

# Determining a language's feature inventory: person in Archi<sup>1</sup>

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## Introduction<sup>3</sup>

In descriptions of languages, we make use of morphosyntactic features such as gender, number or person<sup>4</sup>. This paper shows that sometimes choosing the features and values to describe a language is not straightforward, and the decision of whether or not to use a particular feature requires careful consideration. Thus, when determining a language's feature inventory, we should consider both why we posit a given feature, and how many values to posit for the feature. In our case study we look closely at the Daghestanian language Archi (part 3). It is usually assumed that languages have a person feature, but with Archi this is not self-evident. Archi (like some related languages) has no unique forms for agreement in person, and the standard descriptions of this language do not involve the feature person. However, the agreement patterns in Archi may be interpreted in favour of the presence of this feature, despite the absence of any phonologically distinct forms realising it. Thus, we claim that Archi does have the feature of person that had not been recognised for this language before. We also give a brief overview of the category of person in the languages of Daghestan (part 4).

## 1. Identifying and describing features

Morphosyntactic features are used to factor out common properties of linguistic elements and are, thus, fundamental for linguistic description. A simple example of identifying a feature in a language is identifying number in English. In the majority of cases the plural in English is marked either by a suffix (*cat ~ cats*) or by stem change (*foot ~ feet*), and these complementary strategies are used jointly to mark the plural only, with no interference from a different feature.

Identifying a feature is less straightforward if there is no unique phonology that could be associated with the hypothesised feature even though the pattern of forms prompts recognising the feature. An example of such a feature is animacy in Russian. Consider the (partial) paradigm of the following Russian masculine nouns:

(1)

	'boy'		'table'			
	SG	PL	SG	PL		
ABS	mal'čik	mal'čiki	stol	stoly		
ACC	=GEN	mal'čika	mal'čikov	=ABS	stol	stoly
GEN		mal'čika	mal'čikov		stola	stolov

In Russian, masculine nouns denoting animates and inanimates have different forms in the accusative despite belonging to the same gender. The accusative of animate masculine nouns has the same form as the genitive, whereas the accusative of inanimate masculine nouns has the same form as the absolutive. Moreover, agreeing modifiers show a similar pattern. Thus, we have to recognise that the genders of Russian are subdivided into two subgenders: ANIMATE and INANIMATE (Corbett 1991:161-168), and that these two values trigger different patterns of case syncretism. Even though animacy in Russian is not realised by independent forms, it is nevertheless realised overtly as a morphosyntactic feature through the opposition involving syncretism.

<sup>1</sup> This is the version of the paper updated in March 2012. Mostly, the updates concern glossing and representation of uvular fricative as  $\chi$  and of fortis consonants as C.

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<sup>4</sup> In some literature, the term 'category' is used instead of 'feature'; then the term 'feature' corresponds to our 'feature value'.

Speaking in terms of canonicity, a feature that has unique phonology to distinguish its values (such as number in English) is considered more canonical than a feature that does not trigger a unique set of forms (such as animacy in Russian).

The above example illustrating gender and animacy in Russian shows that paradigms identifying two features may overlap in such a way that one feature emerges as dependent on the other. In the following illustration we compare gender in Russian and Hebrew. Russian has three genders: masculine, feminine and neuter:

(2)

	SG	PL	
masculine	tolst-yj žurnal	tolst-ye žurnaly	‘thick magazine’
feminine	tolst-aja kniga	tolst-ye knigi	‘thick book’
neuter	tolst-oe pis’mo	tolst-ye pis’ma	‘thick letter’

However, the forms of the adjective *tolstyj* ‘thick’ show that the three genders are distinguished only in the singular (*tolst-yj*, *tolst-aja*, *tolst-oe*). In the plural there is just one form *tolst-ye* which does not distinguish gender. Thus, we can say that the values of Russian gender depend on number.

In Hebrew there are two genders, masculine and feminine, which are formally distinguished independently of number:

(3)

	SG	PL	
masculine	melekh tov	mlakh-im tov-im	‘good king’
feminine	malka tov-a	mlakh-ot tov-ot	‘good queen’

With respect to independence, Hebrew gender represents a more canonical type of feature than gender in Russian.

Additionally, examples (2) and (3) show that morphosyntactic features can also be identified through agreement: Russian adjectives have to agree with the nouns they modify in gender, number and case. Thus, we can identify features by looking at agreement targets in a given language. Specifically, we first establish agreement paradigms for the various agreement targets. Then, we identify the features that distinguish between the paradigms, and feature values that distinguish between the cells of each paradigm. The features identified in this way are overt features, and we shall relegate any possible covert features to the status of conditions on agreement rather than treat them as features in our sense of morphosyntactic categories. However, at the same time we do not expect that an overt feature will be necessarily associated with unique phonology.

The description of a feature requires us to state its values and its domain. English number distinguishes between two cells in a paradigm, thus it has two values, referred to as singular and plural. Two is the minimum number of values that is necessary to identify a feature, and the opposition between only two values can be conceived of in terms of binarity, such as singular versus non-singular (e.g. singular versus plural number in English), or past versus non-past (e.g. tense in Maori). Crosslinguistically, many features have more than two values, and establishing the maximum number of values for any particular feature is a matter of empirical investigation. For example, the maximum number of attested different values of number in any one language is five (Corbett 2000). Multiple values can themselves be organised in complex systems for a given language, and the crosslinguistic variation of such systems is considerable.

The domain is the syntactic environment which requires the presence of the feature, or the set of word classes for which the morphosyntactic feature is relevant in a given language. For example, in Russian, the domain of the feature gender are the classes of nouns, pronouns, adjectives and verbs. However, the members of a domain may differ in status: in the domain of gender in Russian, nouns are the controllers (the elements which determine the agreement), while adjectives and verbs are the targets (the elements whose form is determined by agreement). When describing a feature it is important to realise that the same feature can have a different number of values for its controllers and its targets. We may, therefore, need to distinguish controller genders from target genders.

## 2. The morphosyntactic feature of person

The cognitive foundation of the feature of person reflects the basic structure of a speech act and distinguishes the speech act participants: the speaker and the addressee, and what is spoken about (cf. Benveniste 1966; Helmbrecht 1996). Reference to the participants in a speech act can be expressed linguistically in various ways. In English, in certain contexts it is possible to refer both to oneself and to one's addressee using common absinal phrases, as in *Mummy will help you*, or *Would Your Honour like to see the evidence now?*. However, these absinal phrases also have a non-deictic function. On the other hand, elements such as *I* or *you* are used exclusively for participant deixis: they are specialised 'shifters' (Jespersen 1922:123; cited in Cysouw 2003:5) which normally have no other usage besides shifting their reference to different extralinguistic entities particular to each communicational setting.

Such specialised shifters which are used for reference to participants in the speech act are usually referred to as 'person markers'. The set of which they are part forms a paradigm which is traditionally analysed in two orthogonal dimensions: person and number. The paradigm of person includes 'speaker' ('1'), 'addressee' ('2'), and 'other' ('3'), and based on these distinctions, groups of participants can be formed by combining the three basic singular participants. These groups, together with the three singular participants, form the basic paradigm for the typological classification of person, and are thus the possible values of the feature person. Crosslinguistically, there are many different patterns of syncretism between the values of the full person paradigm, especially when considered jointly with the cross-cutting number paradigm (Cysouw 2003; Siewierska 2004; Baerman et al. 2005).

An investigation of the actual morphosyntactic expressions of the feature person reveals that languages with personal inflection differ greatly with respect to how many of the person values (participants) are expressed in a single predication, and which type of arguments the person values affect.

The choice of the expression of the person value itself is determined by the relative position of the participant in a person hierarchy. One possible hierarchy of this type (part of a more extended animacy hierarchy) has been formulated as follows (Silverstein 1976; Comrie 1981):

1ST PERSON > 2ND PERSON > 3RD PERSON

The person hierarchy captures the fact that participants can be referred to by person values independently of their semantic or syntactic status (Helmbrecht 1996:129).

However, the person-based reference to arguments in a clause can also be controlled by syntactic functions:

SUBJECT > DIRECT OBJECT > INDIRECT OBJECT

or semantic roles:

AGENT > RECIPIENT/EXPERIENCER > PATIENT

(cf. Givón 1976:152; Croft 1988:162ff). The hierarchy of syntactic functions captures the observation that, in languages with grammaticalised functions of subject and object and syntactically controlled personal agreement, the predicate is the most likely to agree in person with the subject, before we find agreement with the direct object or indirect object. On the other hand, the hierarchy of semantic roles captures the generalisation that, if personal agreement is controlled by semantic functions of the arguments, the predicate is the most likely to agree with the agent, followed by the recipient/experiencer (which is frequently sentient, therefore it will tend to be human or at least animate), followed by the patient (which can frequently be inanimate and indefinite). Moreover, it is possible that more than one hierarchy can be in use to control personal agreement in one language (e.g. Akhvakh, East Caucasian, which predominantly uses a absinative-accusative syntactic strategy to code first person transitive agent, but with some less prototypical transitive verbs the first person marking is controlled by the semantic role of the ergatively marked experiencer; Helmbrecht 1996:137).

The category of person has often been assumed to be universal (Forchheimer 1953:1; Greenberg 1963:31,96; Benveniste 1971:225; Wierzbicka<sup>5</sup> 1976, 1996; Zwicky 1977:715; Ingram 1978), and the claims have varied from a reference to a rather vague “expression of person” (Benveniste) or “the system of person” (Forchheimer) to specific remarks about the universal existence of “distinct first and second singular independent pronouns” (Greenberg), “proabsinal categories involving at least three persons and two numbers” (Greenberg), or the “morphosyntactic categorisation of person” (Zwicky).

From the point of view adopted in this paper, the (cognitive) category of person exists in a language if it is possible to make a distinction between at least two of the basic participants in a speech act. This is achieved, for example, by allowing self-reference or reference to the addressee. Such reference can be made with the conventional use of any type of noun, or by using some special words that lexicalise the meanings of “speaker (1)” and “addressee (2)”. However, the morphosyntactic feature of person can be posited for the language only if this feature participates in agreement in the language. The morphosyntactic feature of person reflects the grammaticalisation of the category of person in the language.

The existence of personal pronouns, without any influence of the category of person on decisions regarding agreement, is not sufficient to posit the person feature for the language, since the ‘pronouns’ may be lexicalised meanings for the participants of the speech act<sup>6</sup>. Apart from being ‘shifters’ (or, perhaps due to the fact that they are shifters), pronouns can be morphosyntactically odd in different ways. In some languages they may have unexpected inflectional properties. For example, the whole class of pronouns can have a particular grammatical gender irrespective of the fact that they may refer to persons of different genders. This has been reported for Jarawara (a dialect of the Madi language of the Arawá family, spoken in southern Amazonia), in which all pronouns take feminine agreements, irrespective of the sex of the referents (Dixon 1995:265, 290). Another interesting instance comes from Burmeso (a language isolate spoken in northern Irian Jaya), where the first singular pronoun takes feminine agreement and the second singular takes masculine (Donohue 2001:100-101). Finally, Barasano (an eastern Tucanoan language spoken in Colombia) shows a different, curious interrelation between gender and person: the subject agreement markers (suffixes) in Barasano mark gender and animacy in the third person; curiously, the inanimate marker is also used for speech act participants, i.e. first of second person, singular or plural (Jones & Jones 1991:73-4).

In the next section, we will apply the above criteria in the analysis of the person feature in Archi, the language of our case study.

### **3. Case study: Archi**

In this paper we are going to suggest a morphosyntactic feature of person for Archi, a language that has been claimed not to have this feature.

Archi is a Daghestanian (or North East Caucasian) language traditionally assigned to the Lezgian group. It is spoken by about 1200 people who live in a group of seven settlements in close proximity in southern Daghestan. There is a substantial grammatical description of Archi by Kibrik et al. (1977); see References for other sources. The Archi examples presented in this paper, unless indicated otherwise, were elicited from our consultants during field work in Archi in July 2005.

Archi has six major word classes: nouns, pronouns, numerals, adjectives, verbs and adverbs and two minor word classes: postpositions and particles. Archi is particularly interesting for agreement, because for every word class (including minor ones) there are found at least some members that show gender-number agreement. In this paper it is the agreement of the verb that is of primary interest to us. It has been claimed that to describe verbal agreement in Archi the categories of gender and number are sufficient. We hope to demonstrate that the situation is more complex and that the feature of person should be introduced.

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<sup>5</sup> And her followers within the framework of Natural Semantic Metalanguage, e.g. Goddard 1995, 2001:8-10; Diller 1994: 167-169; Onishi 1994:362-367. (References from Cysouw 2003:13).

<sup>6</sup> This distinction, between the cognitive category of person and the morphosyntactic feature of person, is very often unrecognised, sometimes obliterated. Siewierska (2004:xv) says explicitly that “[w]hile the grammatical category of person is typically associated primarily with that of free personal pronoun, in this book no pride of place is assigned to free as opposed to bound forms or pronouns as compared to agreement markers”. As a consequence, she takes “the category of personal pronoun, in some sense of the term, to be universal” (2004:13).

First, let us have a brief look at the Archi gender and number system. Number is rather straightforward, with the values singular and plural. It is expressed in nouns and pronouns by suffixes or stem change. Some verbs have an agreement slot for cumulative gender-number expression. It is a matter of lexical determination whether or not a particular verb has such a slot. There are four genders in Archi. The first and second are for male and female humans respectively, and other nouns belong in the third and the fourth genders. It is impossible to predict fully to which of the two non-human genders any given noun will belong, though words denoting animals tend to be in the third gender. It is also impossible to tell the gender of the noun by its form. The gender of a noun is established by agreement, as in the following adjective-noun pairs:

- (4) a. *hibat:u bošor*<sup>7</sup> ‘good man’ I gender  
 b. *hibat:ur t:onnol* ‘good woman’ II gender  
 c. *hibat:ub χ<sup>c</sup>on* ‘good cow’ III gender  
 d. *hibat:ut nokl* ‘good house’ IV gender

The Archi verb inflects for aspect, tense, mood, polarity, and also for continuity, inferentiality and evidentiality, which can co-occur with other inflectional categories. Many, but not all of the verbs show gender-number agreement, following the ergative strategy, i.e. agreeing with the only argument of the intransitive verb, the patient of the transitive verb and the stimulus of the experiential verb. Gender-number agreement is realised as a prefix or an infix. The choice of the position of the marker is lexical. Table 1 shows the inflections.

Table 1. Gender-number markers used for verb agreement<sup>8</sup>

	SG	PL
I	w-/⟨w⟩	b-/⟨b⟩
II	d-/⟨r⟩	
III	b-/⟨b⟩	∅
IV	∅	

The following examples show the place of the agreement markers in actual verb forms.

- (5)
- | Sg                        |                      | Pl                       |                         |
|---------------------------|----------------------|--------------------------|-------------------------|
| a. <i>bošor</i>           | <i>a⟨w⟩χu</i>        | <i>ktele</i>             | <i>a⟨b⟩χu</i>           |
| man(I)[SG.ABS]            | ⟨I.SG⟩lie.down.PFV   | man(I)PL.ABS             | ⟨I/II.PL⟩ lie.down.PFV  |
| ‘the man lay down’        |                      | ‘the men lay down’       |                         |
| b. <i>t:onnol</i>         | <i>a⟨r⟩χu</i>        | <i>χom</i>               | <i>a⟨b⟩χu</i>           |
| woman(II)[SG.ABS]         | ⟨II.SG⟩lie.down.PFV  | woman(II)PL.ABS          | ⟨I/II.PL⟩ lie.down.PFV  |
| ‘the woman lay down’      |                      | ‘the women lay down’     |                         |
| c. <i>χ<sup>c</sup>on</i> | <i>a⟨b⟩χu</i>        | <i>buc:’i</i>            | <i>aχu</i>              |
| cow(III)[SG.ABS]          | ⟨III.SG⟩lie.down.PFV | cow(III)PL.ABS           | [III/IV.PL]lie.down.PFV |
| ‘the cow lay down’        |                      | ‘the cows lay down’      |                         |
| d. <i>motol</i>           | <i>aχu</i>           | <i>matla</i>             | <i>aχu</i>              |
| kid(IV)[SG.ABS]           | [IV.SG]lie.down.PFV  | kid(IV)PL.ABS            | [III/IV.PL]lie.down.PFV |
| ‘the goat kid lay down’   |                      | ‘the goat kids lay down’ |                         |

Example (5) shows infixal gender-number marking in a synthetic verb form. The next example shows prefixal gender-number markers in a synthetic verb form.

- (6)
- | Sg                      |                   |                        | Pl                      |                 |                  |
|-------------------------|-------------------|------------------------|-------------------------|-----------------|------------------|
| a. <i>t:anna</i>        | <i>bošor</i>      | <i>χu</i> <sup>9</sup> | <i>t:anna</i>           | <i>ktele</i>    | <i>b-oχo</i>     |
| woman(II)SG.ERG         | man(I)[SG.ABS]    | find.I.SG.PFV          | woman(II)SG.ERG         | man(I)PL.ABS    | I/II.PL-find.PFV |
| ‘the woman met the man’ |                   |                        | ‘the woman met the men’ |                 |                  |
| b. <i>bošor-mi</i>      | <i>t:onnol</i>    | <i>d-oχo</i>           | <i>bošor-mi</i>         | <i>χom</i>      | <i>b-oχo</i>     |
| man(I)-SG.ERG           | woman(II)[SG.ABS] | II.SG-find.PFV         | man(I)-SG.ERG           | woman(II)PL.ABS | I/II.PL-find.PFV |
| ‘the man met the woman’ |                   |                        | ‘the man met the women’ |                 |                  |

<sup>7</sup> See Appendix 1 for the transcription conventions we use in this paper.

<sup>8</sup> Updated on March 05 2012

<sup>9</sup> The Archi verb *χos* can mean ‘meet’, ‘come across’ and ‘find’.

- c. *t:anna* *χ<sup>c</sup>on* *b-oχo* *t:anna* *buc:'i* *χo*  
 woman(II)SG.ERG cow(III)[SG.ABS] III.SG-find.PFV woman(II)SG.ERG cow(III)PL.ABS [III/IV.SG]find.PFV  
 'the woman came across the cow' 'the woman came across the cows'
- d. *t:anna* *motol* *χo* *t:anna* *matla* *χo*  
 woman(II)SG.ERG kid(IV)[SG.ABS] [IV.SG]find.PFV woman(II)SG.ERG kid(IV)PL.ABS [III/IV.SG]find.PFV  
 'the woman came across the goat kid' 'the woman came across the goat kids'

The verb is transitive, therefore the agreement is with the object/patient, which is in the absolutive case (often called the absolutive), while the agent is in the ergative. The verb in (6a), showing the agreement with the first gender (the woman met the **man**), lacks an overt prefix, which would have been *w-*. Note, however, that the stem vowel in the verb is changed from [o] to [u]. This is a standard morphological process for Archi: prefixal *w-* is often realised as stem vowel change or labialisation of the stem consonant (cf *q<sup>w</sup>a* 'he comes' vs. *da-q<sup>a</sup>* 'she comes'). The next example shows an analytical verb form, which is a combination of a converb and a copula. The gender-number markers are prefixal.

- (7) Sg Pl
- a. *bošor* *w-as:ar-ši* *w-i* *ktele* *b-as:ar-ši* *b-i*  
 man(I)[SG.ABS] I.SG-tremble.IPFV-CVB I.SG-be.PRS man(I)PL.ABS [I/II.PL]-tremble.IPFV-CVB I/II.PL-be  
 'the man is trembling' 'the men are trembling'
- b. *t:onnol* *d-as:ar-ši* *d-i* *χom* *b-as:ar-ši* *b-i*  
 woman(II)[SG.ABS] II.SG-tremble.IPFV-CVB II.SG-be.PRS woman(II)PL.ABS I/II.PL-tremble.IPFV-CVB I/II.PL-be.PRS  
 'the woman is trembling' 'the women are trembling'
- c. *χ<sup>c</sup>on* *b-as:ar-ši* *b-i* *buc:'i* *as:ar-ši* *i*  
 cow(III)[SG.ABS] III.SG-tremble.IPFV-CVB III.SG-be.PRS cow(III)PL.ABS [III/IV.PL]tremble.IPFV-CVB [III/IV.PL]be.PRS  
 'the cow is trembling' 'the cows are trembling'
- d. *motol* *as:ar-ši* *i* *matla* *as:ar-ši* *i*  
 kid(IV)[SG.ABS] [IV.SG]tremble.IPFV-CVB [IV.SG]be.PRS kid(IV)PL.ABS [III/IV.PL]tremble.IPFV-CVB [III/IV.PL]be.PRS  
 'the goat kid is trembling' 'the goat kids are trembling'

The Archi verb distinguishes four genders in the singular, but only two genders in the plural. In the plural, there is one form for I and II genders marked by *b-* /<b> (formally the same as the third gender in the singular) and another form for III and IV genders marked by the zero (formally the same as the fourth gender in the singular). As the first and second genders include nouns that denote male or female persons, and the third and fourth gender include nouns that denote animals and inanimate things (with a few exceptions which will be discussed later), we can say that in the plural Archi verbs distinguish between humans and non-humans, or have personal vs. non-personal agreement. In this respect Archi verbs demonstrate the behaviour typical for other Daghestanian languages like Bagwalal, Tsakhur, Dargi and others.

It has been claimed that verbal agreement in Archi can be adequately described just in terms of gender and number. So far we have only considered agreement of the verb with noun phrases, i.e. in the third person. To test the claim that Archi has no person we have to look at agreement of the verb with personal pronouns. The most natural context for personal pronouns is when they refer to human beings. In this example, the first person singular pronoun *zon* occurs, and it takes gender I agreement:

- (8)
- a. from Kibrik (1997d:107)  
*zon* *jas:ana* *a<sup>t</sup>:əra* *a<b>k'a-s* *uq<sup>a</sup>-li* *e-w-di*  
 I.SG.ABS this.year fold.SG.LOC <III.SG>drive-INF go.I.SG.PFV-CVB <I.SG>be.PAST  
 'This year I went to drive (sheep) to the sheep-fold where they are milked (man speaking).'
- b. from Kibrik (1977d: 117)  
*zon* *d-irχ:w<sup>i</sup>n*  
 I.SG.ABS II.SG-work.IPFV  
 'I work (woman speaking).'
- c. from Kibrik (1977d: 112)

*to-t*      *č'em-na*      *u:n-u*                      *kanak*      *e<w>di,*      *e<w>di-t'u-ra?*  
 that-IV.SG      time(IV)-LOC      2SG.ABS-and                      there      <I.SG>be.PAST,      <I.SG>be.PAST-NEG-QUEST  
 'That time you were there as well, were you not? (to a man)'

d. from Kibrik (1977d: 121)

*un*                      *hanžugur*                      *d-aq'a?*  
 2SG.ABS                      what.way                      II.SG-come.PFV  
 'How did you get here? (to a woman)'

e. from Kibrik (1977d: 118)

*to-w*                      *q'as:*                      *e<w>t:i-na*                      *w-e<sup>c</sup>-qi*  
 that.one-I.SG[ABS]                      tired                      <I.SG>become.PFV-CVB                      I.SG-return-FUT  
 'He will come back tired.'

f. based on Kibrik (1977d:57)

*to-r*                      *q'a<r>di-li*                      *e<r>di-li*                      *č'abe-tu*  
 that.one-II.SG[ABS]                      <II.SG>sit.PFV-CVB                      <II.SG>be.PFV-EVID                      sheep.OBL.PL-COMIT  
 'She stayed with the sheep.'

In the singular, the personal pronouns take gender agreement corresponding to the gender of the speaker or addressee: male humans trigger gender I agreement, female humans – gender II agreement. There is nothing in the behaviour of the verbs that would suggest that personal pronouns introduce a new category of person. The verbs mark gender-number distinctions just as they do with noun phrases headed by nouns. Before we turn to the plural, let us consider less obvious examples, namely, those with personal pronouns referring to non-humans.

It must be noted that when we were eliciting these examples, not all of the speakers agreed to produce them as they thought them meaningless ("our cows and rivers don't talk"). Compare, however, texts 6 and 7 in Kibrik (1977d) where there are examples of herds of cows and horses talking to people.

(9) third gender:

a. *zon*      *χa<b>t:i-ši*                      *b-i*  
 I.SG.ABS      <III.SG>go.IPFV-CVB                      III.SG-be.PRS  
 'I'm leaving (cow speaking).'

b. *zon*      *a<b>χ<sup>w</sup>*                      *e<b>t:i-li*                      *b-i*                      *un*                      *w-ak:i*  
 I.SG.ABS      <III.SG>sleep                      <III.SG>become.PFV-CVB                      III.SG-be.PRS                      2SG.ABS                      I.SG-leave.IMP  
 'I'm sleeping, go away (cow speaking).'

c. *un*                      *daši*                      *χa<b>t:i-ši*                      *b-i?*  
 2SG.ABS                      where                      <III.SG>go.IPFV-CVB                      III.SG-be.PRS  
 'Where are you going? (to the cow)'

(10) fourth gender:

*zon*      *o<sup>r</sup>čū-li*                      *i*                      *un*                      *t:a-k*                      *k<sup>w</sup>er-gi*  
 I.SG.ABS      get.cold.PFV-CVB                      [IV.SG]be.PRS      2SG.ABS                      water-LAT                      <I.SG>become.IPFV-PRH  
 I'm cold, don't come to the water (river speaking).

The agreement rules for first and second person singular pronouns referring to non-humans are the same as they were in previous examples (8 a-f), i.e. the marking on the verb is sensitive only to the gender of the referent. So far we have seen no difference between verbal agreement with noun phrases headed by nouns and those headed by pronouns, and there was no evidence for the category of person.

We should expect the same pattern of agreement to occur with personal pronouns in the plural. There we would expect verbs to show personal agreement (marker *b- / <b>*) when the referents are human, and non-personal agreement (zero marking) when the referents are non-human. This expectation turns out to be correct for the third person plural pronouns:

(11)

a. *teb*                      *b-as:a-r-ši*                      *b-i*                      'they (humans) are trembling'  
 that.one.PL.ABS                      I/II.PL-tremble-IPFV-CVB                      I/II.PL-be.PRS

- b. *teb*                    *as:a-r-ši*                    *i*                    ‘they (non-humans) are trembling’  
 that.one.PL.ABS            [III/IV.PL]tremble-IPFV-CVB            [III/IV.PL]be.PRS
- c. *teb*                    *aḅχu*                    ‘they (humans) lay down’  
 that.one.PL.ABS            <I/II.PL>lie.down.PFV
- d. *teb*                    *aχu*                    ‘they (non-humans) lay down’  
 that.one.PL.ABS            [III/IV.PL]lie.down.PFV

However, with the first and second person pronouns verbs do not show the expected forms:

(12)

- a. *nen*<sup>10</sup>                    *as:a-r-ši*                    *i*                    ‘we are trembling’  
 IPL.ABS                    [III/IV.PL]tremble-IPFV-CVB            [III/IV.PL]be.PRS
- b. *ž<sup>w</sup>en*                    *as:a-r-ši*                    *i*                    ‘you.PI are trembling’  
 2PL.ABS                    [III/IV.PL]tremble-IPFV-CVB            [III/IV.PL]be.PRS
- c. *nen*                    *aχu*                    ‘we lay down’  
 IPL.ABS                    [III/IV.PL]lie.down.PFV
- d. *ž<sup>w</sup>en*                    *aχu*                    ‘you.PI lay down’  
 2PL.ABS                    [III/IV.PL]lie.down.PFV
- e. from Kibrik (1977d:119)  
*ž<sup>w</sup>en*                    *inžiner-til-če-r-ši*                    *bišin-ej-ši*                    *oq’a-ra?*  
 2PL.ABS                    engineer-PL-OBL.PL-CONT-ALL            PN-IN-ALL                    [III/IV.PL]go.PFV-QUEST  
 Did you go to the engineers, to Bishinaj?

f. from Kibrik (1977d:120)

- nen*                    *χ<sup>w</sup>ara*                    *ke-r*                    *χ:’ele*                    *ba-q’a-nč’iš*  
 IPL.ABS                    glad                    [III/IV.PL]become-IPFV                    guest.PL                    I/II.PL-come.PFV-COND  
 We are glad when we have guests coming.

The pronouns here refer to humans, but the verbs show zero marking as they would do for non-personal forms<sup>11</sup>.

The same agreement pattern can be observed with the omitted pronoun phrase:

- (13) *q’e’jdili-ra?*  
 [IV.SG]sit.PFV-CVB-QUEST  
 ‘Are (you) sitting?’

This is the phrase that is used as a greeting when one passes a group of women sitting in the village square. Note that in the third person the human plural agreement will be *q’e’ḅd’i*. The verb *q’e’jq’is* ‘sit’ is the only Archi verb that has a special form for third person human plural, that does not coincide with III gender singular form, compare:

<sup>10</sup> In Archi there are two first person plural pronouns, distinguished by inclusivity: *nen* ‘we(EXCL)’ and *nen’tu* ‘we(INCL)’.

<sup>11</sup> It is interesting to note that the verbal nouns (traditionally called *masdars* in Daghestanian linguistics), also have the possibility of marking gender and number, compare:

- (i) *to-r-mi-n*                    *d-iq<sup>w</sup>-kul*                    *hani!*  
 that.one-III.SG-OBL.SG-GEN                    III.SG-be.heavy-MSD                    what  
 ‘What a heavy woman (*lit.* the heaviness of the woman what)!’

In terms of agreeing with phrases headed by first and second plural pronouns, *masdars* show the same pattern as verbs do:

- (ii) *wiš*                    *iq<sup>w</sup>-kul*                    *hani!*  
 you.PL.GEN                    [III/IV]be.heavy-MSD                    what  
 ‘You(PL) are heavy (*lit.* the heaviness of you what)!’



(14) 'sit'

imperfective stem

	SG	PL
I	q'owq'ir	q'e <sup>s</sup> bq'ir
II	q'adq' <sup>w</sup> ir	
III	q'abq' <sup>w</sup> ir	q'e <sup>s</sup> jq'ir
IV	q'e <sup>s</sup> jq'ir	

perfective stem

	SG	PL
I	q'owdi	q'e <sup>s</sup> bdi
II	q'ardi	
III	q'abqi	q'e <sup>s</sup> jdi
IV	q'e <sup>s</sup> jdi	

For the first or second person agreement in the verb 'sit' the form of fourth gender singular is used, as we saw in (13).

This agreement with phrases headed by first and second person pronouns was accounted for in Kibrik (1977) by suggesting that pronouns *zon* 'I' and *un* 'you' are irregular lexical items. He places these items along with other nouns that behave irregularly in terms of gender. For words that do not fit into the four gender system Kibrik postulates four more genders.

Table 2. Archi gender system (based on Kibrik, 1977a:55)

Gender	Sg	Pl	Examples	
I	w	b	as above	
II	d- / <ɾ>	b		
III	b	∅		
IV	∅	∅		
V	w	∅	<i>zon, un</i> (masc)	I, you
VI	d- / <ɾ>	∅	<i>zon, un</i> (fem)	
VII	b	b	<i>χalq'</i>	people, nation
			<i>žamaat</i>	people, society
VIII	∅	b	<i>lo</i>	child
			<i>adam, ijsan/insan</i>	person
			<i>k'išaw</i>	somebody
			<i>bokl'</i>	people

The fifth gender is for the personal pronouns *zon* and *un* when their referents are male, the sixth gender is for the same pronouns with female referents. The seventh gender includes two nouns that have personal (*b-* / <*b*>) agreement both in the singular and in the plural, and the eighth gender includes nouns that have fourth gender marking in the singular (zero), and personal marking in the plural (*b-* / <*b*>). This type of agreement is used when the speaker does not know or is not interested in the biological sex of the person in question. Note that for the genders V-VII the list of members is exhaustive, whereas gender VIII is, in principle, an open list.

If we accept this interpretation, we could say that the words *zon* 'I' and *un* 'you' are exceptions, and the information about their agreement must be part of their lexical entry in the dictionary, just as we do for words like *bokl'*. There is no need to postulate a separate morphosyntactic feature of person. However, there are two arguments against this analysis: first, there are cases when first and second person pronouns refer to non-humans and trigger third or fourth gender agreement, and second, the agreement of the verb with conjoined phrases does not conform to the expected pattern either. Let us consider these two in turn.

As the examples (9 (a-c)) and (10) show, the first and second person pronouns can refer to non-humans. Therefore, if we follow the logic of analysis suggested in Kibrik (1977), we will have to postulate two more genders for Archi, because Table 2 does not allow for cases where *zon* and *un* trigger *b-* or *d-* agreement in the singular (III and IV genders respectively). It must be noted that Kibrik (1977) does not provide examples of the first and second person pronouns referring to non-humans, therefore cases like those we saw in examples (9 (a-c)) and (10), are not accounted for. As we mentioned above, these sentences seem unnatural to some speakers of the language who refuse to produce sentences about talking cows. However, for those who were happy about the idea of cows and rivers talking (for example, in fairy-tales), there was no question about the agreement: none of them

would personify cows or rivers and use I or II gender agreement<sup>12</sup>. They were equally happy to produce such sentences in the plural:

(15)

- a.   nen           buc:’i                   as:a-r-ṣ̌i                   i  
 IPL.ABS   cow(III)PL.ABS   [III/IV.PL]tremble-IPFV-CVB   [III/IV.PL]be.PRS  
 ‘We cows are trembling.’
- b.   nen           motol-um                   as:a-r-ṣ̌i                   i  
 IPL.ABS   kid(IV)-PL.ABS   [III/IV.PL]tremble-IPFV-CVB   [III/IV.PL]be.PRS  
 ‘We goat kids are trembling.’
- c.   nen           buc:’i-wu                   motol-um-u                   as:a-r-ṣ̌i                   i  
 IPL.ABS   cow(III)PL.ABS-and   kid(IV)-PL.ABS-and   [III/IV.PL]tremble-IPFV-CVB   [III/IV.PL]be.PRS  
 ‘We cows and goat kids are trembling.’

So if we want to complete Table 2, we must add the following two rows:

Table 2A. Archi gender system.

Gender	Sg	Pl	Examples	
I	w	b	as above	
II	d- /<ɾ>	b		
III	b	∅		
IV	∅	∅		
V	w	∅	<i>zon, un</i> (masc)	I, you
VI	d- /<ɾ>	∅	<i>zon, un</i> (fem)	
??	b-	∅	<i>zon, un</i> (III gender)	
??	∅	∅	<i>zon, un</i> (IV gender)	
VII	b	b	as above	
VIII	∅	b		

Kibrik (1977) suggests that there are the following four lexical items:

- *zon1* ‘I’ (male referents);
- *zon2* ‘I’ (female referents);
- *un1* ‘you’ (male referents);
- *un2* ‘you’ (female referents).

There are words in Archi that look similar to this. For example, the word *x<sup>ʃ</sup>it* can belong in two genders: *x<sup>ʃ</sup>it1* (III gender) ‘spoon’ and *x<sup>ʃ</sup>it2* (IV gender) ‘ladle’. For words like *lo* Kibrik suggests three homonyms: *lo1* (I gender) – ‘boy, lad’, *lo2* (II gender) – ‘girl, maiden’, and *lo3* (IV gender) ‘baby, child’. Thus, there is nothing too unsystematic in the above interpretation of *zon* and *un*. However, once the cases of *zon* and *un* of genders III and IV are taken into account, we have a unique lexical item that a) belongs to all four genders and b) requires us to add two more genders to the system. Such an interpretation of personal pronouns seems to be unduly complicated and also counterintuitive.

The second argument against describing Archi verb agreement purely in terms of gender and number is the behaviour of conjoined phrases. In Archi conjoined phrases can trigger semantic (i.e. plural) agreement:

(16) Kibrik (1977c:186-187), Corbett (1991:271-273), plus our own examples:

- a.   *dija-wu*                   *buwa-wu*                   *ṭ.wak*   *b-i*  
 father(I)[SG.ABS]-and   mother(II)[SG.ABS]-and   near   I/II.PL-be.PRS  
 ‘Father and mother are near.’
- b.   *dija-wu*                   *buwa-wu*                   *ba-q<sup>ʃ</sup>a*  
 father(I)[SG.ABS]-and   mother(II)[SG.ABS]-and   I/II.PL- come.PFV  
 ‘Father and mother came.’

<sup>12</sup> Compare Comrie & Polinsky (1999) on personification in Tsez.

- c. *dija-wu*                      *dogi-wu*                      *t:wak*                      *b-i*  
 father(I)[SG.ABS]-and      donkey(III)[SG.ABS]-and      near                      I/II.PL-be.PRS  
 ‘Father and the donkey are near.’
- d. *dija-wu*                      *dogi-wu*                      *ba-q<sup>ʕa</sup>*  
 father(I)[SG.ABS]-and      donkey(III)[SG.ABS]-and      I/II.PL- come.PFV  
 ‘Father and the donkey came.’
- e. *dija-wu*                      *moto:l-u*                      *t:wak*                      *b-i*  
 father(I)[SG.ABS]-and      kid(IV)[SG.ABS]-and      near                      I/II.PL-be.PRS  
 ‘Father and the goat kid are near.’
- f. *dija-wu*                      *moto:l-u*                      *ba-q<sup>ʕa</sup>*  
 father(I)[SG.ABS]-and      kid(IV)[SG.ABS]-and      I/II.PL- come.PFV  
 ‘Father and the goat kid came.’
- g. *dogi-wu*                      *moto:l-u*                      *t:wak*                      *i*  
 donkey(III)[SG.ABS]-and      kid(IV)[SG.ABS]-and      near                      [III/IV.PL]be.PRS  
 ‘The donkey and the goat kid are near.’
- e. *dogi-wu*                      *moto:l-u*                      *q<sup>ʕa</sup>*  
 donkey(III)[SG.ABS]-and      kid(IV)[SG.ABS]-and      [III/IV.PL]come.PFV  
 ‘The donkey and the goat kid came.’
- h. *dogi-wu*                      *marzi-k’olor-u*                      *t:wak*                      *i*  
 donkey(III)[SG.ABS]-and      loom(IV)[PL.ABS]-and      near                      [III/IV.PL]be.PRS  
 ‘The donkey and the loom are near.’

The nouns like *xalq’* ‘people, nation’ or *bokl’* ‘people’ trigger the same agreement as the nouns of I and II genders (i.e. nouns denoting humans):

(17) from Kibrik (1977c:187):

- χalq’-u*                      *dogi-wu*                      *t:wak*                      *b-i*  
 people(III)[PL.ABS]-and      donkey(III)[SG.ABS]-and      near                      I/II.PL-be.PRS  
 ‘The people and the donkey are near.’

The agreement rules for conjoined phrases can be formulated in semantic terms (based on Corbett (1991: 273):

- if there is at least one conjunct referring to a rational or rationals, then personal plural agreement will be used (*b-/<b>*), as in (16 (a-f)) and (17);
- otherwise the verb takes non-personal plural agreement (zero marking), as in 16 (g-h).

Let us now consider conjoined phrases where one of the conjuncts is a personal pronoun of the first or second person.

(18) From Kibrik (1977d: 109)

- zo:n-u*                      *patšali-wu*                      *šumar haži-wu*                      *vanaš*                      *q<sup>ʕa</sup>*  
 1SG.ABS-and                      PN(I)[SG.ABS]-and                      PN(I)[SG.ABS]-and                      from.there                      [III/IV.PL]come.PFV  
 ‘I and Patali and Umar Xadzhi came from there.’

Compare this to another sentence from the same text

(19) Kibrik (1977d: 109):

- sidiq’du*                      *šahruzat:o-wu*                      *ba-q<sup>ʕa</sup>-li*                      *e<b>di*  
 PN(I)[SG.ABS]-and                      PN(I)[SG.ABS]-and                      I/II.PL-come.PFV-CVB                      <I/II.PL>be.PAST  
 ‘Sadik and Shaxruzat came.’

- (20) *u:n-u*                      *wit*                      *dija-wu*                      *t:wak*                      *i*  
 2SG.ABS-and                      2SG.GEN                      father(I)[SG.ABS]-and                      near                      [III/IV.PL]be.PRS  
 ‘You and your father are near.’

- (21) *zo:n-u*                      *buwa-wu*                      *qʕa*  
 1SG.ABS-and                      mother(II)[SG.ABS]-and                      [III/IV.PL]come.PFV  
 ‘I and mother came.’

Let us now consider cases where a personal pronoun (referring to a human) is conjoined with a noun of III or IV gender.

In cases where a noun of III or IV gender refers to a non-human there is, again, some reluctance to produce such phrases, and the consultants prefer comitative construction (I with the donkey)<sup>13</sup>. There is, however, a sentence in a story about Molla Nasreddin going to the baths where he says:

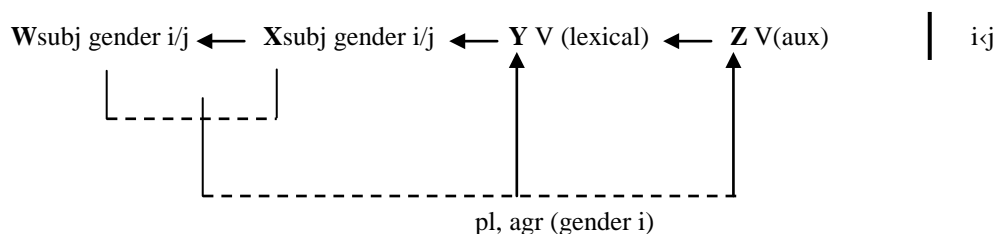
- (22) from Kibrik (1977d:68)  
*zo:n-u*                      *wanəro-wu*                      *šoʕrtal*    *čučəbo-qi*  
 1SG.ABS-and                      camel(III)[SG.ABS]-and                      together    wash-FUT  
 ‘I and the camel will wash together.’

It must be said that the verb *čučəbos* ‘wash’ has no morphological position for agreement, which might help in producing such a sentence.

For those consultants who are happy about conjoining noun phrases of I or II gender with noun phrases of III and IV gender, verbal agreement does not pose a problem:

- (23)
- a. *zo:n-u*                      *dogi-wu*                      *qʕa*  
 1SG.ABS-and                      donkey(III)[SG.ABS]-and                      [III/IV.PL]come.PFV  
 ‘I and the donkey came.’
- b. *zo:n-u*                      *moto:l-u*                      *qʕa*  
 1SG.ABS-and                      kid(IV)[SG.ABS]-and                      [III/IV.PL]come.PFV  
 ‘I and the goat kid came.’
- c. *zo:n-u*                      *χalqʕ-u*                      *qʕa*  
 1SG.ABS-and                      people(III)[SG.ABS]-and                      [III/IV.PL]come.PFV  
 ‘I and the people came.’
- d. *zo:n-u*                      *godo-t*                      *lo-wu*                      *as:a-r-šī*                      *i*  
 1SG.ABS-and                      this-IV.SG                      child(IV)[SG.ABS]-and                      [III/IV.PL]tremble-IPFV-CVB                      [III/IV.PL]be.PRS  
 ‘I and this baby are trembling.’

Kibrik’s solution to the agreement pattern in coordinate constructions in Archi was to group the proposed eight genders into ranks, with rank 1 comprising genders V and VI; rank 2 – genders I, II, VII and VIII; and rank 3 – genders III and IV. He then suggested a resolution rule, based on the system of eight genders and their ranks, according to which the target verb and auxiliary will agree with the gender of the conjunct belonging to the numerically lowest rank (rank 1 < rank 2 < rank 3):



where *i* and *j* refer to gender ranks.

“In the case of conjoined subjects, the predicate is in the plural and agrees in gender with the subject of lower rank” (Kibrik, 1977c: 186). The rule accounts for all the examples above, but it is typologically an odd resolution system. First, it is ‘two-level’, with genders on one level and ranks of genders on

<sup>13</sup> In fact, the grandmother of the family was so upset about these sentences that Marina Chumakina had to have another elicitation session with her granddaughter in a place where the grandmother could not hear them.

another. As Kibrik pointed out later, these ranks do not correspond to an animacy hierarchy or to other kind of hierarchies existing outside his description of Archi. Second, the reference to genders V and VI is essentially an indirect way of referring to personal pronouns (of I and II gender). If this resolution rule is accepted, we end up with two rules, one of which is purely semantic, based on human / non-human distinction (ranks 2 and 3), and another one lexical, based on the behaviour of the particular words (rank 1).

Finally, Kibrik's rule does not account for cases when first and second person pronouns referring to non-humans are used in conjoined phrases. Consider the following examples:

(24) cow (III gender) speaking:

- a. *zo:n-u*            *moto:l-u*            *as:a-r-ši*            *i*  
 1SG.ABS-and        kid(IV)[SG.ABS]-and        [III/IV.PL]tremble-IPFV-CVB        [III/IV.PL]be  
 'I and the goat kid are trembling.'
- b. *zo:n-u*            *d-is*            *hallur-u*            *q'a*  
 1SG.ABS-and        1L.SG-1SG.GEN        owner(II)[SG.ABS]-and        [III/IV.PL]come.PFV  
 'I and my (female) owner came.'
- c. *zo:n-u*            *χalq'-u*            *as:a-r-ši*            *i*  
 1SG.ABS-and        people(III)[SG.ABS]-and        [III/IV.PL]tremble-IPFV-CVB        [III/IV.PL]be  
 'I and the people are trembling.'

(25) goat kid (IV gender) speaking:

- a. *zo:n-u*            *w-is*            *hallu-wu*            *q'a*  
 1SG.ABS-and        1L.SG-1SG.GEN        owner(1)[SG.ABS]-and        [III/IV.PL]come.PF  
 'I and my (male) owner came.'
- b. *zo:n-u*            *godo-t*            *lo-wu*            *as:a-r-ši*            *i*  
 1SG.ABS-and        this-IV.SG            child(IV)[SG.ABS]-and        [III/IV.PL]tremble-IPFV-CVB        [III/IV.PL]be  
 'I and this baby are trembling.'

To account for such cases, and to arrive at simpler resolution rules which are also less odd typologically, we suggest that the feature of person should be posited for Archi. Then the resolution rules for Archi will be the following:

### Person resolution

If there is a conjunct of person 1 or 2, use 1/2 person agreement, otherwise use third person.

### Gender resolution

1. If there is a conjunct referring to a human, gender I/II agreement will be used;
2. Otherwise gender III/IV agreement will be used.

We claim that Archi has a morphosyntactic feature of person that has the following morphological exponence.

Table 3. Archi person.

	SG	PL
I person	w-/⟨w⟩, d-/⟨r⟩, b-/⟨b⟩, ∅	∅
II person	w-/⟨w⟩, d-/⟨r⟩, b-/⟨b⟩, ∅	∅
III person	w-/⟨w⟩, d-/⟨r⟩, b-/⟨b⟩, ∅	b-/⟨b⟩, ∅

Person in Archi deviates from a canonical morphosyntactic feature in four respects:

- there is no unique phonology associated with person;
- as there is no contrast between first and second person, and the contrast 1/2 person vs. third person is realised only in the plural, the values of person feature in Archi are first and second person plural vs. the rest;
- because the feature is only realised in the plural, it is not independent;
- the domain of the feature is restricted to the word classes that distinguish genders in the plural, i.e. verbs (including participles and verbal nouns), adverbs, particles and postpositions.

From the Indo-European perspective such a person feature looks rather strange. However, if we consider the person feature in other Daghestanian languages, Archi will seem less weird.

#### 4. Person in other Daghestanian languages

In terms of person marking and personal agreement, Daghestanian languages show a picture very different to the one presented by Indo-European languages. Among instances where a case for person can be made, two types are distinguished: languages where verbs have special forms for personal agreement and languages where there is no separate phonology associated with person. The languages of the first type are listed in Alekseev (1999: 159): Lak, Udi, Bats, Tabassaran and Dargi. Among the languages that do not have special inflections for person but use some other forms to mark personal agreement, Akhvakh, Tsakhur and some dialects of Avar have been discussed in the literature.

There is a detailed account for personal agreement in East Caucasian (Daghestanian) languages in Helmbrecht (1996) where he discusses Akhvakh, Bats, Dargi (Dargva in his spelling), Lak, Kusur and Zakatal (both are dialects of Avar), and Tabassaran. For other data on personal agreement see Kazenin (1999) for Lak, and van den Berg (1999) for Akusha Dargi. In this paper we only give a brief overview of person in Daghestan that will allow us to see Archi data in some perspective. To do this, we will answer the following questions:

1. What are the forms used to mark person (inflections vs. other means) and what are the values of person feature?
2. Does personal agreement affect the agreement strategy of the language (resulting, for example, in a change of controllers)?

#### 4.1. Formal expression of person

There are four languages that have special inflections for person, let us consider them in turn.

**Lak** verbs have two agreement slots: prefixes for gender agreement and suffixes for agreement in person. Table 4 lists Lak person suffixes.

Table 4. Lak person markers (Kazenin, 1999:386)

'main series'			'preterite series'		
	SG	PL		SG	PL
1	-ra	-ru	1	-w	
2			2		
3	-r(i)		3	∅	

**Dargi** also uses suffixes for personal agreement and has a prefixal slot for gender agreement. There are many dialects of Dargi, here we give examples of three dialects: standard Dargi, the dialect of Kubachi, and the dialect of Megeb. We choose Kubachi and Megeb as they have the largest and the smallest number of values respectively. Table 5 shows the markers.

Table 5. Dargi person markers (based on Helmbrecht, 1996:138)

	standard Dargi		Kubachi		Megeb	
	SG	PL	SG	PL	SG	PL
1	-ra		-d	-da:/ -d(a)	-ra	
2	-ri	-ra	-t:e	-t:a: / -t:a	∅	
3	∅		∅			

In terms of the values, the remaining dialects are the same as the standard Dargi.

**Tabassaran** uses prefixes and infixes for verbal agreement in gender, and suffixes for verbal agreement person; the set of suffixes shown in Table 6 is the same for all tenses.

Table 6. Tabassaran person markers (based on Xanmagomedov, 1999:391)

	SG	PL	
		EXCL	INCL
1	-za	-ča	-ha
2	-va	-čva	
3	∅		

In **Bats** (Tsova-Tush) the verbs fall in two conjugations: in the first verbs agree in person only, in the second verbs agree in gender by prefixation and in person by suffixation. Table 7 shows the suffixes that are used for personal agreement.

Table 7. Bats person markers (based on Chrelashvili, 1999:200)

Singular			
	I conjugation		II conjugation
1	-as		-sõ
2	-ah		-hõ
3	-qu:k		-ṽ

In **Udi** there is no gender marking in the verb. The verb agrees with its arguments in person using the person suffixes showed in Table 8.

Table 8. Udi person markers (based on Schulze-Furhoff, 1994:475)

	SG	PL
1	-zu	-jan
2	-n(u)	-nan
3	-ne	-q'un

These five are the only languages of Daghestan that have special forms for personal agreement. It is important to note that most of them also have gender agreement which, first, has a separate morphological slot and, second, follows the ergative strategy (the transitive verb agrees with its patient, the intransitive verb agrees with its only argument). Only verbs of one conjugation in Bats and the verbs in Udi do not agree for gender.

Let us turn now to the languages which, like Archi, do not have unique forms associated with the personal agreement, but use other means to mark person.

In **Zakatal'**, a southern dialect of Avar, the participial verb form is used with a first person (singular) transitive agent. In all other cases "the normal tense forms are used". Note also that "the marking of the first person in Zakatal' is limited to the past forms of the verb" (Helmbrecht, 1996:136). There is no data on the behaviour of first person plural, we can only say that such behaviour of a participle can signal the beginning of the grammaticalisation of the morphosyntactic feature of person.

The same situation is observed in **Kusur**, another southern dialect of Avar: "[p]ersonal agreement in Kusur is realized by the selection of the participial form of the verb for the 1<sup>st</sup> person and the regular tense marked verbal forms for the other persons" (Helmbrecht, 1996:141). It is important to note here that Kusur participles also have a slot for gender agreement which we discuss later.

Helmbrecht claims that a similar situation is attested in **Tsakhur**: "[a] participial verb form in the present or past tense with a class marking function indicates 1<sup>st</sup> person subject or transitive agent, while the regular tense forms are used for the remaining persons" (Helmbrecht, 1999:138). There is, however, a different point of view presented in Tatevosov & Majsak (1999:230-238) who show that the participial form can be used with the second and the third persons as well in the right context.

**Akhvakh** uses gender markers to distinguish first person: "the first person transitive agent is marked on the verb by *-do* (class I) and *-de* (all other classes). These suffixed markers *-do*, *-de* agree in person with the ergative marked transitive agent and in class with the absolutive marked patient" (Helmbrecht, 1996: 137).

Finally, in gender agreement in **Akusha Dargi** "the first and second person plural have a separate pattern for agreement" (van den Berg, 1999:154) as shown in table 9.

Table 9. Akusha Dargi gender markers as used with different persons (van den Berg, 1999:154)

	SG	PL	
		1, 2	3
M	w	d-, <ɾ>, -r	b
F	r		
N	b	d-, <ɾ>, -r	

So far we have seen that the “Archi situation” where personal agreement has no special forms is not unique. While *Zakatal’*, *Kusur* and *Akhvakh* contrast first person with everything else, the picture in *Akusha Dargi* seems to be the closest to Archi both in terms of values (first and second person plural vs the rest) and in terms of formal expression. The important difference is that *Akusha Dargi* has also a separate morphological slot for personal agreement (see above).

In terms of values, *Lak* resembles Archi in contrasting locutors to non-locutors (first and second vs. third person). Unlike *Dargi*, *Lak* is a contact language for Archi and until 1960s (roughly) many Archi were fluent in *Lak*.

#### 4.2. Agreement strategies

As already mentioned, Daghestanian languages are predominantly ergative, that is, the only argument of the intransitive verb and the patient of the transitive verb control gender-number agreement. However, if the language has personal agreement, the picture becomes more complicated.

In *Lak* the verb can follow the accusative strategy for personal agreement, i.e. agree with the agent of a transitive clause. As there are two morphological slots for agreement, the prefix is used to agree with the patient in gender and the suffix is used to agree with the agent in person, see Helmbrecht (1996) and Kazenin (1999) for detailed accounts.

*Dargi* follows the ergative strategy for gender agreement. For personal agreement two strategies are possible: if both arguments of the verb are locutors (first or second person) then the ergative strategy is used, the verbs agreeing with the patient. If one of the arguments is a locutor and another is not, the verb agrees with the locutor “independent of its semantic role, case marking or syntactic status” (Helmbrecht, 1996:139). There are conditions like focusing of the arguments that can change the picture, see van den Berg (1999).

*Tabassaran* verbs use the ergative strategy for gender agreement and the active strategy for person agreement: there are different markers for verbs like ‘go’ and verbs like ‘be’. Transitive verbs can agree with several arguments (see Helmbrecht, 1996).

*Bats* is similar to *Tabassaran* as the verbs also agree with the patient in gender and use the active strategy for personal agreement (Helmbrecht, 1996).

All languages with no special marking for person that Helmbrecht discusses (*Zakatal’*, *Kusur* and *Akhvakh*) mark first person in the verb irrespective of the syntactic position or semantic role of the argument of the first person pronoun. Note, however, that both *Kusur* and *Akhvakh* verbs also agree with their arguments in gender, and there the strategy is always ergative (the agreement is controlled by the patient).

Let us now return to Archi. Archi follows the ergative strategy throughout, that is, all items - verbs, adverbs, particles – that have morphological slots for agreement agree with the NP in the absolutive. When person is involved the strategy does not change:

(26) from Kibrik (1977d:17)

*gudu laha nent’u ha<sup>ʃ</sup>tər-če-q<sup>ʃ</sup>-ak ačal-k:ut*  
 that.LSG boy(1).SG.ERG 1PL.INCL.ABS river-OBL.PL-INTER-LAT put-CVB  
 ‘So that this boy does not...throw us into the river<sup>14</sup>.’

<sup>14</sup> Note that the verb here is *ačas* ‘put’, which has positions for gender-number agreement: the agreement form for third person human plural is *a<b>čas*), as can be seen in 27 (b).



(27)

a. from Kibrik (1977d:97)

*nen*      *dit:a<t'>u*      *at:i*      *nokl-a-ši*  
1PL.ABS    quickly<IV.PL>    let.go.IMP    house(IV)-IN-ALL  
'Let us go home quickly (=allow us to go home quickly).'

b. *χ<sup>6</sup>on*      *a<b>t:i*  
cow(III)[SG.ABS]    <III.SG>let.go.IMP  
Let the cow go.

(28) from Kibrik (1977d:124)

*ʃ:ar-a-k*      *nen*      *aq:'u*  
who-IN-LAT    1PL.ABS    [III/IV.PL]leave.PFV  
'Who have you left us (to care)?'

Examples (26), (27(a)) and (28) show that the verb agrees with its patient ('us' in both cases). However, as we have already seen in Tabassaran and Akhvakh, this may be the evidence for the semantically based personal agreement. To show that Archi does not use any other strategy of agreement but the ergative, let us see the examples with first and second person agents:

(29) from Kibrik (1977d:117)

*nen*      *eqon*      *nosor-χ:<sup>w</sup>alli*      *a<b>u-li*      *e<b>di*  
1PL.ERG    last.night    cheese-bread(III)[SG.ABS]    <III.SG>make.PFV-CVB    <III.SG>be.PAST  
'Last night we made cheese pasties.'

(30) from Kibrik (1977d:124)

*hanas*      *zon*      *a<r>u*      *ž<sup>w</sup>en*  
why      1SG.ABS    <II.SG>make.PFV    1PL.ERG  
'Why have you given me birth? (a woman to her parents)'

Examples (29) and (30) show that Archi conforms to the ergative strategy, as the verbs in both cases agree with the patient. This is a rare situation: most of the Daghestanian languages that mark person (whether by special morphology or by other means) change to the accusative strategy.

The reason for this may be that Archi uses gender markers for personal agreement and as we have seen, the gender marking always stays ergative independently of all other factors.

## Conclusion

It had been suggested earlier that Archi had no person feature. Indeed there is no direct phonological evidence for such a feature. Having set up the procedure for recognising a morphosyntactic feature of person, we have shown that it is justifiable to postulate this feature for Archi. Once the feature of person is recognised, the agreement rules for Archi become less complicated, the gender system of the language becomes simpler, and we get rid of unnecessary homonymy for personal pronouns.

The person feature in Archi is rather distant from the canonical person feature in morphological expression, values and domain. However, when we view this feature in Daghestanian context, the picture becomes less surprising, as there are other Daghestanian languages that do not have special morphology associated with person and that contrast first and second person to the third person. Archi is exceptional in that despite having a person feature it does not show any deviation from the ergative agreement strategy.

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### Appendix 1. Transcription.

In this paper we are using a transcription based on the IPA. The following table gives the place and means of articulation for the less straightforward of the 70 consonantal phonemes of Archi.

	palato-velar	velar	uvular	pharyngeal	laryngeal
plosive		k g	q		ʔ
fricative			χ ʁ	ħ ʕ	h
lateral fricative	ɬ				
lateral affricate	kɬ				

Additional signs used in transcription (*c* stands for consonant, *v* for vowel):

- c: - fortis consonant
- v: - long vowel
- c<sup>ʕ</sup> - pharyngealised consonant
- v<sup>ʕ</sup> - pharyngealised vowel
- c<sup>w</sup> - labialised consonant
- c' – ejective consonant

### Appendix 2. Abbreviations

I/II/III/IV	genders	IPF	imperfective aspect
1/2/3	persons	FUT	future tense
ALL	allative case	LAT	lative case
COMIT	comitative case	LOC	locative case
COND	conditional	NEG	negation marker
CONT	localisation “cont”	ABS	absinative case
CVB	converb	MSD	masdar (adverbial noun)
ERG	ergative case	OBL	oblique stem
EXCL	exclusive (pronoun)	PF	perfective aspect
GEN	genitive case	PL	plural number
IMP	imperative	PN	personal name
IN	localisation “in”	PRH	prohibitive
INCL	inclusive (pronoun)	QUEST	question marker
INF	infinitive	SG	singular number
INTER	localisation “inter”		