1 Introduction

Agreement is traditionally understood as a relation between an argument and a predicate. However, in some North-East Caucasian (NEC) languages, pronominal arguments, as well as adverbs and particles, participate in apparent agreement with other arguments. This pattern presents a challenge for existing approaches to agreement. In this paper, we present and analyze unusual agreement facts from an NEC language, Archi, and show that the apparently irregular pattern can be reduced to the more commonplace argument-predicate agreement and is therefore well behaved. Our account of the Archi agreement pattern relies on two analytical components: first, the presence of several functional layers within the verb phrase, some of which are headed by phonologically null functional elements, and second, the existence of weak pronouns. We argue that all verbal heads participate in agreement and can get their unvalued features successively checked by immediately adjacent v heads.

The paper is organized as follows. In section 2, we present an overview of Archi, highlighting the grammatical properties relevant for this paper. Section 3 presents the challenging data whose explanation is the main goal 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 inter-DP agreement. We show 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 the 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 Dagestan (Russian Federation); most Archi speakers are bilingual or trilingual in Russian and Avar.

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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, display a contrast between first and second person, with an additional inclusive/exclusive distinction; third 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 nouns, demonstratives and attributives do not distinguish noun class/gender in the plural:

<table>
<thead>
<tr>
<th>Table 1: Archi demonstratives</th>
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<tr>
<td>I SG</td>
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<tr>
<td>ju-w</td>
</tr>
<tr>
<td>jamu</td>
</tr>
<tr>
<td>to-w</td>
</tr>
<tr>
<td>gud-u</td>
</tr>
<tr>
<td>³gud-u</td>
</tr>
</tbody>
</table>

Archi has an articulated system of cases, illustrated here for the noun ba'k‘ ‘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 be referring to them as such. In all case forms except the absolutive, endings attach to the oblique stem, which for most nouns formally coincides with the form of the ergative (Kibrik and Kodzasov 1990). It is possible that the other cases listed in Table 2 are in fact postpositional forms, but nothing in the present discussion hinges on this characterization.

<table>
<thead>
<tr>
<th>Table 2: Non-spatial cases in Archi</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>ABSOLUTIVE</td>
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<tr>
<td>ERGATIVE</td>
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<tr>
<td>GENITIVE</td>
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<tr>
<td>DATIVE</td>
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<tr>
<td>CAUSALIS</td>
</tr>
<tr>
<td>COMITATIVE</td>
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<tr>
<td>COMPARATIVE</td>
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<tr>
<td>PARTITIVE</td>
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<tr>
<td>SIMILATIVE</td>
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</tbody>
</table>
2.2 Agreement
Archi has four noun classes (genders). A fundamental principle of the design of Archi is that all DPs have a noun-class feature:

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

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) I bošor ‘man’, PL klele;
      dozja ‘grandfather’, PL dozja-t:u
II ːonnoł ‘woman’, PL ɬom;
      doba ‘grandmother’, PL doba-t:u
III ɬ’on ‘cow’, PL buc’i
      noš ‘horse’, PL noš-or
IV alat ‘tool’, PL alat-mul
      nokl ‘house’, PL nokl’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:

(3) a. ɬom ba-q’a.
    woman.PL.ABS HPL-come.PFV

---

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).

‘Women came.’

b. Buc’i \( q' \a. \)
cow.PL.ABS nHPL-come.PFV
‘Cows came.’
c. \( \chi: m-u \) buc’i-wu \( ba-q' a/ *q' a. \)
woman.PL.ABS-and cow.PL.ABS-and HPL-come.PFV/nHPL-come.PFV
‘Women and cows came.’

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

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

<table>
<thead>
<tr>
<th></th>
<th>SG</th>
<th>PL</th>
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<tbody>
<tr>
<td>I</td>
<td>w- / ( w )</td>
<td>b- / ( b )</td>
</tr>
<tr>
<td>II</td>
<td>d- / ( \delta )</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>b- / ( \beta )</td>
<td>Ø / ( \Omega )</td>
</tr>
<tr>
<td>IV</td>
<td>Ø / ( \Omega )</td>
<td></td>
</tr>
</tbody>
</table>

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

(4) a. Be:χu-t:u bošor \( q' \a. \)
be.tall-ATTR.I.SG man.I.SG.ABS I.SG.come.PFV
‘A tall man came.’
be.tall-ATTR-II.SG woman.II.SG.ABS II.SG-come.PFV
‘A tall woman came.’
c. Be:χu-t:u-b \( \chi' \) on ba-q' a.
be.tall-ATTR-III.SG cow.III.SG.ABS III.SG-come.PFV
‘A tall cow came.’
d. Be:χu-t:u-t nokl’ 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 klele ba-q' a.
be.tall-ATTR-PL man.HPL.ABS HPL-come.PFV
‘Tall men came.’
f. Be:χu-t:-ib \( \chi o m \) ba-q' a.
be.tall-ATTR-PL woman,HPL.ABS HPL-come.PFV
‘Tall women came.’
g. Be:χu-t:-ib buc’:i q' a.
be.tall-ATTR-PL cow.NHPL.ABS [NHPL]come.PFV
‘Tall cows came.’
h. Be:χu-t:-ib nokl’-dor ak:u.
be.tall-ATTR-PL house.IV-nHPL.ABS [nHPL]see.PFV
‘(I) saw tall houses.’

Only absolutive arguments can determine agreement; as illustrated in (5)b and (6)b, ergative and dative subjects can never be agreement controllers.

(5) a. To-r-mi no'š darc’lirši e<b't’ni.
    that-II.SG-ERG horse.III.SG.ABS post.LOC 〈II.SG〉tie.PFV
    ‘She tied the horse to the post.’ (based on Kibrik 1977b: 195)
b. *To-r-mi no'š darc’lirši e<r’t’ni.
    that-II.SG-ERG horse.III.SG.ABS post.LOC 〈II.SG〉tie.PFV

(6) 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

2.3 Basic clause types
Arch 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 (7)-(9). Certain verbs take dative subjects (9) or subjects in one of the locative (spatial) forms (Kibrik 1977b: 172-176).

(7) Buwa da-q’a.
    mother.II.SG.ABS II.SG-come.PFV
    ‘Mother came.’
(8) Dija-mu buwa χir a<φu.
    father.I-SG.ERG mother.II.SG.ABS behind 〈II.SG〉make.PFV
    ‘Father brought Mother along.’
(9) Laha-s buwa d-ak:u.
    child.SG.OBL-DAT mother.II.SG.ABS II.SG-see.PFV
    ‘Child saw Mother.’

Root clauses have a relatively free word order, (10), while embedded clauses have rigid verb-final order, (11).

    1SG.ERG mother.II.VOC sweet.IV-PL.ABS [IV.PL]eat.PFV
    ‘I, Mother, ate the sweets.’ (Sisters: 81)
b. Klo-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)
(11) a. [Turali-ši jat:i-ši χa<b’t:i-t:i:b]
    Tura.IN-ALL up-ALL 〈HPL〉go.POT-ATTR.PL
    χːams b-ak:u-li jij-me-s.
    bear.III.SG.ABS III.SG-see.PFV-EVID they-PL.OBL-DAT
‘When they were going to Tura, uphill, they saw a bear.’

b. *[χaːbːtːiː-tːib ] turali-ši jatːiːši
   〈HPL〉go.FUT-ATTR.PL Tura.IN-ALL up-ALL
   〈AMS〉 b-akːu-li jij-me-s.
   bear.III.SG.ABS III.SG-see.PFV-EVID they-PL.OBL-DAT

The embedded clause in (11)a is headed by the participial form χaːbːtːiː-tːib ‘going’, which is in the clause-final position. No other order is allowed for this clause. In comparison, the dative subject ʃijmes ‘they.DAT’ freely appears as the final element in the main clause.

Archi has a number of ways of expressing possession. The construction relevant for the discussion below is an existential clause with the possessor in the genitive and the possessum in the absolutive, as illustrated in (12):

(12) Dija-n noš b-i.
    father.I.SG.OBL-GEN horse.II.SG.ABS III.SG-be.PRS
    ‘Father has a horse.’

In this construction, the genitive DP is a constituent of the root clause, but it is not subcategorized for by the verb ‘to be; to exist’. The use of genitive (or some other indirect case) in this context finds wide parallels cross-linguistically, under the rubric of external possessor constructions (Vergnaud and Zubizarreta 1992). The Archi external-possessor genitive can appear either at the left or right periphery of a root clause. If both the possessor and possessor appear preverbally, the possessor has to precede the possessum, which explains the ungrammaticality of (13)c:

(13) a. Usː-mi-n os ʃonol eɾdi.
    brother.I-SG.OBL-GEN one woman.I.SG.ABS 〈I.SG⟩be.PST
    ‘Brother had a wife.’

b. Os ʃonol eɾdi usː-mi-n.
    one woman.I.SG.ABS 〈I.SG⟩be.PST brother.I-SG.OBL-GEN
    ‘Brother had a wife.’

c. *Os ʃonol usː-mi-n eɾdi.
    one woman.I.SG.ABS brother.I-SG.OBL-GEN 〈I.SG⟩be.PST

In contrast, the adnominal use of the genitive, illustrated in (14), displays an internal possessor structure. Here, the genitive ʃatimati ‘Patimat’s’ modifies the noun laha ‘daughter’, which appears in the ergative case. Both forms are subconstituents of a single DP, and the genitive cannot be extrapolated to the right; compare the grammatical (13b) and the ungrammatical (14b). Unlike the external-possessor genitive, internal (adnominal) genitive forms are not limited to unaccusative existential clauses.

(14)a. *[Patimat-li-n laha ] χ*əlli aɾbu.
    Patimat.II-SG.OBL-GEN daughter.II.SG.ERG bread.II.SG.ABS 〈I.SG⟩make.PFV
    ‘Patimat’s daughter made bread.’
b. *Laha ǂallí ǂbú
daughter.II.SG.ERG bread.III.SG.ABS ǂIII.SG.make.PFV
Patiimat-|-n.
Patiimat.II-SG.OBL-GEN

For the purposes of the present paper, we adopt the structures in (15) for external possessives, where the possessor is generated as an argument of vP, as in (15)a and then moves to a higher projection, (15)b (but see Deal 2014 for an overview of other possible analyses of this phenomenon). 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). We assume here that the genitive case is licensed by v and leave the details of this proposal for future research.

(15) a. [vP DP\textsubscript{GEN} [vP DP\textsubscript{ABS} be] v]
b. [XP DP\textsubscript{GEN} [vP DP\textsubscript{GEN} [vP DP\textsubscript{ABS} be] v] x]

The base generation of the external-possessor genitive is apparent from its presence in untensed clauses, as shown in (16). The embedded clause is a masdar clause, the head of which is the existential verb i ‘be’, appearing in the nominalized form. We treat masdar constructions in more detail in Section 4.1, where we argue that they have a vP-sized structure. For the moment, simply note that it is possible to form masdars of external-possessive constructions even in untensed contexts.

(16) Dija-|n ǂdūgrike̜ ǂnoš b-i-kul\textsuperscript{3}
father.I.SG.OBL-GEN village.IV.SG.OBL.IN horse.III.SG.ABS III.SG-be-MSD
sini.
 know
‘I know that Father has a horse in the village.’

2.4. Clause structure

All intransitive verbs in Archi take absolutive subjects. Within intransitives, at least three diagnostics 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 and unaccusatives (Kibrik 1977c: 180).

We follow Chomsky (2001), Legate (2003), and Marantz (2007) in assuming that both unergative and unaccusative verbs have a vP dominating VP, as in (17). The vP of

\textsuperscript{3} The form i of the Archi copula verb ‘to be’ is ambiguous between its untensed form and present tense form.
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.

\[
\begin{align*}
(17) & \quad \text{a. unergative} \quad \text{b. unaccusative} \\
& \quad \begin{array}{c}
\text{vP} \\
\text{DPABS} \\
\text{VP} \quad \text{v} \\
\text{VP} \quad \text{v} \\
\text{V}
\end{array}
\end{align*}
\]

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:\(^4\)\(^5\)

\[
\begin{align*}
\text{(18) } & \quad \text{ʕAli-mu} \quad \text{rasul} \quad u\langle w\rangle k'\text{u} \\
& \quad \text{Ali.1-SG.ERG} \quad \text{Rasul.1-SG.ABS} \quad \langle \text{I.SG.}\text{force.PFV} \\
& \quad \text{[PROi jun't} \rangle \text{u hurmat-q'imat a-s].} \\
& \quad \text{REFL.GEN(IV.SG) respect.IV.SG.ABS} \quad \text{[IV.SG]do-FIN} \\
& \quad \text{‘Ali\(i\) made Rasul\(j\) respect him\(i\).’}
\end{align*}
\]

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

\[
\begin{align*}
\text{(19) a. } & \quad \text{Pat'i-mu} \quad \text{inža'\text{r}u} \quad \text{čučebo.} \\
& \quad \text{Pati.2-SG.ERG} \quad \text{REFL.ABS(II.SG)} \quad \text{wash.PFV} \\
& \quad \text{‘Pati washed herself.’} \\
& \quad \text{b. } & \quad \text{*žec'\text{r}u} \quad \text{Pat'i} \quad \text{čučebo.} \\
& \quad \text{REFL(II.SG).ERG} \quad \text{Pati.II.SG.ABS} \quad \text{wash.PFV}
\end{align*}
\]

\(^4\) The control clause includes a reflexive pronoun. Reflexive pronouns have a complex structure; they consist of a pronominal morpheme and the emphatic particle \( ejt'\text{u} \). For instance, the third person reflexive pronoun in (19) is comprised of the oblique form of the third person pronoun \( inž \) and the emphatic particle \( –ejt'\text{u} \) (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.

\(^5\) Finalis (FIN) is the term used in Kibrik (1977b: 63, 69, 201ff.) for infinitival forms.
(‘Pati washed herself.’)

These diagnostics argue for the structure presented in (20). 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.

(20) Ergative subject and absolutive object

In addition to the standard transitive construction with the ergative subject, Archi exhibits a special construction with psychological predicates 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:

(21) Laha-s Rasul w-ak:u.
    child.1.SG.OBL-DAT Rasul.ABS.1.SG 1.SG-see.PFV
    ‘A/The boy saw Rasul.’

Dative experiencers pattern with ergative subjects in asymmetrically c-commanding absolutives, as shown in (22). These subjects must therefore be generated higher than the absolutive object, as schematized in (23).

(22) a. Laha-s inžaw w-ak:u.
    child.1.SG.OBL-DAT REFL.ABS.1.SG 1.SG-see.PFV
    ‘A/The boy saw himself.’

    REFL.DAT.1.SG child.1.SG.ABS 1.SG-see.PFV
(23) **Dative/oblique subject and absolutive object**

\[
\begin{array}{c}
vP \\
DP_{DAT/OBL} \rightarrow' \\
\quad vP \\
\quad v_2 \\
\quad \left(\begin{array}{c}
\quad \quad vP \\
\quad \quad v_1 \\
\quad \quad \quad \quad \quad DP_{ABS} \\
\quad \quad \quad \quad \quad \quad V\
\end{array}\right)
\end{array}
\]

The dative case encodes not only subjects of affective clauses as in (22), but also indirect objects. Such indirect-object datives are bound by the ergative but cannot bind it:

(24) a. ʕali-μu žusaবu tilivizor be-šde.
    Alī.1-SG.ERG REFL.DAT(III.SG) tv.set.III.SG.ABS III.SG-buy.PFV
    ‘Ali bought a TV set for himself.’

b. *Żuবu ʕali-s tilivizor be-šde.

Indirect-object datives, which are licensed in the presence of an ergative argument, bind the absolutive object but not vice versa, as shown in (25). 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 (26). One could represent that head as a dedicated applicative head but nothing in the analysis here hinges on the distinction between v and Appl.6

(25) a. Rasul-li Fatimka-s surat-li-t
    Rasul.1-SG.ERG Fatimka.2-SG.OBL-DAT picture.IV-SG.OBL-SUP
    inžaবu d-ak:u-s aরu.
    REFL.ABS(I.SG) ILSG-see-FIN 〈I.SG〉d₀.PFV
    ‘Rasul showed Fatimka herself in the picture.’

b. *Rasul-li Fatimka surat-li-t
    Rasul.1-SG.ERG Fatimka.2-SG.ABS picture.IV-SG.OBL-SUP

---

6 We have not observed examples where the dative experience subject (shown in (22)) and dative object (shown in (24)) co-occur, but in principle, nothing rules out such a co-occurrence.
3 Agreement between DPs?

In addition to argument-verb agreement, Archi noun-class-agreement exponents can appear on non-verbal elements (see Corbett 2013 and online handout at http://fahs-wiki.soh.surrey.ac.uk/wiki/pages/W2K0y3q7/Archi_materials.html, for an overview). As with the standard argument-verb agreement, this agreement is always determined by an absolutive argument. 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, show agreement with the absolutive DP. Thus, in (27)a, the dative of the first person singular pronoun agrees in noun class with the DP ‘that woman’; (27)b, c show a similar agreement pattern in the plural, with the exclusive and inclusive ‘we’, respectively:

(27) a. To-r ɬ:onnol  d-ez  eɿχni.
   [that-II.SG woman.II.SG.ABS] II.SG-1SG.DAT <II.SG>forget.PFV
   ‘I forgot that woman.’

b. To-r ɬ:onnol  d-el  eɿχni.
   [that-II.SG woman.II.SG.ABS] II.SG-1PL.EXCL.DAT <II.SG>forget.PFV
   ‘We (EXCLUSIVE) forgot that woman.’

c. To-r ɬ:onnol  d-elaɿu  eɿχni.
   [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 first person pronoun appears in the ergative, agreement with the absolutive is only present on first person plural. Compare the following examples; in (28), the ergative form of ‘we’ shows class agreement with the DP ‘TV’, but in (29), the singular ergative pronoun does not show agreement:

\[
\text{žes:-aɽu} \quad d-ak:u-s \quad aɽu.
\]

REFL.DAT<II.SG> II.SG-see-FIN <II.SG>do.PFV

(26)
First person genitive pronouns in the external-possessor position also agree with the absolutive:

(30) **B-is** duʁqiqʼ χʼon b-i.
III.SG-1SG.GEN village.IV.IN cow.III.SG.ABS III.SG-be
‘I have a cow in the village.’

(31) a. Cimint hinc baran e>b(di-tʼu
  cement.III.SG.ABS now like <III.SG>be.PST-NEG
  b-oło.
  III.SG-1PL.EXCL.GEN
  ‘We (EXCLUSIVE) did not have cement as (we do) now…’ (Sisters:16)
b. Cimint hinc baran e>b(di-tʼu
  cement.III.SG.ABS now like <III.SG>be.PST-NEG
  la>bőu.
  <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:

(32) **Nena>bőu** ja-b televisor b-ez
1PL.INCL.ERG<III.SG> this-III.SG TV.set.III.SG.ABS III.SG-1SG.DAT
mu a>bőu.
be.good <III.SG>do.PFV
‘We fixed this TV set for me.’

Pronouns can appear in all the abstract non-locative cases, but agreement is only registered on pronouns in the core cases: ergative, dative, and external-possessor genitive. Second person pronouns never show agreement. Table 4 presents non-spatial case forms of first and second person pronouns; the agreeing forms are shown in boldface.
Table 4: Archi first and second person pronouns (agreement with the absolutive is shown only for the absolutive goal in singular)

<table>
<thead>
<tr>
<th></th>
<th>SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1ST PERSON</td>
<td>2ND PERSON</td>
<td>1ST PERSON</td>
</tr>
<tr>
<td>1ST PERSON</td>
<td></td>
<td>EXCL</td>
</tr>
<tr>
<td>ABSOLUTIVE</td>
<td>zon</td>
<td>nen(‘)u</td>
</tr>
<tr>
<td>ERGATIVE</td>
<td>zari</td>
<td>un</td>
</tr>
<tr>
<td>GENITIVE</td>
<td>w-is</td>
<td>wit</td>
</tr>
<tr>
<td>DATIVE</td>
<td>w-ez</td>
<td>was</td>
</tr>
<tr>
<td>CAUSAL</td>
<td>za-š:i</td>
<td>la-š:i</td>
</tr>
<tr>
<td>COMITATIVE</td>
<td>za-š:u</td>
<td>la-š:u</td>
</tr>
<tr>
<td>COMPARATIVE</td>
<td>za-š:ur</td>
<td>la-š:ur</td>
</tr>
<tr>
<td>PARTITIVE</td>
<td>za-š:iš</td>
<td>la-š:iš</td>
</tr>
<tr>
<td>SIMILATIVE</td>
<td>za-š:di</td>
<td>la-š:di</td>
</tr>
<tr>
<td>SUBSTITUTIVE</td>
<td>za-š:ena</td>
<td>la-š:ena</td>
</tr>
</tbody>
</table>

The distribution of agreeing pronouns is subject to a number of syntactic constraints. First, an agreeing pronoun cannot be a subconstituent of a larger clausal constituent. This is particularly clear in (33), 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.

(33) Nena-bu/ *nena-w/ *nena-a-u mu-t-u-r
   HPL-IPL.INCL-1/PL.INCL-1.SG/II.SG-IPL.INCL be.beautiful-ATTR-II.SG
   lo-wu w-is ušdu-wu ŵir a\b\u. child.II.SG.ABS-and I.SG-1.SG.GEN brother.II.SG.ABS-and behind HPL-make.PFV
   ‘We (INCLUSIVE) brought a beautiful girl and my brother.’

Next, pronominal XPs agree with the absolutive only. As (34)-(36) show, dative, genitive, and ergative arguments themselves can never control agreement. Example (34) 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 (35) and (36) similarly fail to determine agreement:

(34) a. B-is du\riq\cq \c’on b-i.
   III.SG-1.SG.GEN village.IV.IN cow.III.ABS III.SG-be
   ‘I have a cow in the village.’ (female speaking)

   b. *D-is du\riq\cq \c’on b-i.
   II.SG-1.SG.GEN village.IV.IN cow.III.ABS III.SG-be
(35) a. **D-ez** Ajša d-akːu.
   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-akːu.
   I.SG-1.SG.DAT Aisha.II.SG.ABS II.SG-see.PFV
   (‘I have seen Aisha.’)

(36) a. **Nen(ˈb)u** hanžugur Ŝummar
   〈III.SG〉1PL.INCL.ERG how life III.ABS.SG
   b-a-rča-r?
   III.SG-〈IPFV〉carry.out-IPFV
   ‘How are we to spend our life?’ (based on T3:4)

b. *Nen(ˈt)u** hanžugur Ŝummar
   〈1PL〉1PL.INCL.ERG how life III.ABS.SG
   b-a-rča-r?
   III.SG-〈IPFV〉carry.out-IPFV
   (‘How are we to spend our life?’)

In sum, first 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. This appears to be a case of inter-DP agreement in Archi:

(37) **Argument agreement in Archi**

First person pronouns in non-absolutive core cases agree with the absolutive argument

In order to develop an analysis of this pattern, we first need to 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 (37) based on our understanding of Archi syntax.

### 4 Case licensing and agreement in Archi

#### 4.1 Masdars

Archi has a rich and productive system of deverbal nouns or nominalizations, which are traditionally referred to as masdars. 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 with respect to their process of formation. The first type is formed on the basis of a bare root; the second type is formed from a root together with its aspectual specification, and is essentially a clausal nominalization (Kibrik 1977b: 110-112). Here we will consider only the former type. We treat these root-based masdars as vP-nominalizations with the following structure:
A DP complement within a masdar exhibits the same case that would be assigned by the corresponding finite verb. Thus, masdars of intransitive verbs (both unaccusatives and unergatives) have their argument in absolutive case, (39); masdars of agentive transitive verbs have an external argument in ergative case and an internal argument in absolutive case, (40); masdars of affective verbs have a dative external argument and an  

absolutive internal argument, (41).

(39) [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.’

(40) [Rasul-li tilivizor b-uš-mul]
    b-ez sini.
    III.SG-1SG.DAT know
    ‘I know that Rasul bought a TV set.’

(41) [Rasul-li-s ł:onnol d-ux-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 (39)-(41) indicate that all argument cases are available in non-finite contexts, i.e., they are all licensed inside vP, rather than TP. Another crucial property of Archi masdars is that, like verbs in finite structures, they agree with their absolutive argument. This property suggests that agreement between verbs and absolutive DPs occurs inside vP but not in TP, which implies that the v head is responsible for agreement in Archi.

Agreeing pronouns of the type described in section 3 are also found in masdars, as illustrated in (42)-(43). These examples are titles of stories, a common context for masdars:  

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7 Example (42) 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.
This suggests that modals and their complements do not form separate clausal domains.

4.2 Modal verbs

Another piece of evidence for locating Archi case licensing in vP rather than TP comes from modal verbs. Modals often appear as restructuring verbs that take vP-sized complements (Wurmband 1999, 2001, Davis and Dubinsky 2004, a.o.). Below, we show that two Archi modal verbs, ‘can’ and ‘must’, are restructuring verbs that take a vP. Crucially for our analysis, these structures exhibit the same distribution of argument cases and agreement as masdars (and finite structures) do.

Consider the following sentences:

(44) [Nes:en zon o<w>γukʷe-s] ko<w>šar.
    now I.ABS I.sleep-FIN <1.SG>must
    ‘I must sleep now.’
(45) [Tow-mu jeb a<b>čas-s] kʷa<b>šuqi.
    he-ERG they.ABS <HUM.PL>kill-FIN <HUM.PL>must
    'He will have to kill them.' (Kibrik 2003: 985)

In (44) and (45) the verb ‘must’ shows agreement, which is 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 (44) and (45) indicates that the complement of the Archi verb ‘must’ is smaller than CP. However, these facts are equally compatible with a TP- or vP-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 vPs.

First, as we mentioned in section 2, Archi word order is relatively free in matrix clauses but it is 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 (46). In (46)a, the agent and the theme of the infinitive ‘put on’ are contiguous, but in (46)b, the agent is dislocated to the right. This suggests that modals and their complements do not form separate clausal domains.

(46) a. [vP Zari baʃoža a<b>kla-s] b-eker.
    1SG.ERG ring.III.ABS.SG <111.SG.put.on-FIN III-be.able
    ‘I can put on a ring.’
b. [vP Baʃoža a<b>kla-s] b-eker zari.
    ring.III.ABS.SG <111.SG>put.on-FIN III-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 vP, given that negation can appear within masdars, as shown below. Note, crucially, that Archi does not allow multiple negation within a single clause:

(47) a. W-ez Maq sud w-ak:u-li i<w>di-t’u.  
   1.SG-1.SG.DAT Maq sud 1.SG-see.PFV-CVB  <1.SG>be.PST-NEG  
   ‘I haven’t seen Maqsud.’

b. *W-ez Maq sud w-ak:u-li-t’u i<w>di-t’u.  
   1.SG-1.SG.DAT Maq sud 1.SG-see.PFV-CVB-NEG  <1.SG>be.PST-NEG  
   (‘I haven’t seen Maqsud.’)

Examples (48)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:

(48) a. [sali-mu χ:ams a<b>ču-t’u-mat] laq’i<w>i-t’u.  
   ‘Ali could not avoid killing a bear.’ (lit: could not do so that he did not kill a bear)

b. [Os ans b-ergu-t’u-kul] Ø-ez sinši Ø-eb-t’u.  
   one bull.III.ABS.GA III.SG-go-NEG-NMLZ IV-I.DAT know IV-able.PFV-NEG  
   ‘I did not know that 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 vP rather than a TP/CP:

(49) a. Ṣali-mu χ:ams a<b>ča-s e<b>ti-t’u.  
   Ali.1-SG.ERG bear.III.SG.ABS III.SG.kill-NEG FIN III.SG.be.able-NEG  
   ‘Ali could not kill a bear.’

b. *Ṣali-mu χ:ams a<b>ča- t’u-s e<b>ti.  
   Ali.1-SG.ERG bear.III.SG.ABS III.SG.kill-NEG-FIN III.SG.be.able.PFV  
   (‘Ali could not kill a bear.’)

c. *Ṣali-mu χ:ams a<b>ča- t’u-s e<b>ti-t’u.  
   Ali.1-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 vPs, and that the resulting constructions instantiate restructuring. The vPs 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 occurs inside the vP. We will now examine this licensing in more detail.
4.3 Deriving Archi clause structure

The absolutive is licensed by the lowest v, which carries both a Case feature and an unvalued class feature, as shown in (50) below. In that and subsequent derivations, we assume that Archi has V-to-v head movement. The evidence for this movement comes from morphology, namely, from the order of roots and agreement markers in lexical verb. 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). 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 that V undergoes head movement to v, yielding a complex head v-V, as represented in the structure below:

(50)

By assumption, ergative and dative are inherent cases (Aldridge 2008, Woolford 2006, Legate 2008, a.o.); they are licensed as external arguments of the next functional head. To be more precise, dative case carries a theta-related experiencer feature [EXP], while ergative case comes with an [AGENT] feature on v (see Wurmbrand 2013 for general

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8 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 a substantial subset of infixing verbs in Archi cannot be accounted for by phonological rules.

9 Another way to get the licit morpheme order is to assume a post-syntactic operation of 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.
properties of such a feature and Gagliardi et al. 2014 for its valuation in Lak and Tsez). The derivation for transitive verbs is shown schematically below:\(^{10}\)

\(^{10}\) Our current case-licensing proposal is compatible with configurational case assignment mechanisms (Marantz 1991; Bobaljik 2008; Polinsky and Preminger 2014; Levin and Preminger in press).
As we already stated, all v heads have the [uCL] feature as no verbs can appear without agreement. Class features are valued by the closest absolutive argument. We embrace the standard assumption that inherently case-marked DPs are invisible to Agree (cf. Bobaljik 2008; Preminger 2014), which explains why agreement with the ergative or dative argument is impossible.

The next question has to do with the appearance of agreement on multiple v heads (including v heads that do not have overt phonological realization). 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 Režač 2003 for a general discussion, and Baker and Willie 2010 for a particular test case in Ibibio). Assuming that multiple probing is not available or at least less preferred, we are left with successive valuation. That means that 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 itself has a valued class feature (cf. Collins 2003; Baker and Willie 2010 for a similar approach).

In (51), [uCL] on v₁ is valued by the DPABS. The [uCL] feature of v₂ cannot be valued by the same DP; therefore, it is valued by the closest head with valued class features, namely v₁. If more v heads appear in the structure, they look to the closest head in order to value their class feature. The derivation for the affective construction is similar, except that v₂ has the feature [EXP] rather than [AGENT] and licenses an inherent dative. Finally, a vP phrase can also contain an indirect-object dative, licensed by a vP (see (26) above); such a licensing v head is also expected to agree with the adjacent v head, in the same manner as shown in (51).

The main properties of case licensing and agreement in Archi introduced in this section are summarized below:
(52) **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 v₁;
   ii. ergative on external arguments is licensed by v₂ when it bears the [AGENT] feature;
   iii. dative on external arguments is licensed by v₂ when it has the [EXPERIENCER] feature;

b. Archi verb phrase can include several vP 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 **Explaining the agreeing pronouns**

In this section, we demonstrate that the apparent agreement between DPs in Archi, presented in section 3 above, is just a surface effect. Agreeing pronouns however are not uniform; one type of analysis is warranted for 1ˢᵗ person singular and plural exclusive pronouns, whereas 1ˢᵗ person inclusive pronouns, which have more structure, require a different analysis. 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 they are not uniform with respect to 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 to differ 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, Laenzlinge 1998, Grohmann 2000, a.o.), and several tests have been suggested in the literature 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 based on 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:

(53) 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

Applying these diagnostics to Archi, we find that the Archi agreeing pronouns cannot be modified by the focus marker -ej’t’u:

(54) *Buwa-mu b-ez-ijbu χ'ošon abu.
    Mother-ERG III-1.DAT-III.FOC dress.III.ABS.SG made
    (*’Mother made the dress for ME.’)

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

(55) Buwa-mu b-ez-jbijbu χ'ošon abu.
    Mother-ERG III-1.SG.DAT-REFL<III.SG> dress.III.ABS.SG make<III>PVF
    ‘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 material. For example:

(56) A: Buwa-mu l:a-s χ'ošon abu?
    mother.II-ERG.SG who.SG.OBL- DAT dress.III.ABS.SG made
    ‘Who did Mother make a dress for?’

   B: Wa-s.
      2SG-DAT
      ‘For you.’

Meanwhile, agreeing pronouns have to appear in their agreeing form.¹¹

(57) A: Buwa-mu l:a-s χ'ošon abu?
    mother.II-ERG.SG who.SG.OBL- DAT dress.III.ABS.SG made
    ‘Who did Mother make a dress for?’

   B: B-ez/*ez.
      III-1.SG.DAT/1.SG.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 does not have a strong–weak contrast in the first person singular. Accordingly, in Archi, the weak 1ˢᵗ person pronoun is the only possible option.

¹¹ The ungrammatical reply in (57)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.
Furthermore, the possibility of weak, i.e., agreeing pronouns, in fragment answers is unsurprising. If we assume, following Merchant (2004), that fragment answers are a result of 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:

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

Weak pronouns have also been argued to be deficient in structure, lacking some features that are 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 (1) above: all Archi DPs, whether lexical or pronominal, must be specified for the [CL] feature. Archi weak pronouns, however, lack class specification. The feature bundles on Archi pronouns are thus as shown in (59):

(59) **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 are 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 gets [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 do not have a [CL] feature. Since all DPs must have that feature, per principle (1) above, weak pronouns receive a copy from the closest v head, as schematically shown in (60). Recall also that even though some v heads, e.g., \(v_2\), may be phonologically null, they nevertheless all have a [CL] feature, which can be copied to a weak pronoun in the configuration shown in (60).

(60)

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12 We will illustrate this situation in the next section (see discussion of (63)).
Our proposal and the structure in (59) make several predictions. Since agreement and feature copying occur inside vP, we predict that only pronouns that carry cases licensed inside vP can have agreement markers; pronouns licensed outside the vP will not have class features. To put it differently, *there should be no weak pronouns outside 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 vP, as shown in the table below.

<table>
<thead>
<tr>
<th>Licensed in vP</th>
<th>Licensed above vP</th>
<th>Licensed in PP</th>
<th>Licensed in DP/NP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolutive</td>
<td>Causalis (cf. Rizzi</td>
<td>Comitative</td>
<td>Internal possession</td>
</tr>
<tr>
<td>E{rgative</td>
<td>1990:46-51; Cinque</td>
<td>Comparative</td>
<td>genitive</td>
</tr>
<tr>
<td>Dative</td>
<td>1999; Kayne 2004)</td>
<td>Simulative</td>
<td>Partitive</td>
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<tr>
<td>External-</td>
<td></td>
<td>Substitutive</td>
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<tr>
<td>possession genitive</td>
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<td>Spatial forms</td>
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</tr>
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</table>

The cases licensed inside vP include ergative, dative and genitive of external possession (licensed by different v heads). Our proposal predicts that precisely pronouns in these cases will have agreement exponents. This prediction is borne out. Pronouns associated with cases licensed above vP are not expected to have agreement markers, since their features are copied from the v head. This prediction, too, is borne out; for example, causalis case, licensed high, is incompatible with agreement:

(61) Za-ši un q"as:-e<w>ti.
    1.SG-CAUSALIS you.1.SG.ABS get.tired<-1.SG>become.PFV
    ‘You got tired because of me.’

Archi also has a number of cases (comitative, comparative, simulative, substitutive, and a large number of spatial cases), which are licensed inside PP, making it impossible for them to receive class features from outside the PP domain. Pronouns bearing cases licensed inside PP cannot have agreement exponents. Thus:

(62) I-t’u za-ʃ:u klo-t’u
    [IV.SG].be.PRS-NEG 1SG.OBL-COMIT [IV.SG]give.PFV-NEG
    za-ra-ʃ bo-li.
1.SG.OBL-CONT-LAT say.PFV-EVID

“I don’t have it, he did not give it to me,” (the wife) said.’ (T25:24)

Similarly, the genitive of internal possession and the partitive, which are both licensed inside DP, never carry agreement. Given that DPs constitute a separate domain, DP internal pronouns are not expected to be able to get class features from v, which is the case: pronouns that are marked for genitive of internal possession and partitive do not bear agreement markers. Table 6 presents a full paradigm of Archi 1st and 2nd person pronouns.

**Table 6**: Archi first and second person pronouns (showing only agreement with absolutive singular)

<table>
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<th>SG</th>
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<tr>
<td></td>
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5.2 **Weak pronouns in Archi clause structure**

In this section we demonstrate how the proposal presented above works when applied to actual Archi data. Consider the following sentence:

(63) To-r 1:onnol d-ez c=t’ən.  
that-II.SG woman-II.SG.ABS II.SG-1SG.DAT 1I.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 gets [DAT] from $v_2$. Agreement is determined by the absolutive DP; thus, the unvalued class feature in $v_1$ gets its value from DP_ABS ‘that woman’, and $v_2$ gets its value from $v_1$, in turn, as shown in (64), where we use English glosses for the sake of exposition:
The external argument ‘I-DAT’ is a weak pronoun, which is unspecified for the [CL] feature; that violates the requirement on [CL] feature specification (1). To avoid the violation, the offending dative DP borrows a copy of the [CL] feature of the closest v, v₂, as shown in (65) below:
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 bear 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’ gets its features valued by v₁ and gets [ABS]. Since the verb in (66) is agentive, v₂ comes with the [ERG] feature. The external argument gets its 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, in violation of the principle in (1) above. Thus, this DP must copy the [CL] feature from the closest v, which in turn copies its class features from v₁:
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 (15) above.

Altogether, the sample derivations above allow us to account for the following agreeing pronouns all of which are weak: 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 be extended to 1st person inclusive pronouns because they are clearly not weak. In the next section, we put forward a different analysis of these pronouns, which reflects their complex structure.

5.3 Agreeing complex pronouns
First person plural inclusive pronouns, when they appear in the core cases licensed inside vP, also show agreement exponents. However, 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). 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 with respect to its phonological structure: all case forms of 1st person exclusive pronouns
but one are strong pronouns. The one 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 -ej’t’u
b. strong (all other forms) + the marker -ej’t’u

The emphatic marker ejt’u shows agreement when used in any context, not just with pronouns. It has two allomorphs (Kibrik 1977b: 127):

(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, which is widely used outside the pronominal system, has the meaning ‘very’, ‘only’, ‘even’; for example:

(72) To-w bošor to-t s:at-lit:-ej<w>u
    this-1.SG man.1.SG.ABS that-IV.SG hour-LOC-<1.SG>EMPH.SG
    mac’a-ma w-ak:0tu-ši e<w>ti.
    be.dark-CVB.LOC.ESS 1.SG-see.NEG.POT-NEG-CVB <1.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] comes from its combination with indeterminate pronouns. A 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 negative polarity items from pronouns and the numeral ‘one’, which supports our analysis of this item as a focus marker:

(73) Zari os:-ej<t’>u-t:u-t os adam acu-t’u.
    1.SG.ERG one-EMPH<IV.SG>-ATTR-1.SG one man.1.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 by itself would not constitute unequivocal evidence for its focus-marker status, it is certainly very common for focus markers to be used in the derivation of reflexives (see König 2001 and König and Siemund 2000 for a cross-linguistic overview showing the role of intensifiers in reflexive formation).

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13 Given this allomorphy it may be reasonable to analyze –ejt’u morphologically as a suffix; Kibrik refers to it as a particle, which may be a reflection of 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’.
The marker -ejt’u cannot combine with sentence-level (high) adverbs; for example:

(74) *Talahlîs-ijr’u/ejt’u [χ’el eɣdi-t’aw]
fortunately-II.EMPH/IV.EMPH rain_IV.SG.ABS IV.SG.to.rain.PFV-CVB.NEG
da-q’ã.
II.SG-come.PFV
(‘FORTUNATELY, I (woman speaking) came back before it rained.’)

Further, the marker -ejt’u is also impossible on finite verbs:

(75) *Lo ari-li-t:i-š u<w>klen-ij<w>u
child.I.SG.ABS work.IV-SG.OBL-SUP-EL I.SG.come.before-EMPHI.SG
zon kummul uw-li.
I.SG.ABS food.IV.SG.ABS [IV.SG].make.PFV-CVB
(‘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 vP, thus making it too low to interact with clause-level adverbs and finite forms, which involve projections higher than vP. Additional evidence in support of this conclusion comes from the inability of -ejt’u to combine with DPs bearing vP-external cases, such as causalis, (76).

(76) *W-irxw-mul-li-ši-j<w>u zon
I.SG-work-MSD-CAUSALIS-EMPH<ISG> 1.I.SG.ABS
q’as:-e<w>ti.
get.tired-<ISG>become.PFV
(‘I got tired BECAUSE OF WORK.’)

Wherever –ejt’u appears, it always shows agreement. The example below show 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) Gubêît:i-jdbu kl’an b-ez.
basket.III.SG.ABS-EMPH<III.SG> want III.SG-I.SG.DAT
‘I want only a basket.’ (implying that I do not want anything else)

(78) Ja-t nokl’ iškol-li-s ɣarak-ijt’u
this-IV.SG house.IV.SG.ABS school.IV.SG.OBL-DAT behind-EMPH<IV.SG>
i.
IV.SG.be.PRS
‘This house is right behind the school.’

(79) Lo e’mmu d-ak:u-t:-jcrdu
child.II.SG.ABS cry.PFV II.SG-see.PFV-CVB-EMPH<II.SG>
buwa da-q’ã.
mother.II.SG.ABS II.SG-come.PFV
‘As soon as the mother saw that the girl cried, she came.’
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-ijerũ 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 pronouns have the following structure, which consists of the 1st person inclusive pronoun and the focus marker -ejt’u:

(83)

```
DP
  ┌──┐
  │ DP
  │   │ Ejt’u
  │   └──┘
  │       plural
  │       [∅CL]; [FOCUS]
```

In (83) we present the focus particle as a lexical realization of the D head. Just like the weak pronouns, this D head is unspecified for [CL], in violation of the principle in (1). However, all nominal elements in Archi must be specified for [CL]. To avoid such a violation, the D head -ejt’u resorts to copying [CL] features from the closest v, as shown below:
We can now illustrate the proposed analysis for the example presented in (85):

(85) **Nenadebu** b-is televizor mu a>b>u.

1PL.INCL.ERG<i>III.SG</i>III.SG-1.SG.GEN TV.set.III.SG.ABS be.good <III.SG>d0.PFV

‘We fixed my TV.’

In (85), the ergative form of the 1<sup>st</sup> person inclusive pronoun bears an agreement exponent, which is controlled by the DPABS *televizor* ‘TV’. Following our proposal, that DP gets it case valued by the v<sub>1</sub> head. As agreement is always controlled by an absolutive-marked argument, DPABS values [u<sub>CL</sub>] features on v<sub>1</sub>, which in its turn values [u<sub>CL</sub>] on v<sub>2</sub>. 
The pronoun ‘I.INCL.ERG’ now has a D head, which is unspecified for [CL], in violation of (1). To avoid that violation, D[FOCUS] copies a [CL] feature from the closest \( v_1, v_2 \), as shown in (87) below:
At the beginning of this section, we pointed out that not all 1st person inclusive pronouns are identical with respect to phonological structure: the core morpheme of the dative 1st person inclusive pronoun is weak, while all the 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 (88).

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 (89).
Let us now apply this structure to the derivation of the following sentence:

(90) To-r ɬ:onnol  d-eλaɽu  eɽyyni.
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 (90) 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 dative case checked by \(v_2\). The internal argument values \([u_{CL}]\) on \(v_1\), while \(v_1\) itself values the class feature on \(v_2\), as in (91) below:
The important point to keep in mind is that *delaru* is a complex pronoun consisting of a 1<sup>st</sup> person exclusive pronoun and *-ej’tu*, with both components unspecified for [CL]: the pronoun *ela* is weak and thus lacks [CL] specification, while *-ej’tu* 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] gets the [CL] feature of the closest v head, v<sub>2</sub>, and then the D head *ela* gets a copy of that class feature from D[FOCUS], as schematically shown in (92):

(92)

![Diagram of the complex structure of 1<sup>st</sup> person inclusive pronouns in Archi.](https://example.com/diagram)

Our account of the complex structure of 1<sup>st</sup> person inclusive pronouns predicts that they can bear agreement affixes only when their case is licensed inside vP. This prediction is borne out: only 1<sup>st</sup> person inclusive pronouns in the genitive, dative, and ergative can appear with agreement exponents.

All things considered, inter-DP agreement registered on 1<sup>st</sup> person inclusive pronouns follows from their complex structure involving the focus marker *-ej’tu*. 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 offer some consideration as to why it is Archi inclusive pronouns, rather than their exclusive counterparts, that 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 too 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,\(^{14}\) and there is a diachronic explanation for this unique situation. Historically, Proto-Lezgic had a distinction between inclusive and exclusive pronouns, with two independent forms, \(^{*}dla\-n\) vs. \(^{*}dža\-n\) respectively (Alekseev 1985: 70-71). This Proto-Lezgic distinction was lost in Archi, which then developed a new way of distinguishing the two meanings, by using 1\(^{st}\) person inclusive reflexive pronouns as non-reflexive 1\(^{st}\) person plural inclusive pronouns. These pronouns have retained the complex structure but have lost their reflexive meaning.

6 Conclusions

In this paper, we presented novel data from Archi illustrating a typologically unusual phenomenon of agreement between 1\(^{st}\) person pronouns and absolutive-marked arguments. Besides their typological significance, the data presented in the paper present an apparent challenge to current approaches to agreement, which hold that Agree relations can be established only between heads and phrases. We showed that the apparent agreement between a 1\(^{st}\) person pronoun and an absolutive DP can be reduced to more conventional agreement, namely, agreement between the absolutive DP and a series of \(v\) heads. In particular, we presented an analysis showing that agreeing pronouns in Archi are not uniform with respect to their internal structure: 1\(^{st}\) person singular and 1\(^{st}\) person plural exclusive pronouns are weak pronouns, whereas 1\(^{st}\) person inclusive pronouns are complex lexemes composed of 1\(^{st}\) person exclusive pronouns modified by the focus marker \(-ej't'u\). Thus, the apparent challenge of irregular Archi agreement is merely an illusion; all the agreement facts, however intricate, follow from a well-established mechanism of noun-verb agreement.

We proposed that weak pronouns lack [\(\text{CL}\)] feature specification, \([\emptyset\text{CL}]\), and must therefore copy a class feature from the closest \(v\) to avoid a violation of the constraint that all DPs must have [\(\text{CL}\)] feature specification. Furthermore, we argued that in the complex structure of 1\(^{st}\) person inclusive pronouns (1\(^{st}\) person inclusive pronoun + focus marker \(-ej't'u\)), the second component, the focus marker, is a D head that receives its class feature via copying from the closest \(v\) head.

From an empirical standpoint, we have used independently motivated properties of language design, such as distinctions within pronouns, to probe deeper into the apparently unusual agreement pattern. On a more general level, our analysis demonstrates that quite often, subtle facts need to be investigated to determine the syntax of the world’s languages. Sometimes surface cues suggest extraordinary patterns or phenomena, when there really are none.

\(^{14}\) There are other NEC languages that distinguish 1\(^{st}\) person plural inclusive and exclusive pronouns but they use two completely different roots (for forms see Kibrik and Kodzasov 1990: 221-222).
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