasul.'

The thematic role of the dative argument is well defined, confirming the status of that argument as bearing an inherent case. Dative experiencers pattern with ergative subjects in asymmetrically c-commanding absolutives, as shown in (40).

(40) a. Laha-s   inžaw   w-akːu.
        child.I.SG.OBL-DAT REFL.ABS.I.SG   I.SG-see.PFV
        'A/The boy saw himself.'
    b. *Žusːaw   lo   w-akːu.
        REFL.DAT.I.SG   child.I.SG.ABS   I.SG-see.PFV
        ('A/The boy saw himself.')

The binding data indicate that the dative argument is generated higher than the absolutive object, as schematized in (41). Thus, we locate the dative/oblique subject-like argument in the specifier of the highest vP in the layered verb phrase. The main difference between this structure and the structure of the ergative clause in (38) pertains to the inherent versus structural status of the dative and ergative respectively.

(41) Dative/oblique subject and absolutive object

```
                        vP
                     ╱      ╲
              DP_DAT/OBL      v'
                            ╱    ╲
                          vP      v₂
                        ╱    ╲
                      VP      v₁
                    ╱    ╲
              DP_ABS       V
```
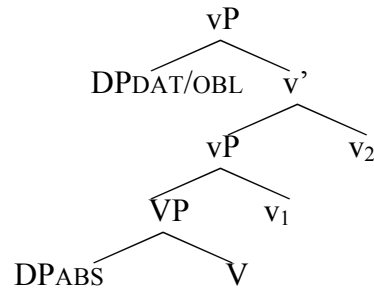
However, the dative case encodes not only subjects of affective clauses, as in (40), but also indirect objects. Such indirect-object datives are bound by the ergative but cannot bind it:

(42) a. ʕali-mu   žusa‹b›u   tilivizor   be-šde.
          Ali.I-SG.ERG REFL.DAT‹III.SG›   tv.set.III.SG.ABS   III.SG-buy.PFV
          'Ali bought a TV set for himself.'
      b. *Žu‹b›u   ʕali-s   tilivizor   be-šde.
          REFL.ERG‹I.SG›   Ali.I-SG.DAT   tv.set.III.SG.ABS   III.SG-buy.PFV
          ('Ali bought a TV set for himself.')

Dative subjects are incompatible with ergative subjects whereas dative objects (indirect-object datives) co-occur with ergatives. Dative objects, licensed in the presence of an ergative argument, bind the absolutive object but not vice versa, as shown in (43). This asymmetry indicates that the dative object is generated above the absolutive object, presumably in the specifier of the lower *v* head, as shown in (44). One could represent that head as a dedicated applicative head, but nothing in the analysis here hinges on the distinction between *v* and *Appl*.[14]

(43) a. Rasul-li   Fatimka-s   surat-li-t
          Rasul.I-SG.ERG Fatimka.II.SG.OBL-DAT   picture.IV-SG.OBL-SUP
          inža‹r›u   d-ak:u-s   a‹r›u.
          REFL.ABS‹II.SG›   II.SG-see-FIN   ‹II.SG›do.PFV
          'Rasul showed Fatimkaᵢ herselfᵢ in the picture.'
      b. *Rasul-li   Fatimka   surat-li-t
          Rasul.I-SG.ERG Fatimka.II.SG.ABS   picture.IV-SG.OBL-SUP
          žes:-a‹r›u   d-ak:u-s   a‹r›u.
          REFL.DAT‹II.SG›   II.SG-see-FIN   ‹II.SG›do.PFV
          ('Rasul showed Fatimkaᵢ herselfᵢ in the picture.')

---

[14] We have not observed examples where the dative experiencer subject (as shown in (40)a) and dative object (as shown in (42)a, (43)a) co-occur, but in principle, nothing rules out such a co-occurrence.

(44)

```
                        vP
                      /    \
                 DPERG      v'
                          /    \
                        vP      v₃
                      /    \
                 DPDAT      v'
                          /    \
                        vP      v₂
                      /    \
                    VP      v₁
                   /  \
              DPABS    V
```
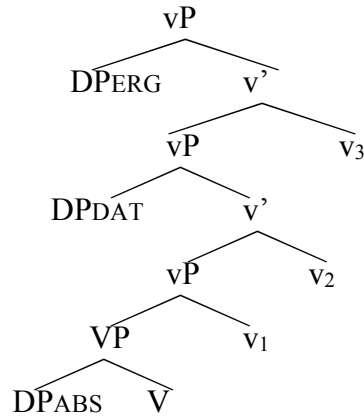
4.3 Modal verbs

Another piece of evidence for locating Archi case licensing in *v*P rather than TP comes from modal verbs. Modals often appear as restructuring verbs that take *v*P-sized complements (Wurmbrand 1999, 2001, Davis and Dubinsky 2004, a.o.).[15] Below, we show that two Archi modal verbs, 'can' and 'must', are restructuring verbs that take a *v*P. Our assumptions about modal verbs in Archi are as follows: they are *v* heads since they bear class markings on par with lexical and auxiliary verbs, and they embed under auxiliary verbs, as shown in (45).

(45) qʷˤe-s   ku‹w›šu-li   i‹w›t:t'u   zon
    I.SG.go-FIN   ‹I.SG›must.PFV-CVB   ‹I.SG›AUX.PFV.NEG   1SG.ABS
    'I did not have to go.'

These structures exhibit the same distribution of argument cases and agreement as masdars (and finite structures).
    Consider the following sentences:

(46) [Nesːen zon   o‹w›χukʷe-s]   ko‹w›ša-r.
      now   1.ABS   ‹I.SG›sleep-FIN   ‹I.SG›must-IPFV
      'I must sleep now.'
(47) [Tow-mu jeb   a‹b›čas-s]   kʷa‹b›šu-qi.
      he-ERG   they.ABS   ‹HPL›kill-FIN   ‹HPL›must.PFV-FUT
      'He will have to kill them.' (Kibrik 2003: 985)

In (46) and (47), the verb 'must' displays agreement, controlled by the absolutive-marked arguments 'I' and 'they' respectively. On the standard locality assumption that agreement is clause bound (Chomsky 2000, 2001, a.o.), the pattern in (46) and (47) indicates the

---

[15] An anonymous reviewer raises an issue of the exact structure of clauses involving modal verbs. As shown in Wurmbrand (1999, 2001), modal verbs lack theta-assigning properties and are usually found in restructuring or raising contexts; this is the approach we adopt here.

complement of the Archi verb 'must' is smaller than CP. However, these facts are equally compatible with a TP- or *v*P-sized complement. In the rest of this section, we provide further syntactic evidence indicating that complements of the raising verbs under discussion are in fact *v*Ps.

As we mentioned in section 2, Archi word order is relatively free in matrix clauses but rigid in embedded clauses. In particular, Archi does not allow cross-clausal scrambling. However, arguments of infinitival phrases can undergo displacement when used with a higher modal verb, as shown in (48). In (48)a, the agent and the theme of the infinitive 'put on' are contiguous, but in (48)b, the agent is dislocated to the right. This suggests that modals and their complements do not form separate clausal domains.

(48) a. [*v*P **Zari** baʁəža a‹b›kła-s] b-eker.
        1SG.ERG ring.III.ABS.SG ‹III.SG›put.on-FIN III.SG-be.able
        'I can put on a ring.'

    b. [*v*P Baʁəža a‹b›kła-s] b-eker **zari.**
        ring.III.ABS.SG ‹III.SG›put.on-FIN III.SG-be.able 1SG.ERG
        'I can put on a ring.' (Kibrik 2003: 565)

Another indication of the monoclausal status of modals constructions in Archi comes from negation. Archi negation must be located within the *v*P, given that negation can appear within masdars, as shown in (50)b below. Note, crucially, that Archi does not allow multiple negation within a single clause:

(49) a. W-ez Maqʼsud w-ak:u-li i‹w›di-t'u.
        I.SG-1SG.DAT Maqsud I.SG-see.PFV-CVB ‹I.SG›be.PST-NEG
        'I haven't seen Maqsud.'

    b. *W-ez Maqʼsud w-ak:u-li-t'u i‹w›di-t'u.
        I.SG-1SG.DAT Maqsud I.SG-see.PFV-CVB-NEG ‹I.SG›be.PST-NEG
        ('I haven't seen Maqsud.')

Examples (50)a, b present biclausal structures featuring a converbal and a nominalized clause respectively; in both of those structures, negation is possible within each clausal domain:

(50) a. [ʕali-mu χ:ams a‹b›ču-**t'u**-mat] laq'i‹w›t:i-t'u.
        Ali.I-SG.ERG bear.III.SG.ABS ‹III.SG›kill.PFV-NEG-CVB ‹I.SG›finish.PFV-NEG
      'Ali could not avoid killing a bear.' (lit: could not do so that he did not kill a bear)

    b. [ans b-erqʕu-**t'u**-kul] ∅-ez sin-ši ∅-ebt:'u.
        bull.III.ABS.SG III.SG-go-NEG-NMLZ IV-I.DAT know-CVB IV-become.PFV.NEG
        'I did not know the bull was not coming.'

Meanwhile, in constructions with the modal verbs 'can' and 'must', only one negation is possible, indicating that the complement of these modal verbs must be a *v*P rather than a TP/CP:

(51) a. ʕali-mu   χ:ams   a‹b›ča-s   e‹b›t:i-**t'u.**
         Ali.I-SG.ERG bear.III.SG.ABS ‹III.SG›kill-FIN ‹III.SG›be.able-NEG
         'Ali could not kill a bear.'
      b. *ʕali-mu   χ:ams   a‹b›ča-**t'u**-s   e‹b›t:i.
         Ali.I-SG.ERG bear.III.SG.ABS ‹III.SG›kill-NEG-FIN ‹III.SG›be.able.PFV
          ('Ali could not kill a bear.')
      c. *ʕali-mu   χ:ams   a‹b›ča-**t'u**-s   e‹b›t:i-**t'u.**
         Ali.I-SG.ERG bear.III.SG.ABS ‹III.SG›kill-NEG-FIN ‹III.SG›be.able.PFV-NEG
          ('Ali could not kill a bear.')

We conclude that complements of modal verbs are *v*Ps and that the resulting
constructions instantiate restructuring. The *v*Ps embedded under the restructuring modals
still manifest the same case and agreement as their finite counterparts.

     Based on the data from masdars and modal verbs, we can establish that all Archi
case licensing and agreement occur inside the *v*P. We will now examine this licensing in
more detail.

4.4   Putting it all together
The absolutive is licensed by the lowest *v*, which carries both a case feature and an
unvalued class feature, as shown in (52) below. In this and subsequent derivations, we
assume that Archi has V-to-*v* head movement. The evidence for this movement derives
from morphology, namely, from the order of roots and agreement markers on lexical
verbs. The lexical verb corresponds to V in the syntactic structure, whereas agreement
markers are the lexical realization of [CL] features on *v*. Archi lexical verbs are always
inflected with agreement markers; these markers can be either prefixal or infixal, but
never suffixal. Thus, we observe the sequences Agr-Root with a prefix and <Agr.Infix>-
Root with an infix, but not *Root-Agr (see also Table 3 above).[16] The licit orders
correspond to *v*-V and <*v*>-V; the order *V-*v* is excluded. One of the ways to derive
these morpheme orders in a head-final (V-*v*) language is to assume that V undergoes
head movement to *v*, yielding a complex head *v*-V,[17] as represented in the structure
below:

---

[16] We assume that infixes are underlyingly prefixes that undergo insertion into the verb in
the phonological component after vocabulary insertion. See Kibrik (1997c: 215-217) for
some phonological requirements on infixation; but see also Chumakina and Corbett (in
press) who argue that phonological rules cannot account for a substantial subset of
infixing verbs in Archi.

[17] Another way to arrive at the licit morpheme order is to assume a post-syntactic
operation of a morphological merger (Marantz 1988, Bobaljik 1995, a.o.). A detailed
investigation of Archi verbal morphology goes beyond the scope of this paper, and we
leave it for future research.

(52)

```
                    vP
             _____/\
            /         v̄
         __/\___
        VP        v
      _/\_      _/\_
     DP    t   v    V
   [uCASE];  [ABS];
    [CL]     [uCL]
```
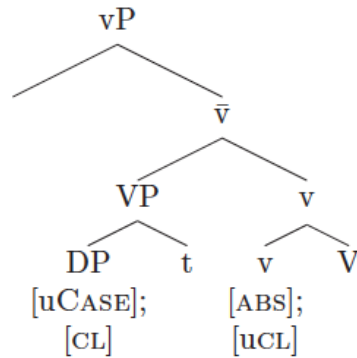
If the verb is unergative, then the sole argument merges in the specifier of *v*P. At this point in the derivation, only the *v* head can value [uCASE] on DP, since no other potential case-feature-valuing heads have yet been merged. Thus, the unergative argument receives absolutive case from *v*, capturing the uniform case assignment on intransitives found in Archi.

We have already characterized the ergative as a structural case and the dative, as an inherent case. Ergative and dative subjects are licensed as external arguments of the next functional head. The derivation for transitive verbs is shown schematically below:

(53)

```
                      vP
          _____/_____
         DP                  v̄
      [uCASE];         ____/\____
       [CL]           vP          v₂
                    _/\_        [uCL];
                   VP    v₁    [AGENT]/[ERG]
                 _/\_  _/\_
              DP_ABS t v   V
             [uCASE]; [ABS];
              [CL]   [uCL]
```
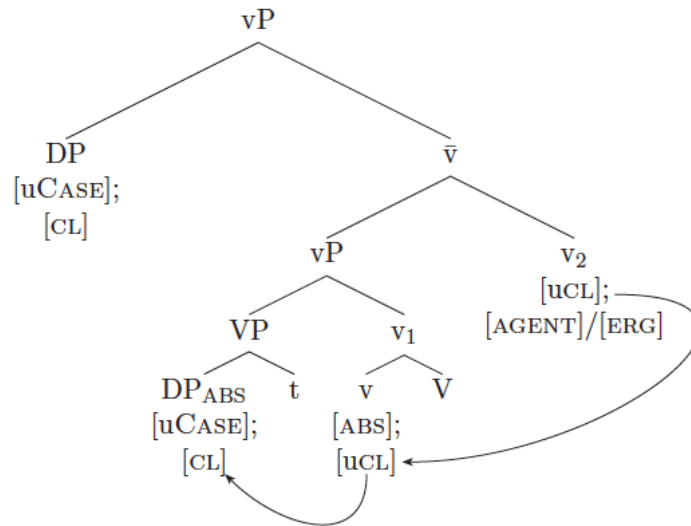
As we previously stated, all *v* heads contain the [uCL] feature since no verbs can appear without agreement. Class features are valued by the closest absolutive argument. In principle, agreement with the ergative may be available (and such agreement is found in some ergative languages). However, in Archi, the absolutive is the only visible bearer of agreement features among DPs meaning higher agreeing heads (including *v* heads

without overt phonological realization) bypass the ergative DP and probe for agreement lower.

In principle, two possible operations may be available to derive such agreement: multiple probing (several probing heads value their features with the same goal) or successive valuation (cyclic Agree). Researchers have offered independently motivated considerations against multiple probing (see especially Režać 2003 for a general discussion and Baker and Willie 2010 for a particular test case in Ibibio). Assuming that multiple probing is unavailable or, at least, less preferred, we are left with successive valuation where only the [uCL] feature of the lowest v can be valued by an absolutive DP. Therefore, other [uCL] features must be valued by the closest v head that also has a valued class feature (cf. Collins 2003; Baker and Willie 2010 for a similar approach).

In (53), [uCL] on v_1 is valued by the DPABS. The [uCL] feature of v_2 cannot be valued by the same DP; therefore, it is valued by the closest head with valued class features, namely v_1. If more v heads appear in the structure, they look to the closest head to value their class feature. The derivation for the affective construction is similar, except that v_2 has the feature [EXP] and licenses an inherent dative. Finally, a *v*P phrase can also contain an indirect-object dative licensed by a *v*P (see (44) above); such a licensing *v* head is also expected to agree with the adjacent *v* head in the same manner as shown in (53).

The main properties of case licensing and agreement in Archi introduced in this section are summarized below:

(54) *Clausal design of Archi*
a. all case licensing is done in vP:
    i.   absolutive on arguments in intransitive constructions (unaccusatives and unergatives) is always licensed by v_1;
    ii.   ergative on external arguments is licensed by v_2;
    iii.   dative on external arguments is licensed by v_2 when it contains the [EXPERIENCER] feature;
b. Archi verb phrases can include several *v*P layers. Each *v* head has [uCL] features, which can be valued either by a DP[ABS] or by the closest *v* head with valued [CL] features.

5   *Accounting for the agreeing pronouns*

In this section, we demonstrate that the apparent agreement between 1st person pronouns in core cases and the absolutive DPs, as presented in section 3 above, is merely a surface effect. Agreeing pronouns, however, are not uniform; one type of analysis is warranted for 1st person singular and plural exclusive pronouns, whereas the 1st person inclusive pronoun, which has more structure, will require a different analysis. In section 5.1, we present evidence for treating a subset of 1st person agreeing pronouns as weak pronouns based on their phonological properties and certain aspects of syntactic distribution. We discuss the analysis of 1st person singular and plural exclusive pronouns in section 5.2 and then turn to the inclusive pronouns in section 5.3.

5.1   Strong vs *weak pronouns in Archi*

A closer look at the pronouns that can have agreement exponents reveals that the pronouns are not uniform in their phonological properties. 1st person singular and 1st person plural-exclusive pronouns have the same phonological shape: VC(V) with an obligatorily non-obstruent consonant. Kibrik (1977a: 325-326) independently observes that only affixes lack obstruents in Archi; thus, pronouns with the VC(V) structure appear analogous to affixes, obviously violating an independent minimal word requirement.

　　In their phonological make-up, 1st person singular and 1st person exclusive pronouns seem different from other pronouns in a way that resembles the contrast between weak and strong pronouns. Weak pronouns differ from strong pronouns both phonologically and syntactically (cf. Cardinaletti and Starke 1994, Laenzlinger 1998, Grohmann 2000, a.o.), and the literature has suggested several tests to distinguish between them.

　　The discussion of strong-weak pronouns in the literature predominantly involves 3rd person pronouns; the presence of a strong-weak contrast within 1st person pronouns in Archi rules out some standard diagnostics. For example, no conclusions can be drawn from the (im)possibility of indexing human referents (Cardinaletti and Starke 1994). However, some diagnostics are still applicable. In particular, weak pronouns are known to disallow focus modification (Cardinaletti and Starke 1994) and relatedly, to be impossible as fragment answers. Consider the following French examples:

(55) a. C'est toi/*tu qui　　　　　　sautes　　　　le　plus haut.
　　　　　It is 2SG.STRONG/2SG.WEAK jump.2SG.PRS　DET　most high
　　　　　'It is you who jumps the highest.'
　　　b. Qui a　raconté son　　secret? -- Moi/*Je.
　　　　　who has told　self's secret　　1SG.STRONG/1SG.WEAK
　　　　'Who told their own secret?—I did.'

Applying these diagnostics to Archi, we find that the Archi agreeing pronouns cannot be modified by the focus marker *-ejt'u*:

(56) *Buwa-mu　　b-ez-ijbu　　　　　　χˤošon　　　　　a‹b›u.
　　　　Mother-ERG　III-I.DAT-III.FOC　　dress.III.ABS.SG　make‹III.SG›PFV
　　　　('Mother made the dress for ME.')

This constraint can be circumvented by putting the respective pronoun in a reflexive form under emphasis, similar to the English *She made the dress for MYSELF*.

(57) Buwa-mu　　　b-ez-a‹b›u　　　　　χˤošon　　　　　a‹b›u.
　　　　Mother-ERG　　III-1SG.DAT-REFL‹III.SG›dress.III.ABS.SG make‹III.SG›PFV
　　　　'Mother made the dress for ME.'

Turning now to fragment answers, we find that non-agreeing pronouns — i.e. the 'strong' pronouns — can appear in fragments in an appropriate case form without any additional verbal material. For example,

(58) A: Buwa-mu   ɬ:a-s   χˤošon   abu?
            mother.II-ERG.SG   who.SG.OBL- DAT   dress.III.ABS.SG   make‹III.SG›PFV
            'Who did Mother make a dress for?'
      B: Wa-s.
            2SG-DAT
            'For you.'

Meanwhile, agreeing pronouns must appear in their agreeing form:[18]

(59) A: Buwa-mu   ɬ:a-s   χˤošon   abu?
            mother.II-ERG.SG   who.SG.OBL- DAT   dress.III.ABS.SG   make‹III.SG›PFV
            'Who did Mother make a dress for?'
      B: B-ez/*ez.
            III-1SG.DAT/1SG.DAT
            'For me.'

The fact that agreeing pronouns are possible in fragment answers should not be surprising. Archi has only one set of 1st person singular pronouns; that is, unlike French and other familiar languages, it lacks a strong–weak contrast in the 1st person singular. Accordingly, in Archi, the weak 1st person pronoun is the only possible option. Furthermore, the possibility of weak, i.e., agreeing, pronouns in fragment answers is unsurprising. If we assume, following Merchant (2004), that fragment answers result from PF ellipsis — i.e., that the relevant parts of the sentence are elided after agreement and feature copying is done — weak pronouns are actually predicted to be possible in Archi.

      Based on these observations, we suggest that Archi agreeing 1st person singular and plural exclusive pronouns are weak forms that are phonologically deficient:

(60)   *Weak pronouns in Archi*
       a. /is/, /ez/: 1sg
       b. /(V)l(V)/: 1pl

Weak pronouns have also been argued to be deficient in structure, lacking some features present in strong pronouns (for an overview of such proposals, see Laenzlinger 1998, Grohmann 2000). Following this line of analysis, we propose that Archi weak pronouns are structurally deficient. Recall the principle in (2) above: all Archi DPs, whether lexical or pronominal, must be specified for the [CL] feature. Archi weak pronouns, however, lack class specification. Thus, the feature bundles of Archi pronouns are as shown in (61):

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[18] The ungrammatical reply in (59)B is acceptable if the absolutive in the baseline sentence is in class IV (or plural class nIPL) in which case the agreement exponent is null. However, it is critical for our discussion that when the absolutive is in a different class, there must be agreement on the pronoun in the fragment answer.

(61) strong pronouns: [CL], [PERSON], [NUMBER]
      weak pronouns: [PERSON], [NUMBER]

Although weak pronouns are unspecified for the [CL] feature, they behave identically to strong pronouns and lexical DPs with respect to case licensing — i.e., they are merged in the regular DP position and assigned case in the same positions as all other DPs. Weak pronouns get their case feature valued by v: when a pronoun is serving as the external argument of an agentive transitive verb, it receives [ERG] from v_2; when it appears in the affective construction, it receives [DAT] case from v_2. At this point in the derivation, the case feature on weak pronouns has been valued, but they lack a [CL] feature. Since all DPs must have that feature, per principle (2) above, weak pronouns receive a copy from the closest v head, as schematically shown in (62). Here and below we represent such feature copying by a dotted line.

(62)
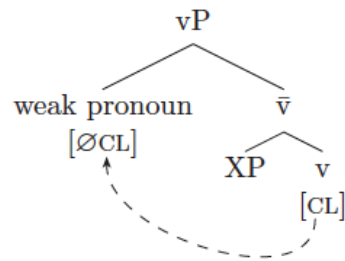
As discussed above, some functional heads may be phonologically null, but they all still contain a [CL] feature. Therefore, the copying of that feature on a weak pronoun does not depend on the morphological exponence of the functional head that licenses that pronoun. Thus the structure in (62) crucially relies on our analysis of agreement in Archi where all v head have an [uCL] feature; this feature can be valued by a DP$_{ABS}$ (=XP in (62)) or another v head with valued [CL] features.

 Our proposal and the structure in (62) make several predictions. Since agreement and feature copying occur inside vP, we predict that only pronouns carrying cases licensed directly inside vP can have agreement markers; pronouns licensed outside the vP will not have class features. Stated differently, there should be no weak pronouns outside the vP.

 Out of the many cases in the rich case system of Archi, only some are licensed in vP. Other cases may be licensed either inside DP or above the vP, as shown in the table below.

TABLE 5: Archi case-licensing loci

Licensed in vP	Licensed above vP	Licensed in PP	Licensed in DP/NP
Absolutive **Ergative** **Dative** **External-possession genitive**	Causalis (cf. Rizzi 1990:46-51; Cinque 1999; Kayne 2004)	Comitative Comparative Simulative Substitutive Spatial forms	Internal-possession genitive Partitive

The cases licensed inside *v*P, by different licensing heads, include ergative, dative, and the genitive of external possession, all shown in boldface above. Our proposal predicts that weak pronouns in these cases *only* will have agreement exponents. Pronouns associated with cases licensed above the *v*P are not expected to have agreement markers, since their features are copied from the *v* head. Unfortunately, causalis, the only case licensed above the vP without any apparent P head, is never observed with pronouns, unsurprising because it is used adverbially. However, as a result, this form is unavailable to test our prediction concerning agreement exponents. As for cases licensed inside a PP, our prediction is confirmed: pronouns bearing inherent cases licensed by a P head (comitative, comparative, simulative, substitutive, and a vast array of spatial cases) cannot bear an agreement exponent.

Similarly, the genitive of internal possession and the partitive, both licensed inside a DP, do not agree with the clausemate absolutive.[19] Given that DPs constitute a separate domain, DP-internal pronouns are not expected to be able to receive class features from *v*.

Table 6 presents a full paradigm of Archi 1st and 2nd person pronouns displaying their agreeing forms for vP-licensed cases.

TABLE 6: Archi 1st and 2nd person pronouns (only agreement with the absolutive singular shown)

		SG		PL		
		1st person	2nd person	1st person		2nd person
				EXCL	INCL	
ABSOLUTIVE		zon			nen‹t'›u	
ERGATIVE		zari	un	nen	**nena-w** **nena‹r›u** **nena‹b›u** **nen‹t'›u**	ž[w]en
GENITIVE		**w-is** **d-is** **b-is** **Ø-is**	wit	**Ø-ulu** **d-olo** **b-olo** **Ø-olo**	**la‹w›u** **la‹r›u** **la‹b›u** **la‹t'›u**	wiš
DATIVE		**w-ez** **d-ez** **b-ez**	was	**w-el** **d-el** **b-el**	**w-ela-w** **d-ela‹r›u** **b-ela‹b›u**	wež

---

[19] Adnominal genitives demonstrate feature concord with the noun they modify, e.g., *w-is uš* 'my brother', where *w-* is class I marker, but this feature copying from the head noun inside the DP is irrelevant for the discussion here.

	Ø-ez		**Ø-el**	**Ø-el‹t'›u**	
CAUSAL	za-š:i	wa-š:i	la-š:i		žʷa-š:i
COMITATIVE	za-ł:u	wa-ł:u	la-ł:u		žʷa-ł:u
COMPARATIVE	za-χur	wa-χur	la-χur		žʷa-χur
PARTITIVE	za-qˤiš	wa-qˤiš	la-qˤiš		žʷa-qˤiš
SIMILATIVE	za-qˤdi	wa-qˤdi	la-qˤdi		žʷa-qˤdi
SUBSTITUTIVE	za-kł'ena	wa-kł'ena	la-kł'ena		žʷa-kł'ena

5.2   Weak pronouns in Archi clause structure

In this section, we present and analyze Archi data to illustrate how agreeing pronouns can be accounted for. The following example includes agreement marked on the dative argument:

(63)   To-r   ł:onnol   d-ez   e‹r›χni.
       that-II.SG   woman.II.SG.ABS   II.SG-1SG.DAT   ‹II.SG›forget.PFV
       'I forgot that woman.'

In the affective verb 'to forget', the lower *v* head (v_1) carries [uCL] and [ABS] features, while v_2 is specified for [uCL] and [DAT]/[EXP]. The internal argument gets its features valued by v_1 and receives [ABS] case, while the external argument receives [DAT] from v_2. The absolute DP determines agreement; thus, the unvalued class feature in v_1 receives its value from DPABS 'that woman', and v_2 receives its value from v_1 in turn, as shown below where we use English glosses for the sake of exposition:

(64)

vP

DP   v̄

I

[uCASE]; [∅CL]

vP   v₂

[uCL];

[EXP]/[DAT]

v̄

VP   v₁

DP   t   v₁   V

[uCL]

that woman   *forget*

[uCASE][II]
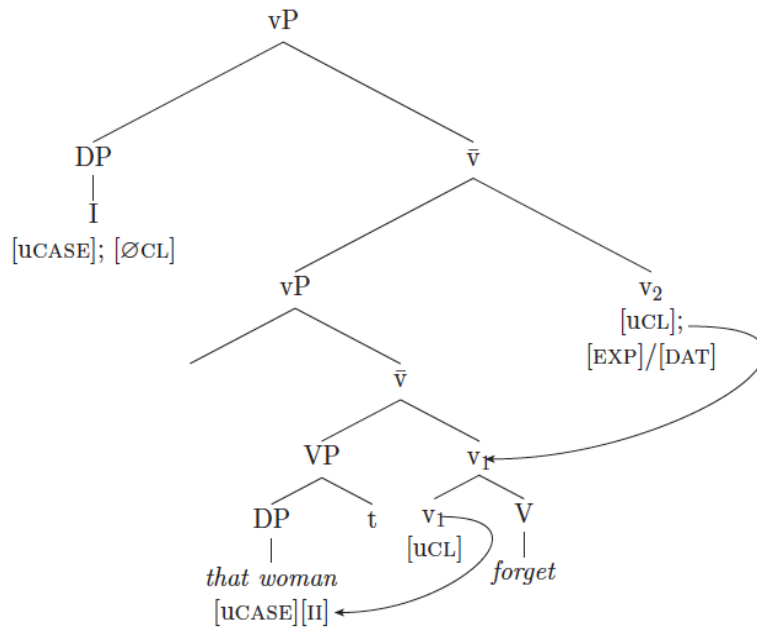
The external argument 'I-DAT' is a weak pronoun, unspecified for the [CL] feature; this example violates the requirement on [CL] feature specification (2). To avoid the violation, the offending dative DP borrows a copy of the [CL] feature from the closest v, v_2, as shown in (65) below:

(65)

vP   ]
/   \
DP   v̄
I   / \
[DAT];   vP   v₂
| / \   [II]
[∅CL]   v̄
/ \
VP   v₁
/ \   / \
DP   t   v   V
that woman   [II] |
[ABS]; [II]   forget
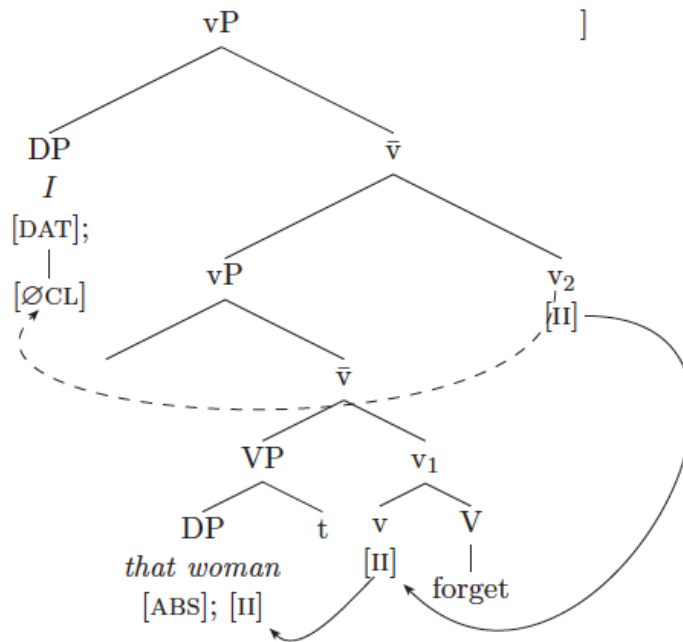
When weak pronouns are merged in lower positions, [CL] features are copied in the same manner. Consider the following sentence:

(66) To-r-mi   **b**-ez   χˤošon   a⟨b⟩u.
      that-II.SG-ERG **III.SG**-1SG.DAT   dress.III.SG.ABS   .⟨III.SG⟩make.PFV
      'She made me a dress.'

In (66), the weak pronoun bears the lexical dative case and "agrees" with the absolutive argument in [CL]. The derivation for this sentence proceeds in a similar way to (64) and (65). The internal argument *χˤošon* 'dress' has its features valued by v_1 and receives [ABS]. Since the verb in (66) is agentive, v_2 comes with the [ERG] feature. The external argument receives its structural case from the higher v. The weak pronoun 'me' receives the dative case, which we treat as a morphological realization of the beneficiary theta role (Woolford 2006). But the dative DP in (66) does not have [CL] specification, which violates the principle in (2) above. Thus, this DP must copy the [CL] feature from the closest *v*, which in turn copies its class features from v_1. The structure in (67) shows the successive valuation of agreement on verbal heads, and the structure in (68) shows the copying of class features on the weak pronoun from functional head v_2.

(67)

```
                                    vP
                    ┌────────────────┴────────────────┐
                   DP                                  v̄
                   she                ┌────────────────┴────────────────┐
              [uCASE][II]            vP                                 v₃
                          ┌───────────┴───────────┐              [uCL]; [ERG]
                         DP                        v̄
                          I             ┌──────────┴──────────┐
                    [uCASE]; [∅CL]     vP                     v₂
                                  ┌─────┴─────┐            [uCL]
                                            v̄
                                 ┌──────────┴──────────┐
                                VP                     v₁
                           ┌─────┴─────┐        ┌──────┴──────┐
                          DP           t       v1             V
                         dress              [uCL] [ABS]      │
                      [uCASE][III]                          make
```

(68)

vP
- DP *she* [ERG]; [II]
- v̄
  - vP
    - DP *I* [DAT]; [∅CL]
    - v̄
      - vP
        - v̄
          - vP
            - DP *dress* [ABS][III]
            - t
          - v₁
            - v [III]
            - V | make
      - v₂ [III]
  - v₃ [III]
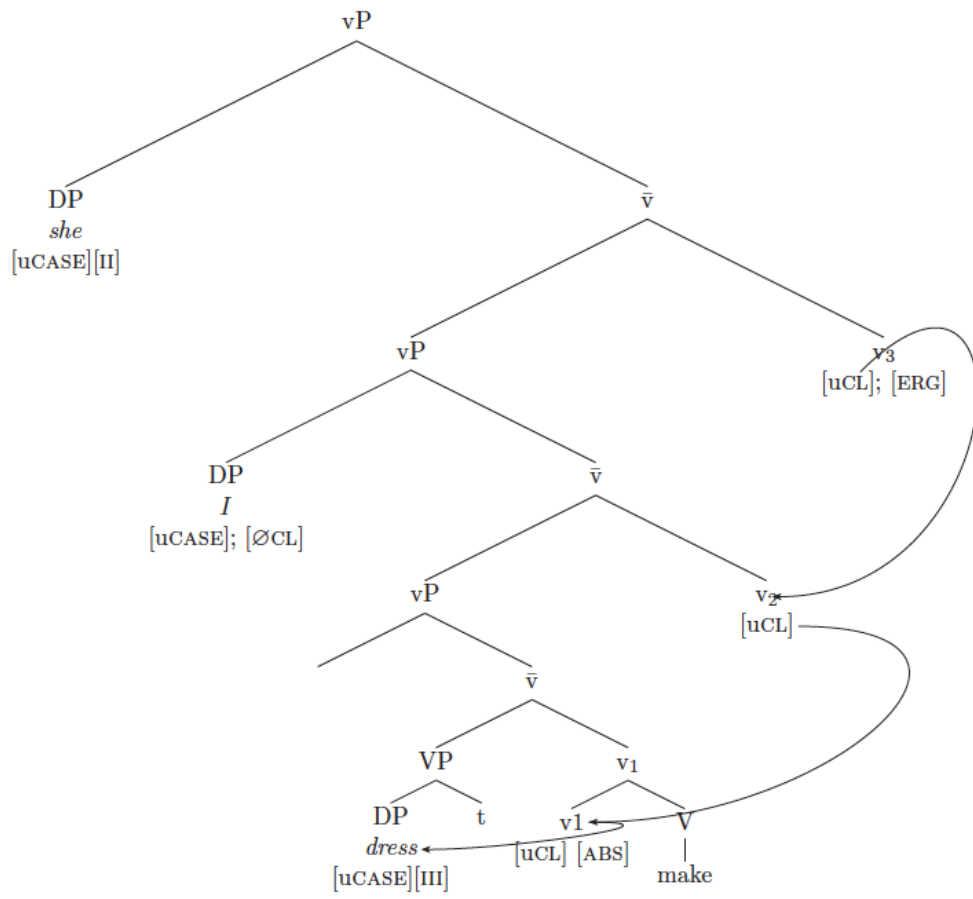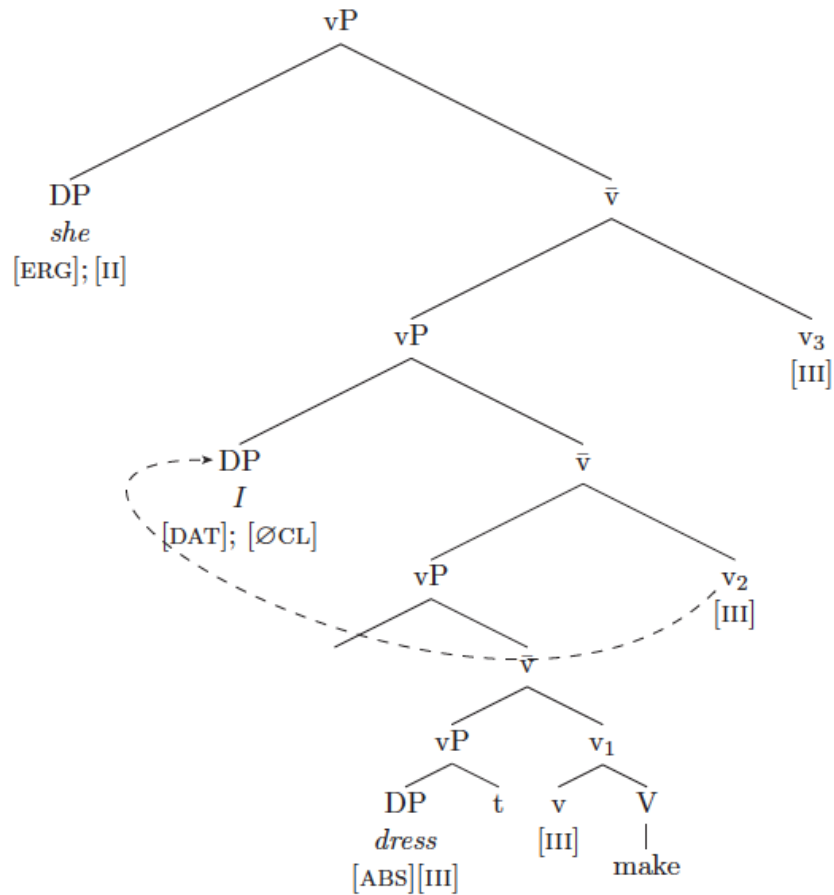
Genitive forms of weak pronouns are only found in external-possession constructions where they are licensed by *v* (as in the case of dative arguments in the affective construction), as shown in (16) above.

Altogether, the sample derivations above allow us to account for the following agreeing weak pronouns: 1st person singular dative, 1st person singular genitive, 1st person plural dative, and 1st person plural genitive.

However, the proposal presented in this section cannot extend to 1st person inclusive pronouns because they are clearly not weak. In the next section, we propose a different analysis of these pronouns, which reflects their complex structure.

5.3   Agreeing complex pronouns
 1st person plural inclusive pronouns, when they appear in the core cases licensed inside *v*P, also exhibit agreement exponents. Unlike the set of pronouns discussed in the previous section, 1st person plural inclusive pronouns have a complex morphological structure. The first morpheme is identical to the 1st person plural exclusive, in the appropriate case; the second is the emphatic exponent *-ejt'u* (Kibrik 1977b: 125, 126, 326). Thus:

(69)   1st person plural inclusive = 1st person plural exclusive + the marker *-ejt'u*

Within the case paradigm, the first component of these inclusive pronouns is not uniform in its phonological structure: aside from one strong pronoun, all case forms of 1st person pronouns are exclusive. The exception is the dative form *ela*, which is weak. Thus, the paradigm of inclusive pronouns is not fully uniform:

(70)   a.   weak (dative, /ela/) + the marker *-ejt'u*
       b.   strong (all other forms) + the marker *-ejt'u*

The emphatic marker *ejt'u* demonstrates agreement when used in any context, not only with pronouns. It has two allomorphs (Kibrik 1977b: 127):[20,21]

(71)   a.   a<CL>u/ C___
       b.   ej<CL>u/ V___

In what follows, we first discuss properties of *ejt'u* and then provide a detailed analysis of the pronouns under discussion.

5.3.1   *Emphatic* -ejt'u
The emphatic marker *-ejt'u,*[22] widely used outside the pronominal system, has the meaning 'very', 'only', 'even'; for example,

(72)   To-w   bošor   to-t   s:aʕat-lit:-ej‹w›u
       this-I.SG   man.I.SG.ABS   that-IV.SG   hour-LOC-‹I.SG›EMPH.SG
       mač'a-ma   w-ak:o:-t'u-ši   e‹w›t:i.
       be.dark-CVB.LOC.ESS   I.SG-see.NEG.FUT-NEG-CVB   ‹I.SG›become.PFV
       'That man became invisible AT THAT VERY MOMENT.' (Kibrik 1977b: 326)

This suggests that *-ejt'u* bears the [FOCUS] feature. Further evidence for the association between *-ejt'u* and [FOCUS] derives from its combination with indeterminate pronouns. A

---

[20] Given this allomorphy, it may be reasonable to analyze *–ejt'u* morphologically as a suffix; Kibrik refers to it as a particle, which may reflect the long-standing tradition in Caucasiology. For our purposes, the actual morphological status of *–ejt'u* is irrelevant, and we will be referring to it agnostically as a 'marker'.

[21] In addition to the phonologically conditioned cases of allomorphy exemplified in (71), the emphatic marker *-ejt'u* has several lexically specified allomorphs. When used as part of some reflexive pronouns, the emphatic marker has irregular forms. For example, the ergative singular form of the pronoun *inž-aw* 'he himself' is irregular, instead of the expected *inž-ejwu predicted by the rule in (71) (Kibrik 177b: 127).

[22] In the data here and elsewhere, this marker has two forms: *ejt'u* and *ijt'u* depending on when the examples were obtained. In the 1970s, the marker was pronounced [ejt'u], which is reflected in Kibrik's spelling; thirty years later, a vowel shift led to the modern pronunciation [ijt'u], reflected in more recent fieldwork examples.

number of languages derive polarity items by adding a focus marker to pronouns, indeterminate expressions, and the word 'one' (cf. Haspelmath 1997 for an overview and Shimoyama 2008 for Japanese). In Archi, *-ejt'u* is used to derive polarity items from pronouns and the numeral 'one', supporting our analysis of this item as a focus marker:

(73) Zari   os:-ej‹t'›u-t:u-t   os   adam   aču-t'u.
     1.SG.ERG one-EMPH‹IV.SG›-ATTR-I.SG   one   man.IV.SG.ABS [IV.SG]kill.PFV-NEG
     'I did not kill a single person.' (Kibrik 1977b: 327)

As we show below, *-ejt'u* is also used to derive reflexive pronouns. Although this function alone would not constitute unequivocal evidence for its focus-marker status, focus markers used in the derivation of reflexives are certainly very common (see König 2001 and König and Siemund 2000 for a cross-linguistic overview showing the role of intensifiers in reflexive formation).

At the same time, the marker *-ejt'u* cannot combine with IP-level (high) adverbs; for example,

(74) ***Talaħliš-ijr'u/ijt'u**   [χˁel   eχdi-t'aw]
     fortunately-II.EMPH/IV.EMPH rain.IV.SG.ABS   IV.SG.to.rain.PFV-CVB.NEG
     da-qˁa.
     II.SG-come.PFV
     ('FORTUNATELY, I (woman speaking) came back before it rained.')

Furthermore, the marker *-ejt'u* is also impossible on finite verbs, as shown below:

(75) *Lo   ari-li-t:i-š   u‹w›kłen
     child. I.SG.ABS work.IV-SG.OBL-SUP-EL   ‹I.SG›come.before
      zari   kummul   aw-ij‹t'›u.
      1SG.ERG food.IV.SG.ABS   [IV.SG].make.PFV-EMPH‹I.SG›
      ('BEFORE (my) son came (home) from work, I had made food.')

Given the data above, we suggest that the emphatic marker *-ejt'u* is licensed inside *v*P, making it too low to interact with IP-level adverbs and finite forms, which involve projections higher than *v*P. Additional evidence supporting this conclusion derives from the inability of *-ejt'u* to combine with DPs bearing *v*P-external cases, such as causalis, (76).[23]

(76) *W-irxw-mul-li-ši-j<w>u   zon
      I.SG-work-MSD-CAUSALIS-EMPH<I.SG>   1.I.SG.ABS
      q'ˁas:-e<w>ti.
      get.tired-<I.SG>become.PFV
      ('I got tired BECAUSE OF WORK.') (Kibrik 1977b: 156)

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[23] This example is based on Kibrik's description; modern speakers seem to be using causalis less often, replacing it with one of the locative forms.

Wherever –*ejt'u* appears, it is always marked for agreement. The example below illustrates its co-occurrence with a noun in an argument case, (77), a noun in a spatial case, (78), a nominalized verb, (79), a pronoun, (80), and an adverb, (81).

(77) Gubčit:i-j‹b›u   kł'an b-ez.
      basket.III.SG.ABS-EMPH‹III.SG› want III.SG-1SG.DAT
      'I want only a basket.' (implication: I do not want anything else)

(78) Ja-t   nokł'   iškol-li-s   χarak-ij‹t'›u
      this-IV.SG house.IV.SG.ABS school.III-SG.OBL-DAT behind-EMPH‹IV.SG›
      i.
      IV.SG.be.PRS
      'This house is right behind the school.'

(79) Lo   eˤmmu   d-ak:u-t:-ij‹r›u
      child.II.SG.ABS cry.PFV   II.SG-see.PFV-CVB-EMPH‹II.SG›
      buwa   da-qˤa.
      mother.II.SG.ABS   II.SG-come.PFV
      'As soon as the mother saw that the girl cried, she came.' (lit.: at the seeing …)

(80) Buwa-kul-dija-kul   zari-j‹t'›u
      mother.II-NMLZ.IV.SG.ABS-father.IV-NMLZ.IV.SG.ABS   1SG.ERG-‹IV.SG›EMPH
      uw-qi.
      IV.SG.do.PFV-FUT
      'It is me who will have to become their parent.'
      (lit.: 'only I will do motherhood and fatherhood') (T3: 18)

(81) Arša   horo:k-ej‹b›u   iškul   dabłu.
      Archi.INESS long.ago-‹III.SG›EMPH   school.III.SG.ABS open.PFV
       'A school opened in Archi a very long time ago.' (Kibrik 1977b: 326)

Regardless of its attachment site, the agreement on –*ejt'u* is always determined by the absolutive DP: in (78), the emphatic particle attaches to a noun in a spatial form and agrees with the object argument *jat nokł'* 'this house'; in (79), this marker modifies the converb *d-ak:u-t:-ij‹r›u* and agrees with the absolutive DP *lo* 'child'; in (80), -*ejt'u* is attached to the 1st person pronoun *zari* 'I.ERG' and again, it agrees with the absolutive DP. Thus, the core properties of -*ejt'u* can be summarized as follows:
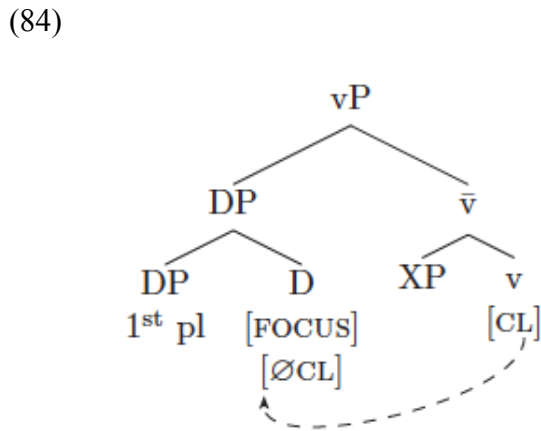
(82) Distribution and agreement properties of -*ejt'u*
      The focus marker -*ejt'u* attaches to vP-internal material and agrees with the clausemate absolutive DP.

5.3.2   Complex structure of 1st person inclusive pronouns
We are now ready to present our analysis of the agreeing inclusive pronouns. We propose that the 1st person inclusive pronoun is a complex DP, headed by the focus marker –*ejt'u*, which takes 1st person plural pronouns (=DP) as its complement:

(83)

```
              DP
           ╱      ╲
        DP          D
         |
    1ˢᵗ person     ejt'u
    plural      [ØCL]; [FOCUS]
```
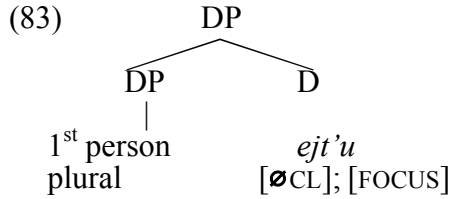
In (83), we present the focus particle as a lexical realization of the D head. Similar to the weak pronouns, this D head is unspecified for [CL], which is in violation of the principle that all nominal forms in Archi must be specified for class. To avoid such a violation, the D head -*ejt'u* resorts to copying [CL] features from the closest *v*, as shown below:
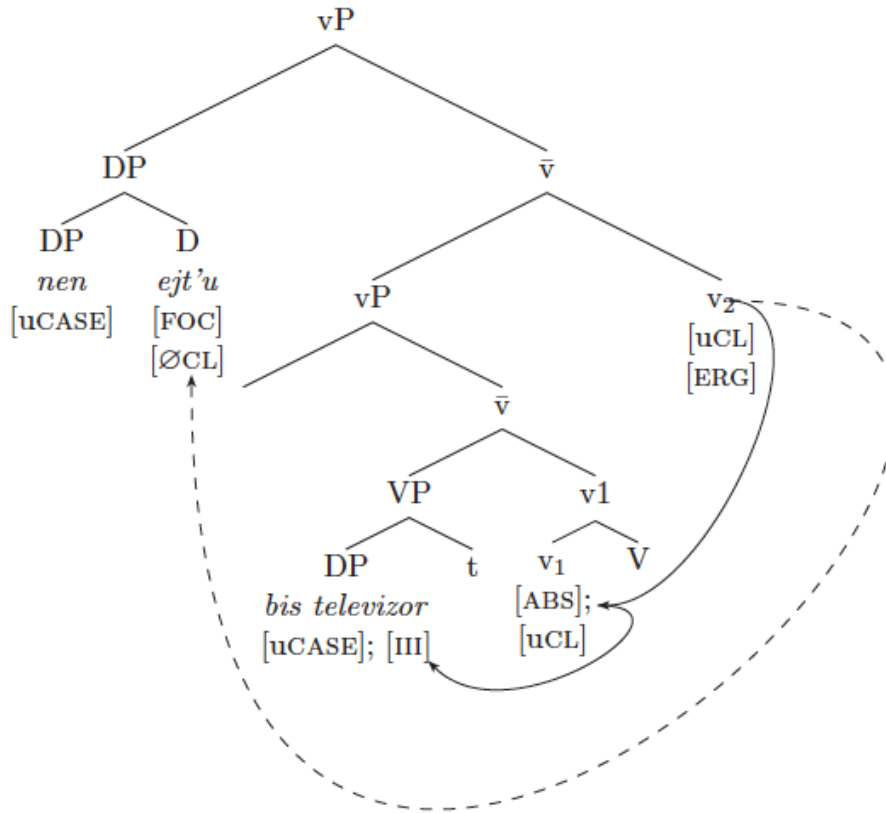
(84)

```
                    vP
                 ╱      ╲
              DP          v̄
           ╱      ╲      ╱  ╲
        DP          D  XP    v
      1ˢᵗ pl    [FOCUS]     [CL]
                [ØCL]
```

We can now illustrate the proposed analysis for the example presented in (85):

(85) **Nen-a‹b›u**   b-is   tilivizor   mu
      1PL.INCL.ERG-‹III.SG›.EMPH III.SG-1.SG.GEN TV.set.III.SG.ABS be.good
   a‹b›u.
      ‹III.SG›do.PFV
      'We fixed my TV.'

In (85), the ergative form of the 1ˢᵗ person inclusive pronoun bears an agreement exponent, controlled by the DP_ABS *tilivizor* 'TV', following our proposal that DP gets its case valued by the v_1 head. As agreement is always controlled by an absolutive-marked argument, DP_ABS values [uCL] features on v_1, which in turn values [uCL] on v_2. The pronoun 'I.INCL.ERG' now has a D head, unspecified for [CL] in violation of (1). To avoid such a violation, D[FOCUS] copies a [CL] feature from the closest *v*, v_2, as shown below:

(86)

vP

DP   v̄

DP   D
nen   *ejt'u*
[uCASE]   [FOC]   vP   v₂
         [∅CL]   [uCL]
                            v̄   [ERG]

VP   v1

DP   t   v₁   V
*bis televizor*   [ABS];
[uCASE]; [III]   [uCL]

At the beginning of this section, we identified that not all 1ˢᵗ person inclusive pronouns are identical in phonological structure: the core morpheme of the dative 1ˢᵗ person inclusive pronoun is weak, while all others are strong. Unlike other agreeing pronouns, the dative form of the 1ˢᵗ person inclusive has two agreement exponents (CL-*ela*-CL-*ejt'u*). The agreement properties of this pronoun follow directly from its structure, in which neither D head is specified for [CL]. The structure of this dative 1ˢᵗ person inclusive pronoun is shown in (87).

(87)   DP

DP   D
      ejt'u
D   [∅CL];[FOCUS]
ela
[∅CL]
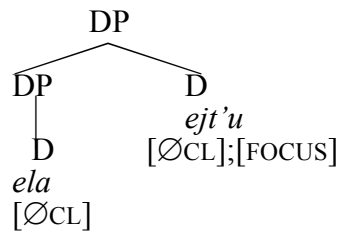
Since there are two D heads with unspecified [CL] features, two copying processes occur: D[FOCUS] copies the class feature from the closest *v* head, and then the second D, *ela*, copies that class feature from D[FOCUS], as in (88).
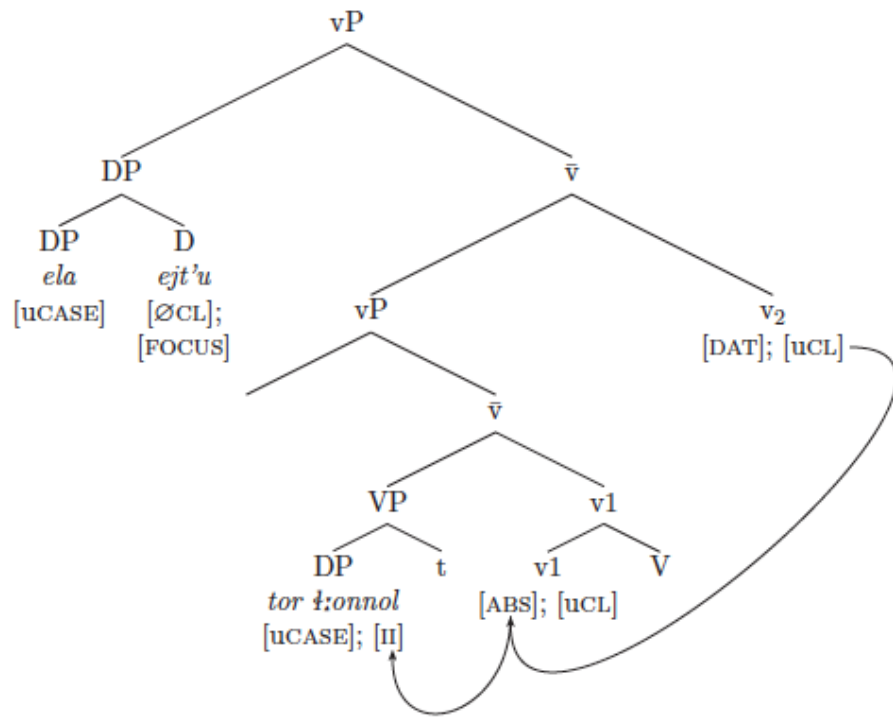
(88)

vP

DP   v̄

DP   D   XP   v

D   *ejt'u*   [CL]

[∅CL]   [∅CL]; [FOCUS]
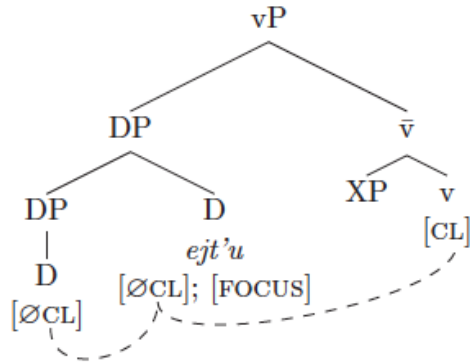
Let us now apply this structure to the derivation of the following sentence:

(89)   To-r   ɬ:onnol   **d-ela‹r›u**   e‹r›χni.
       that-II.SG   woman.II.SG.ABS   II.SG-1PL.INCL.DAT‹II.SG›   ‹II.SG›forget.PFV
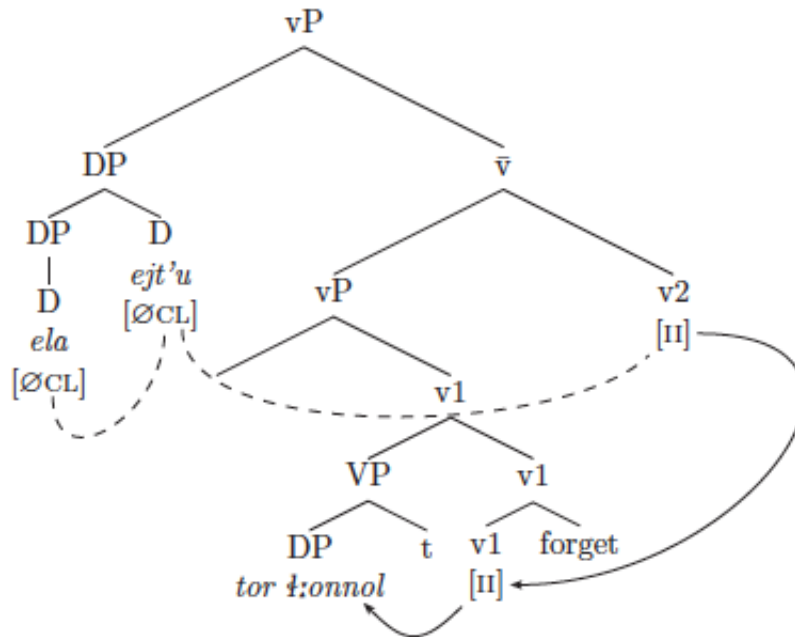   'We (inclusive) forgot that woman.'

The dative form of the 1st person pronoun *delaru* in (89) agrees with the absolutive argument *tor ɬ:onnol* 'that woman'. The internal argument 'that woman' gets its case checked by v_1. The complex DP *delaru* gets its dative case checked by v_2. The internal argument values [uCL] on v_1, while v_1 values the class feature on v_2, as in (90) below:

(90)

vP

DP v̄

DP D vP v₂
ela ejt'u [DAT]; [uCL]
[uCASE] [∅CL]; v̄
[FOCUS]

VP v1

DP t v1 V
tor ɬonnol [ABS]; [uCL]
[uCASE]; [II]

Delaru is a complex pronoun consisting of a 1st person exclusive pronoun and -*ejt'u* with both components unspecified for [CL]: the pronoun *ela* is weak and thus lacks [CL] specification, while -*ejt'u* is independently unspecified for [CL] for reasons outlined above. To avoid violating the requirement that all Archi DPs must be specified for class (1), first, D[FOCUS] receives the [CL] feature of the closest *v* head, v_2, and second, the D head *ela* receives a copy of that class feature from D[FOCUS], as schematically shown in (91):

(91)

vP
├─ DP
│ ├─ DP
│ │ └─ D
│ │   *ela*
│ │   [∅CL]
│ └─ D
│   *ejt'u*
│   [∅CL]
└─ v̄
   ├─ vP
   │ ├─ v1
   │ │ ├─ VP
   │ │ │ ├─ DP
   │ │ │ │ *tor ł:onnol*
   │ │ │ └─ t
   │ │ └─ v1
   │ │   ├─ v1
   │ │   │ [II]
   │ │   └─ forget
   └─ v2
      [II]

Our account of the complex structure of 1st person inclusive pronouns predicts that the pronouns can bear agreement affixes only when their case is licensed inside *v*P. This prediction bears out: only 1st person inclusive pronouns in the genitive, dative, and ergative can appear with agreement exponents.

   All things considered, inter-DP agreement registered on 1st person inclusive pronouns follows from their complex structure involving the focus marker -*ejt'u*. This marker is unspecified for [CL] and copies the relevant feature from the closest functional head *v*.

   Before we conclude this section, we would like to consider why Archi inclusive pronouns, rather than their exclusive counterparts, are marked with agreement exponents. Cross-linguistically, languages where exclusive pronouns are more complex than inclusive pronouns seem predominant (Cysow 2003). However, a pattern of more complex inclusive forms and less complex exclusive forms is also attested cross-linguistically, albeit not often. Compare the spoken French *nous—nous autres* or Ilocano *ta—tayo* (Cysouw 2003: 157); other languages with this pattern include Waiwai (Cysouw 2003: 152), Quechua (Weber 1989: 37, 54-55), and Limbu (Harbour 2013).

   Archi is the only NEC language that has this pattern,[24] and there is a diachronic explanation for this unique situation. Historically, Proto-Lezgic distinguished between inclusive and exclusive pronouns with two independent forms, *dlaˤ-n* vs. *dža-n*

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[24] Other NEC languages distinguish 1st person plural inclusive and exclusive pronouns, but they use two completely different roots (for actual forms, see Kibrik and Kodzasov 1990: 221-222).

respectively (Alekseev 1985: 70-71). Archi lost this Proto-Lezgic distinction and then developed a new way of distinguishing the two meanings by using 1st person inclusive reflexive pronouns as non-reflexive 1st person plural inclusive pronouns. These pronouns have retained their complex structure but have lost their reflexive meaning.

6 Conclusions

In this paper, we presented novel data on Archi illustrating a typologically unusual phenomenon of apparent agreement between 1st person pronouns and absolutive-marked arguments. Apart from their typological significance, these facts challenge current approaches to agreement, which hold that Agree relations can be established only between heads and phrases. We demonstrated that the apparent agreement between a 1st person pronoun and an absolutive DP can be reduced to a more conventional agreement, namely, agreement between the absolutive DP and a series of v heads. Thus, the apparent challenge of irregular Archi agreement is merely an illusion; all the agreement facts, however intricate, follow a well-established mechanism of noun-verb agreement.

We proposed that weak pronouns lack noun-class feature specification and must therefore copy a class feature from the closest v to avoid violating the Archi-internal constraint that all DPs must have [CL] feature specification. We also showed that agreeing pronouns in Archi are not uniform in their internal structure: 1st person singular and 1st person plural exclusive pronouns are weak pronouns, whereas 1st person inclusive pronouns are complex lexical items composed of 1st person exclusive pronouns followed by the restrictive (focus) marker -*ejt'u*. In the complex structure of 1st person inclusive pronouns, the focus marker is a D head which requires a noun-class feature and receives that feature via copying it from the closest v head.

From an empirical standpoint, we have used independently motivated properties of language design, such as distinctions between strong and weak pronouns and agreement between verbal heads and DPs, to probe deeper into the apparently unusual agreement pattern. On a more general level, our analysis demonstrates that quite often, subtle facts must be investigated to determine the syntax of the world's languages. Sometimes surface-oriented observations suggest 'exotic' or unfamiliar mechanisms, but closer, theoretically informed investigation shows that the underlying mechanism is not exotic at all.

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