This text is a revised version of a paper presented at the conference RARA & RARISSIMA, Leipzig, 29 March - 1 April 2006

Person agreement in Akhvakh: functional motivation and origin of an uncommon type of agreement pattern

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ABSTRACT. *In the Nakh-Daghestanian language family, person agreement is considered a recent innovation of a few isolated languages. Person agreement in Akhvakh is limited to the perfective positive and follows a typologically rare pattern, in which the same couple of verbal ending encodes a 1st person vs. 2nd/3rd person contrast in declarative clauses, and a 2nd person vs. 1st/3rd person contrast in questions. A comparison of the verb forms involved in person agreement with other Akhvakh verb forms not involved in this mechanism suggests that, in Akhvakh, the emergence of this atypical pattern of person agreement resulted from the reanalysis of a TAM distinction.*

KEYWORDS. *agreement, evidentiality, person, split intransitivity, TAM.*

1. Introduction

Akhvakh (*ašoλi mic'i*, Russian *axvaxskij jazyk*, Azerbaijani *axax dili*) is a North-East Caucasian (or Nakh-Daghestanian) language belonging to the Andic branch of the Avar-Andic-Tsezic family, spoken in the western part of Daghestan and in the village of Axaxdərə (*ašoλi hani*) near Zaqatala (Azerbaijan). This paper is based on the author's field work carried out in Axaxdərə.[1]

[1] Judging from Magomedbekova 1967 (which so far constitutes the main source of information on Akhvakh), the variety of Akhvakh spoken in Axaxdərə is very close to the Northern Akhvakh dialect spoken in the Akhvakhskij Rajon of Daghestan. Nearly all affixes identified by Magomedbekova occur in Axaxdərə Akhvakh with identical forms and functions, or with slight differences only, and most words she gives in her lexicon have exactly the same form too. In particular, cases of replacement of native Akhvakh words or of integrated Russian loanwords by Azerbaijani loanwords are relatively rare, which suggests that the installation of Akhvakh migrants in Azerbaijan must be relatively recent, in spite of the fact that the Akhvakhs of Axaxdərə have kept no regular relations with Daghestanian Akhvakhs.

Akhvakh clause structure is characterized by flexible constituent order and ergative alignment, in case marking as well as in gender-number agreement between the verb and its core arguments.

Akhvakh distinguishes three genders in the singular: human masculine (M), human feminine (F), and non-human (N). In the plural, the distinction masculine *vs.* feminine is neutralized, resulting in a binary opposition human plural (HP) vs. non-human plural (NP).

Independent verb forms are inflected for TAM, polarity and gender-number agreement (see section 2); person agreement, which constitutes the main topic of this paper, occurs in one tense only.

Noun morphology involves number inflection and case inflection. Except for 1st and 2nd person singular pronouns, whose absolute form is characterized by a non-void ending *-ne*, the absolute form of nouns (used in the extra-syntactic function of quotation or designation and in S/P roles) has no overt mark. Case suffixes may attach to a stem identical with the absolute form, or to a special *oblique stem*. The formation of the oblique stem may involve changes in the last vowel (indicated in the gloss as '.O'), or the addition of a formative *-su-* (M) / *-λi-* (F/N) / *-lo-* (HP) / *-le-* (NP).

2. Agreement or verbs in gender and number

In Akhvakh, gender-number agreement of verbs involves both prefixes and suffixes, with two different kinds of conditioning:

– The presence of gender-number *prefixes* in verb forms involves no grammatical conditioning. Verbs divide into two classes, those having an initial slot for gender-number concord, and those devoid of it. The verbs belonging to the 1st subset always begin with a gender-number prefix referring to the S/P argument (i.e., to the argument encoded by an NP in the absolute case), those belonging to the 2nd one never take such a prefix.[2]

– By contrast, the presence of gender-number *suffixes* referring to the same S/P argument is conditioned by the grammatical nature of the verb form. The rules governing the presence of gender-number suffixes in verb forms are complex. In some verb forms, they do not occur at all; in others, they are obligatory; in a third group of verb forms, gender-number suffixes are optional, and when they are present they may appear as distinct segments, or merge with other formatives.

Ex. (1) and (2) illustrate gender-number agreement with intransitive and transitive verbs. The verbs appearing in these examples obligatorily bear one of the gender-number prefixes *w-* (M) / *j-* (F) / *b-* (N) / *b(a)-* (HP) / *r-* (NP), and they are in a tense

[2] The assignment of individual verbs to these two subsets is arbitrary. They are roughly of equal importance, and there seems to be no evidence of a historical explanation of this situation, which is found in other Andic languages too.

(the perfective negative) in which an optional gender-number marker *-we* (M) / *-je* (F) / *-be* (N) / *-ji* (HP) / *-re* (NP) may follow the TAM suffix *-ilλa*, or merge with it according to the following rules :

-ilλa-we → *ilλo* (M)
-ilλa-je → *ilλe* (F)
-ilλa-be → *ilλe* (N)
-ilλa-ji → *ilλi* (HP)
-ilλa-re → *ilλe* (NP)

Ex. (1) & (2) are given with gender-number suffixes merged with the perfective negative suffix, but variants of these forms with an agglutinated gender-number suffix, or devoid or gender-number suffix, would be equally acceptable.

(1) a. *ek'wa / de-ne / me-ne w-oq'-ilλo*
man 1S-ABS 2S-ABS M-come-PF.NEG.M
'The man / I (masc.) / You (sing.masc.) did not come'

b. *ak'i / de-ne / me-ne j-eq'-ilλe*
woman 1S-ABS 2S-ABS F-come-PF.NEG.F
'The woman / I (fem.) / You (sing.fem.) did not come'

c. *χwe / mašina b-eq'-ilλe*
dog car N-come-PF.NEG.N
'The dog / The car did not come'

d. *mik'eli / ilλi / isi / ušti b-eq'-ilλi*
child. PL 1PI 1PE 2P HP-come-PF.NEG.HP
'The children / We (incl.) / We (excl.) / You (pl.) did not come'

e. *χwadi / mašinadi r-eq'-ilλe*
dog.PL car.PL NP-come-PF.NEG.NP
'The dogs / The cars did not come'

(2) a. *ek'wa-sw-e jaše j-ič-ilλe*
man-OM-ERG girl F-push-PF.NEG.F
'The man did not push the girl'

b. *ek'wa-sw-e mašina b-ič-ilλe*
man-OM -ERG car N-push-PF.NEG.N
'The man did not push the car'

c. *jašo-de ek'wa w-uč-ilo*
girl.O-ERG man M-push-PF.NEG.M
'The girl did not push the man'

d. *de-de me-ne j-ič-ile*
1S-ERG 2S-ABS F-push-PF.NEG.F
'I (masc. or fem.) did not push you (fem.)'

The same mechanism of gender-number agreement operates in all tenses. The variations concern the possibility to have gender-number prefixes or suffixes, depending on lexical and grammatical factors, but not the rule of agreement itself: when gender-number marks are present in a verb form, their value is always determined by the S/P argument, represented by an NP in the absolute case.

As illustrated by the above examples, in most tenses, verb agreement is strictly limited to gender and number, and verb morphology does not reflect person distinctions.

3. Person agreement in Axaxdərə Akhvakh

3.1. Person agreement morphology

In Axaxdərə Akhvakh, the perfective positive is the only tense in which, in addition to gender-number agreement with their S/P argument, verbs show variations reflecting person distinctions. There are two possible endings for this tense: *-ada* (glossed PF.1D/2Q) and *-ari* (glossed PF). The details of the agreement rule accounting for the choice between these two endings will be described in section 3.2, but note immediately that the glossing of *-ari* as PF and of *-ada* as PF.1D/2Q reflects the difference in markedness between the two endings of the perfective positive: *-ada* necessarily implies the presence of a 1st/2nd person A argument in transitive clauses, or of a 1st/2nd person S with intransitive verbs showing person agreement, whereas intransitive verbs that do not show person agreement invariably take the ending *-ari*, irrespective of the person of their S argument.

A segmentation of these suffixes as *-a-da* and *-a-ri*, with a common element *-a-* as the tense marker proper, is probably justified in a diachronic perspective (see section 4), but in a synchronic morphological analysis, it is not confirmed by the possibility to isolate the same formatives with the same meaning in other forms.

Morphologically, the two suffixes of the perfective positive show the following variations:

– the initial *a* of these two endings may merge with an underlying *i* belonging to the stem according to the rule *a* + *i* → *ē* (for example, the perfective positive of *gūrulλa* 'do', whose root has the underlying form |*gwi(j)*|, is *gw-ēri* ~ *gw-ēda*);[3]

– with stems that select nasalized variants of affixes, the perfective positive endings occur as *-ani* and *-ãda* ;

– if the S/P argument is human plural, the obligatory merging of a gender-number agreement mark results in variants of these endings *-iri* and *-idi* ;[4]

– the ending *-ari* never shows variations due to gender-number agreement with S/P arguments other than HP; by contrast, with S/P arguments other than HP, *-ada* has the optional variants *-ado* (M) and *-ade* (F, N, or NP) resulting from the optional merging of a gender-number suffix.

In addition to that, with verbs that have stem allomorphy,[5] agreement with a human plural S/P argument triggers not only the choice of the endings *-iri* ~ *-idi*, but also the choice of the 'long' allomorph of the stem.

In ex. (3), the forms of the first column illustrate the variations or the ending *-ari*, whereas those in the second column illustrate the variation of the ending *-ada*. In ex. (3a), *bixurulλa* 'grasp' illustrates the case of a verb whose stem |*-ix-*| undergoes only phonologically conditioned changes in contact with certain prefixes. Ex. (3b) and (3c) illustrate the behavior of two verbs with stem allomorphy, *čōrulλa* (stem |*ča(b)-*|) and *gūrulλa* 'do' (stem |*gwi(j)-*|). Occurrences of the long allomorph of the stem are underlined.

(3) a.

	-ari	-ada
M	*w-ux-ari*	*w-ux-ada* ~ *w-ux-ada-we* ~ *w-ux-ado*
F	*j-ix-ari*	*j-ix-ada* ~ *j-ix-ada-je* ~ *j-ix-ade*
N	*b-ix-ari*	*b-ix-ada* ~ *b-ix-ada-be* ~ *b-ix-ade*
HP	*ba-x-iri*	*ba-x-idi*
NP	*r-ix-ari*	*r-ix-ada* ~ *r-ix-ada-re* ~ *r-ix-ade*

[3] The underlying *i* responsible for this variation is apparent in the injunctive form *gwij-a*.

[4] When realized as a distinct segment, the suffix 'human plural' appears as *-ji*.

[5] In Akhvakh, all verb forms without exception end with a non-void inflectional suffix, and most verbs build all of their forms from a unique stem invariably ending in a consonant. There is however a set of non-derived verbs characterized by an alternation between a 'long' stem ending in a consonant and a 'short' stem characterized by the loss of the final consonant, and the same kind of alternation concerns also the derived transitive verbs formed by means of a causative suffix whose underlying form is |*-a(j)-*|. Since all of the verb suffixes of Akhvakh begin with a vowel, the selection of the short form of such verb stems implies interaction between the last vowel of the stem and the initial vowel of the suffixes attached to it. The division of verb suffixes into those selecting the long form of alternating verb stems, and those selecting the short form, is not correlated with any phonological or semantic property, and must be considered as synchronically arbitrary.

b.

	-ari	-ada
M	*č-āri*	*č-āda ~ č-āda-we ~ č-ādo*
F	*č-āri*	*č-āda ~ č-āda-je ~ č-āde*
N	*č-āri*	*č-āda ~ č-āda-be ~ č-āde*
HP	*čab-iri*	*čab-idi*
NP	*č-āri*	*č-āda ~ č-āda-re ~ č-āde*

c.

	-ari	-ada
M	*gw-ēri*	*gw-ēda ~ gw-ēda-we ~ gwē-do*
F	*gw-ēri*	*gw-ēda ~ gw-ēda-je ~ gw-ēde*
N	*gw-ēri*	*gw-ēda ~ gw-ēda-be ~ gw-ēde*
HP	*guj-iri*	*guj-idi*
NP	*gw-ēri*	*gw-ēda ~ gw-ēda-re ~ gw-ēde*

3.2. The rule of person agreement

The details of person agreement constitute one of the few points on which the information provided by Magomedbekova on the variety of Akhvakh spoken in the Akhvakhskij Rajon of Daghestan is not confirmed by my own observations on Axadərə Akhvakh:

(a) Magomedbekova describes a *1st person* (*-ada~-eda*) vs. *2nd/3rd person* (*-ari~-eri*) contrast illustrated by declarative sentences, without mentioning the existence of contexts in which the same ending *-ada~-eda* would be triggered by a 2nd person controller.[6]

(b) According to Magomedbekova, person agreement follows accusative alignment: the controller of person agreement is A (the ergative argument) with transitive verbs, S (the argument in the absolute case) with intransitive verbs.

(c) According to Magomedbekova, person agreement is optional: the presence of a 1st person S/A argument is a necessary condition for the ending *-ada~-eda* to be selected, but it does not automatically trigger the choice of this ending; *-ari~-eri* is the only possible ending in the presence of a 2nd/3rd person controller, but the ending *-ari~-eri* may occur in the presence of a 1st person controller too.

By contrast, what I have observed in Axaxdərə Akhvakh is that:

[6] I have not found in Axaxdərə Akhvakh the variants *-eda* and *-eri* of the perfective positive endings signaled by Magomedbekova: in Axaxdərə Akhvakh, all instances of *-eda* and *-eri* in the perfective positive concern stems underlyingly ending with *i(j)*, and therefore can be explained as the result of a morphophonological process, as in ex. (3c).

(a) Person agreement involves a *1st person* (*-ada*) vs. *2nd/3rd person* (*-ari*) contrast in declarative clauses, but *2nd person* (*-ada*) vs. *1st/3rd person* (*-ari*) contrast in questions.[7]

(b) Person agreement follows active rather than accusative alignment: transitive verbs invariably show person agreement with A (*-ada* with 1st person A and *-ari* with 2nd/3rd person A in declarative clauses, *-ada* with 2nd person A and *-ari* with 1st/3rd person A in questions), whereas intransitive verbs divide into two semantically motivated classes, those which agree with S in the same way as transitive verbs with A (accusative alignment), and those that do not show person agreement with S and invariably show the ending *-ari* (ergative alignment).

(c) Person agreement in Axaxdərə Akhvakh is not optional: transitive verbs obligatorily take the ending *-ada* in declarative clauses in which a 1st person A is expressed or understood, and in questions in which a 2nd person A is present or understood; with most intransitive verbs, person agreement with S is, either obligatory, or impossible; I have observed a few cases of hesitation or fluctuation in the agreement of intransitive verbs, but they seem to be semantically motivated – see section 3.3.

	declarative clauses	questions
1st person A / S_A	**-ada**	-ari
2nd person A / S_A	-ari	**-ada**
3rd person A / S_A	-ari	-ari
no A / S_A	-ari	-ari

Ex. (4a-d) illustrate the choice between *-ari* and *-ada* in declarative and interrogative transitive clauses in which A is a speech act participant, and ex. (4e) shows that *-ari* is invariably selected (in declarative clauses as well as in questions) if A is not a speech act participant.

[7] In my field work on Akhvakh, I immediately noticed that, contrary to what I expected from Magomedbekova's description, *-ada* is used with 2nd person controllers too, but my first hypothesis was that the choice between *-ari* and *-ada* simply reflects the *1st/2nd person vs. 3rd person* distinction, and it took me a long time to discover the exact nature of the agreement rule. The reason is that all the examples occurring in the first texts I collected involved, either 1st person controllers in declarative clauses, or 2nd person controllers in questions, and I did not pay sufficient attention to the possible relevance of this distribution, and to its possible connection with the hesitations and inconsistencies I observed in the answers of the informants whenever I tried to retake the data in elicitation. The point is that declarative clauses referring to past events with 2nd person S/A arguments and questions referring to past events with 1st person S/A arguments are natural in marked contexts only, and consequently are relatively infrequent in spontaneous discourse. *A priori*, the information provided by declarative clauses referring to past events and involving a 2nd person S/A is already known to the addressee, since (s)he took part the event in question, and for the same reasons, the information asked for by questions referring to past events and involving a 1st person S/A is normally already known to the speaker. But when such marked configurations began to appear in texts (for example, in rhetorical questions whose function is not to ask for some information, but to contest an assertion previously made by the addressee), it turned out that they quite consistently follow the pattern illustrated by ex. (4).

(4) a. *eƛ'-ada* *"di-λa* *q'abuλ-ere* *goλa",* *me-de-la* *eƛ'-ari* *"di-λa-la"*
say-PF.1D/2Q(N) 1S-DAT agree-ICV COP.NEG.N 2S-ERG-and say-PF 1S-DAT-and
'I said "I don't agree", and you said "me too"'

b. *de-de* *čũda* *eƛ'-ari* *ha-be?*
2S-ERG when? say-PF DEM-N
'When did I say that?'

c. *me-de* *čugu* *eƛ'-ada* *ha-be?*
2S-ERG why? say-PF.1D/2Q DEM-N
'Why did you say that?'

d. *me-de* *čũda* *b-eχ-ada* *hu* *šãƛ'e?* *–šuni* *b-eχ-ada*
2S-ERG when? N-buy-PF1D/2Q DEM dress yesterday N-buy-PF1D/2Q
'When did you buy this dress? –I bought it yesterday'

e. *hu-sw-e* *čũda* *b-eχ-ari* *hu* *mašina?* *–šuni* *b-eχ-ari*
DEM-OM-ERG when? N-buy-PF DEM dress yesterday N-buy-PF
'When did he buy this car? –He bought it yesterday'

Ex. (5) illustrates the behavior of an intransitive verb agreeing with S in the same way as a transitive verb with A, whereas (6) illustrates the case of an intransitive verb invariably taking the ending *-ari*, irrespective of the nature of S.

(5) a. *mene* *čũda* *w-ošq-ada?* *–šuni* *w-ošq-ada*
2S when? M-work-PF1D/2Q yesterday M-work-PF1D/2Q
'When did you work? –I worked yesterday'

e. *hu-we* *čũda* *w-ošq-ari?* *–šuni* *w-ošq-ari*
DEM-M when? M-work-PF yesterday N-buy-PF1D/2Q
'When did he work? –He worked yesterday'

(6) a. *mene* *čũda* *h-ēni?* *–šuni* *h-ēni* [8]
2S when? recover yesterday recover
'When did you recover? –I recovered yesterday'

e. *hu-we* *čũda* *h-ēni?* *–šuni* *h-ēni*
DEM-M when? recover yesterday recover
'When did he recover? –He recovered yesterday'

[8] *h-ēni* is the realization of the underlying form |*hī(j)-ari*|.

3.3. The two classes of intransitive verbs

As illustrated by examples (5) and (6) above, some intransitive verbs of Akhvakh agree in person with S in the same way as transitive verbs do with A, whereas others do not show person agreement. This division of intransitive verbs into two classes belongs to a well-known type of split intransitivity,[9] since it reflects the degree of control of the participant encoded as S. The sample of intransitive verbs given in (7) shows that intransitive verbs with S representing a relatively active participant agree in person with S in the same way as transitive verbs do with A, whereas those with a clearly passive S argument do not show person agreement. Note that, among the components of the notion of prototypical agentivity, control is more important here than volition, since verbs describing involuntary bodily processes that however allow for some degree of control (such as *hīk'unulа* 'hiccup' or *ʕ'ōrulа* 'cry')[10] belong to the first subset.

(7) a. Intransitive verbs agreeing in person with S like transitive verbs with A:

badalуrulа 'laugh', *baχwadurulа* 'play', *baʔurulа* 'speak', *beq'urulа* 'come', *beʁurulа* 'stand up', *bešqurulа* 'work', *beturulа* 'run', *bišurulа* 'win', *bišurulа* 'gather', *boƛurulа* 'walk', *buqurulа* 'fight', *bužurulа* 'believe', *c'iriƛilōrulа* 'get vexed', *čak'urulа* 'urinate', *čōrulа* 'wash', *damaƛilōrulа* 'wonder', *(ʁa)duk'urulа* 'sit down', *hīk'unulа* 'hiccup', *ħečurulа* 'sneeze', *ħulōrulа* 'scream', *ič'eƛ'urulа* 'dress', *kasurulа* 'jump', *kočilōrulа* 'move', *k'ōnulа* 'lie down', *k'usurulа* 'squat down', *ʕ'ōrulа* 'cry', etc.

b. Intransitive verbs that do not show person agreement with 1st/2nd person S:

ãƛaχχurulа 'perspire', *ãq'ažurulа* 'be thirsty', *aq'ussurulа* 'suffocate', *bač'aq'urulа* 'to be late', *baƛ'aralуrulа* 'to lose weight', *baqwarolуrulа* 'become old', *baχiƛilōrulа* 'get jealous', *baχχurulа* 'be surprised', *becolуrulа* 'get blind', *begulуrulа* 'get drunk', *beχχurulа* 'be glad', *biƛ'urulа* 'die', *buxurulа* 'fall down', *buχurulа* 'feel cold', *čakōnulа* 'get sick', *čaralуrulа* 'get fat', *č'aʕinōrulа* 'be bored', *goč'urulа* 'wake', *hunulа* 'recover', *ƛurulа* 'be afraid', *makwačurulа* 'be hungry', etc.

The few cases of hesitation or fluctuation I have observed confirm the semantic motivation of these two classes of intransitive verbs. For example, according to the judgment of my main informant, *ƛ'ūk'unulа* 'sleep' may agree in person, but *dene ƛ'ūk'ada* (with person agreement) tends to be interpreted as 'I lay down in order to

[9] See in particular Van Valin 1990, Mithun 1991.

[10] The ambiguous status of such verbs from the point of view of agentivity is apparent in the fact that, out of context, their imperative positive (e.g., *Cry!*) sounds somewhat strange, whereas their imperative negative (e.g., *Don't cry!* or *Stop crying!*) sounds perfectly normal.

sleep', whereas *dene ƛ'ūk'ani* (without person agreement) must be used if the intended meaning is 'I dozed off unwillingly'.

3.4 The functional basis of Akhvakh person agreement

The statement that *-ada* marks agreement with a 1st person A or S_A argument in declarative clauses, and with a 2nd person A or S_A argument in interrogative clauses, describes the distribution of the two verbal endings encoding the TAM-polarity value 'perfective positive' correctly, but raises the following question: what is the property shared by 1st person arguments in declarative clauses and 2nd person arguments in questions that may justify this apparent inversion of person marking between declarative and interrogative clauses?

However, this property is not difficult to identify: in declarative speech acts, the speech act participant in charge of the assertion is the speaker, whereas in questions, the speech act participant in charge of the assertion is the addressee. In other words, the choice between *-ada* and *-ari* encodes that the A or S_A argument is identical or not with the speech act participant in charge of the assertion.

Consequently, this mechanism can be described as person agreement at a superficial level only. Its functional motivation is not to encode a person contrast as such. It has in common with person agreement proper that it encodes a particular alignment of argument roles and speech act roles, but the relevant distinction at the level of speech act roles cannot be formulated in terms of person only.

In some sense, marking the identity between an A or S_A argument and the speech act participant in charge of the assertion can be viewed as the grammaticalization of a particular type of evidentiality. A participant having played a particularly active role in a past event qualifies to report on the event in question better than anyone else, and *-ada* can consequently be characterized as encoding that the speech act participant in charge of the assertion has a direct knowledge of the event by having played an active role in it.

4. Person agreement in North-East Caucasian languages, and the puzzle of Akhvakh

Gender-number agreement is common in North-East Caucasian languages, and is considered an ancient feature of this language family. The affixes involved in gender-number agreement in Akhvakh are quite obviously cognate with functionally similar affixes, not only in the other Andic languages, but also in languages belonging to various branches of North-East Caucasian.

By contrast, person agreement is not common in North-East Caucasian languages, and is considered a recent and isolated innovation of the few languages that have it.[11] In particular, Akhvakh is the only Andic language having person agreement. It seems that

[11] Helmbrecht 1996, Hewitt 2004, van den Berg 2005.

an agreement pattern similar to that of Akhvakh (i.e., with an inversion of person marking between declarative and interrogative clauses) exists in the Mehweb dialect of Dargwa,[12] but there is no evidence that there could be any historical connection between Akhvakh and Mehweb Dargwa person marking.

In languages already having person agreement, the development or renewal of person agreement morphology can be the result of various reanalysis processes.[13] However, regarding the emergence of person agreement in languages previously devoid of it, it is commonly assumed that the grammaticalization of bound pronouns is the only possible evolution by which languages can acquire person agreement.

In some of the East Caucasian languages that have person agreement, we find the situation expected in languages in which such an evolution took place in the relatively recent past, with a multivalued feature of verbal person closely reflecting the person-number distinctions expressed by independent pronouns, and person markers still recognizable as cognate with the corresponding independent pronouns.

The situation in Akhvakh is strikingly different: in this language, person marking involves a binary choice and does not interfere with number (whereas plural pronouns have forms entirely different from those of singular pronouns). Moreover, all Akhvakh personal pronouns have a formal distinction between absolute and ergative cases, but the same suffixes are used to mark person agreement of intransitive verbs with S (in the absolute case), and of transitive verbs with A (in the ergative case). And finally, the hypothesis of a pronominal origin of person agreement is hardly compatible with the fact that the same couple of suffixes encode 1st person vs. 2nd/3rd person in declarative clauses and 2nd person vs. 1st/3rd person in questions.

If one accepts the idea that person agreement is a recent innovation of Akhvakh (and it is reasonable to accept it, given that no traces of a similar mechanism have been recognized in any other Andic language), the only possible conclusion is that the person distinction in Akhvakh verb morphology cannot result from the grammaticalization of pronominal clitics, and must have another explanation. In other words, Akhvakh is an exception to the universal of language change according to which the grammaticalization of pronominal clitics is the only way by which languages previously devoid of person distinctions in verb morphology can acquire such distinctions.

This conclusion was already proposed by Helmbrecht, who observed a similar situation in a few other East Caucasian languages, and quite correctly pointed out that, in all cases, the form selected by 1st person subjects was a participle. However, the scenario he proposes ('petrification' of a gender-number marker and switch from gender-number to person indicating function) remains quite vague. In addition, in the particular case of Akhvakh, Helmbrecht's hypothesis is difficult to accept, since the participial form that eventually became a finite form marking 1st person in declarative

[12] Sumbatova ms.
[13] On the evolutions affecting person marking, see Sievierska 2004:246-281.

clauses and 2nd person in questions is not necessarily marked for gender and number (see in particular ex. (8) below).

In the following section, I argue that a closer examination of Akhvakh verb morphology, not limited to the particular tense showing person agreement, makes it possible to elaborate a more precise and more plausible hypothesis.

5. Solving the puzzle: a possible origin of person agreement in Akhvakh

The historical explanation I propose is an internal reconstruction elaborated on the basis of a comparison of the two endings that mark person agreement in the perfective positive with identical or partially identical endings found in other verb forms in which they are not involved in person agreement.

First, as already indicated, the form of the perfective positive used in independent clauses to encode identity of the S or S_A argument with the speech act participant responsible for the assertion is homonymous with the perfective positive participle. In other words, as illustrated by example (8), the ending *-ada* has two possible values:

– in verb forms heading independent declarative or interrogative clauses, in addition to the TAM value (perfective positive) it shares with *-ari*, it encodes that the A or S_A argument is identical with the speech act participant in charge of the assertion (i.e. the speaker in declarative clauses, or the addressee in questions), contrasting with *-ari* used if the A or S_A argument is different from the speech act participant in charge of the assertion, or in intransitive constructions involving an S_P argument – (8a-b);

– but the same ending *-ada* characterizes also the participial form of the perfective positive, independently of any person distinction – (8c-d).[14]

(8) a. *ek'wa-sw-e* *kitabi* *ž-āri*[15]
man-OM-ERG book read-PF
'The man read the book'

b. *de-de* *kitabi* *ž-āda*[16]
1S-ERG book read-PF.1D/2Q
'I read the book'

c. *ek'wa-sw-e* *ž-āda* *kitabi*
man-OM-ERG read-PF.PTC book
'the book read by the man'

[14] The same homonymy is observed in the variant of Akhvakh described by Magomedbekova, but she does not recognize it explicitly in her description.
[15] *ž-āri* is the realization of the underlying form |*ža(b)-ari*|.
[16] *ž-āda* is the realization of the underlying form |*ža(b)-ada*|.

d. *de-de* *ž-āda* *kitabi*
1S-ERG read-PF.PTC book
'the book read by me'

The fact that the suffix of the imperfective positive participle is *-ida* (see below), and that most adjectives (including those that are not synchronically derived from verbs) have an ending *da*, suggests that *-ada* was originally a complex suffix, consisting of a tense marker *-a-* and of a participle marker *-da*.

Another important observation is that Akhvakh also has two verb suffixes *-iri* and *-ida*. Synchronically, the parallelism with *-ari* and *-ada* is limited to form. Functionally, in independent clauses, *-iri* and *-ida* mark two different tenses, irrespective of person distinctions:[17]

– the form with the ending *-ida* (glossed IPF) is an imperfective form referring to habitual events, or permanent facts, or events obligatorily occurring under certain conditions; this is in particular the verb form commonly used in proverbs and riddles – ex. (9);[18]

(9) a. *rač'iχe* *č'-ēda* *č'-ēda* *č'or-ida*
iron burn-IPF(P) burn-IPF(P) strike-IPF
'One strikes the iron when it is hot'

b. *bek-oqe* *xwaj-ida,* *xwan-oqe* *ūk-ida* *(qalica)*
snake-like crawl-IPF horse-like eat-IPF scythe
'It crawls like a snake, it eats like a horse (the scythe)'

– the form with the ending *-iri* (glossed NAR) has two uses difficult to relate in a strictly synchronic perspective: it is mainly used in fiction narratives, as illustrated by the anecdote 'The duck soup' reproduced in (10), but it is also productively used in questions,[19] in which case it carries a meaning of necessity – ex. (11).

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[17] Unfortunately, on this point, it is not possible to compare Axaxdərə Akhvakh with the dialect described by Magomedbekova, since the presentation of the two forms in question is a particularly obscure part of her description. She characterizes *-iri* as 'present', but does not illustrate its use, and identifies *-ida* as the marker of the 'present participle' only. She does not explicitly mention the use of the form with the ending *-ida* as a finite form, suggesting only very briefly (p. 81) that the 'present' might have the same mechanism of person agreement as that observed in the past. This clearly does not hold for the dialect of Akhvakh spoken in Axaxdərə (in which the only form identifiable as a present is an analytic form *imperfective converb + copula* occurring in ex. (10h) below, and the use of the 'present participle' as the head of independent clauses implies no mechanism of person agreement), but to what extent it really holds for the Daghestanian varieties of Akhvakh remains an open question.

[18] Note that, in ex. (9a), the same imperfective form occurs also in a participial use; the variant *-ēda* of the imperfective ending *-ida* results from the amalgamation of an underlying *a* belonging to the stem |*č'a(b)*| (this verb is quoted in the infinitive as *č'-ōrulλa*, with a similar phenomenon affecting the infinitive ending, whose basic form is *-urulλa*).

[19] The label 'narrative' is clearly not appropriate for this use of the form with the ending *-iri*, but it seems difficult to find a semantic characterization accounting for the two uses of this form; the only justification

(10) a. *molla če žo-λ-e miq'o qedo w-āno w-uk'-iri*
Molla one day-OF/N-ESS road.O behind M-go.ICV. M M-be-NAR
'One day Molla was travelling.

b. *miq'o-ge baƛ'i-qe če īhwara harigw-iri,*
road.O-ESS side.O-ESS one lake see-NAR
īhwara geƛi ʕodak'a harigw-iri.
lake inside.ESS duck.PL see-NAR
Near the road he saw a lake, in the lake he saw ducks.

c. *hu-re harigw-eλi, če-be b-ix-uruλa-ƛ'e īhwara geƛa kas-iri.*
DEM-NP see-when one-N N-catch-INF-QUOT lake inside.LAT jump-NAR
Having seen them, he jumped into the lake to catch one of them.

d. *kas-eλi qedo ʕodak'a r-iʁ-e r-īni*[20]
jump-when after duck.PL NP-fly-PCV NP-go.NAR
As he jumped, the ducks flew away.

e. *qe molla-sw-e ʕodak'a-li-ga eqaj-e taχi-gunu īgora b-eχ-e,*
then Molla-OM-ERG duck.PL-ONP-LAT look at-PCV pocket-EL bread N-take-PCV
Then Molla looked at the ducks, took some bread from his pocket,

f. *īhora geƛi tūk-e tūk-e īgora q'-ōnuλa w-ašl-ēri.*
lake inside.ESS dip-PCV dip-PCV bread eat-INF M-begin-NAR[21]
dipped it into the lake, and started eating.

g. *miq'o-gu m-ĩda ãdo-lo-gu če-sw-a harigw-iri,*
road-EL HP-go.IPF(P) person.PL-OHP-EL one-OM-DAT see-NAR
molla-su-ga eƛ'-iri:
Molla-OM-LAT say-NAR
One of the persons walking on the road saw that and asked Molla:

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of the label selected here is that the narrative use of this form is far more frequent than its use in deontic questions.

[20] *mūnuλa* 'go' shows in certain forms a stem |*-āʔ-*|, but in most of the forms of this verb, no segment representing the stem can be isolated, and the only manifestations of the stem are the lengthening of the first suffixal vowel and the nasalization of affixes.

[21] The variant *-ēri* of the narrative ending *-iri* is due to the amalgamation of an underlying *a* belonging to the stem |*-ašla(j)-*| 'begin': the underlying representation of *wašlēri* is |*w-ašla(j)-iri*|.

h – *čugu* *me-de* *hušte* *q'-āne* *goda?*
why 2S-ERG so eat-ICV COP.N
– Why are you eating in this way?

i *molla-sw-e-la* *eƛ'-iri:* *– ha-be* *ʕodek'e-ƛi* *čupa* *goda.*
Molla-OM-ERG-and say-NAR DEM-N duck-GEN soup COP.N
And Molla said: – That's duck soup.

j *ħepi,* *čik'wada* *žahuda* *godi.*
unfortunately a little cold COP.N
Unfortunately it is a bit cold.'

(11) a. *me-de* *či* *eƛ'-eλi* *is-e* *ĩc'o* *aχ-iri?*
2S-ERG what say-when 1PE-ERG door open-NAR
lit. 'We must open the door when you say what?'

b. *du* *miqadi* *čuge* *q'el-ēri?*
2S.O moustache.PL how dress-NAR[22]
(a barber to his customer) 'How must I dress your moustache?'

Consequently, within the frame of a synchronic morphological analysis, it would not be correct to consider the four suffixes *-ari*, *-ada*, *-iri*, and *-ida* as involving two binary choices *-i-* vs. *-a-* and *-ri* vs. *-da*. However, the form with the ending *-ida* is also the imperfective participle (in which case I gloss it IPF(P)). It already appeared in this use in ex. (10g) above, and another illustration is given at ex. (12). The participial use of the verb form with the imperfective positive ending *-ida* provides additional evidence that such a segmentation was probably correct at some stage in the history of Akhvakh.

(12) *de-de* *ruša* *b-uq'-ida* *ãžite*
1SG-ERG tree N-cut-IPF(P) axe
'the axe with which I am cutting the tree'

We must therefore explain the lack of semantic parallelism, in the present state of the language, between the two apparently parallel couples of verbal endings *-ari* / *-ada* and *-iri* / *-ida*. A plausible explanation of this mismatch is that it results from divergent evolutions undergone by forms that originally were analyzable as a combination of two binary distinctions, *-a-* (perfective) *vs. -i-* (imperfective) and *-ri* (finite) *vs. -da* (participle). At that stage, it is reasonable to suppose that, when forms with the ending *-da* were used as heads of independent clauses, the contrast *-ri* vs. *-da* involved TAM

[22] The variant *-ēri* of the ending *-iri* has the same explanation as in ex. (10f) above; the underlying representation of *q'elēri* is |*q'ela(j)-iri*|.

distinctions, not only in combination with *-i-*, but also in combination with *-a-*. More precisely, given the evidence that *-da* was originally a participle marker, a plausible hypothesis is that the independent use of forms showing this ending implied the kind of TAM values typically expressed by participles used as heads of independent sentences: perfect in the case of *-a-da*, progressive in the case of *-i-da*.

The evolution leading to the destabilization of this system was probably the emergence of the two analytic forms that, in present-day Akhvakh, express the meanings of perfect (*perfective converb* + *copula*) and progressive (*imperfective converb* + *copula*). Starting from that, the simple forms of the perfective and the imperfective were affected by divergent evolutions:

– the two simple forms of the imperfective (*-iri* and *-ida*) were maintained with very different TAM values (the narrative use of *-iri* resulting probably from the maintenance of the former use of an imperfective form as a 'historical present');

– by contrast, the development of the analytic perfect resulted in blurring the TAM distinction originally expressed by the choice between *-ari* and *-ada*.

Most often, such situations of synonymy between formally distinct grammatical forms end with the elimination of one of the two competing forms. But another possible evolution is the maintenance of the formal distinction with a new function. This is precisely the hypothesis I propose to explain the emergence of person agreement in Akhvakh: the participle originally used with a perfect meaning was retained in clauses involving an A or S_A argument identical with the speech act participant in charge of the assertion, whereas the finite form of the perfective was retained in clauses involving an A or S_A argument different from the speech act participant in charge of the assertion, and in clauses involving no A or S_A argument.

The obvious weakness of this hypothesis is that the functional motivation of the proposed scenario is not clear: why should perfect have a particular affinity with situations in which the event referred to involves a relatively active participant who is at the same time the speech act participant in charge of the assertion? However, in addition to morphological evidence, the plausibility of this hypothesis is reinforced by the fact that a similar evolution can be reconstructed in at least one other language, in which however it did not lead to the emergence of person agreement, since person agreement already existed, but only to a renewal of person agreement morphology.

6. Similar developments in other languages

The reanalysis of a TAM distinction as a person distinction is certainly not a common phenomenon. However, the case of Akhvakh is not entirely isolated. The Turkic language Azerbaijani is another case in point.[23]

[23] This coincidence may well involve areal convergence, but direct influence of Azerbaijani on Akhvakh is not a plausible explanation: with the only exception of very young children, speakers of the Axaxdərə

Azerbaijani has two synonymous perfect markers, *-mIş* and *-(y)Ib*,[24] with the following distribution: in the 1st person, *-mIş* is the only possibility; in the 2nd and 3rd persons, both *-mIş* and *-(y)Ib* are possible, but in the 3rd person, there is a strong tendency to prefer *-(y)Ib*:

(12) The Azerbaijani perfect

bax-mış-am	'I have looked'
bax-mış-san ~ bax-ıb-san	'You (sing.) have looked'
bax-ıb (~ bax-mış-dır)	'(S)he has looked'
bax-mış-ıq	'We have looked'
bax-mış-sınız ~ bax-ıb-sınız	'You (pl.) have looked'
bax-ıb-lar (~ bax-mış-lar)	'They have looked'

This paradigm clearly results from the fusion of two originally distinct paradigms: in other Turkic languages, the choice between *-mIş* and *-(y)Ib* does not involve person distinctions, and the verb forms in which these suffixes occur differ in their TAM meaning or syntactic distribution.[25] The situation of Azerbaijani is not entirely comparable to that of Akhvakh, since it involves no *declarative vs. interrogative* contrast, but the fact that the suffix *-mIş* obligatory with 1st person subjects is also a participle marker (as in *mühazirəyə qulaq as-mış tələbələr* 'the students having listened to the lecture'), whereas the form preferred with 3rd person subjects has no participial use, is reminiscent of the situation observed in Akhvakh.

7. Conclusion

In a language already having person agreement, like Azerbaijani, the establishment of a person-driven distribution of two synonymous TAM markers does not create new morphological distinctions and new rules of syntax: it just affects the expression of TAM and person distinctions, creating a paradigm in which the feature 'person' manifests itself, not only in the choice of the personal ending, but also in the choice of the affix filling the TAM marker slot. But in a language originally devoid of verbal affixes expressing person, one can easily imagine that the same type of evolution may be

variety of Akhvakh are all bilingual in Akhvakh and Azerbaijani, but person agreement is attested in the variety of Akhvakh spoken in the Akhvakhskij Rajon of Daghestan too, and the speakers of the Daghestanian varieties of Akhvakh have no contact with Azerbaijani. In addition to that, the hypothesis of a transfer of the Azerbaijani pattern could not explain the inversion of person marking between assertive clauses and questions observed in Akhvakh.

[24] *I* represents an underspecified high vowel with 4 possible values (*i, ü, ı,* and *u*) determined by vowel harmony.

[25] For example, in Turkish, *-mIş* is a past evidential marker, and *-(y)Ib* occurs only in a non-finite verb-form (converb).

responsible for the emergence of new distinctions involving person in a direct or indirect way, and the evidence examined in the previous sections suggests that this is precisely what occurred in Akhvakh.

ABBREVIATIONS

1D/2Q : 1st pers. in declarative clauses, 2nd pers. in questions
1S : 1st pers. sing. pronoun
2S : 2nd pers. sing. pronoun
1PE : 1st pers. pl. (excl.) pronoun
1PI : 1st pers. pl. (incl.) pronoun
2P : 2nd pers. pl. pronoun
ABS : absolute
COP : copula
DAT : dative
DEM : demonstrative
EL : elative
ERG : ergative
ESS : essive
F : singular human feminine
GEN : genitive
HP : human plural
ICV : imperfective converb
INESS : inessive
INF : infinitive
INJ : injunctive
IPF : imperfective
LAT : lative
M : singular human masculine
N : singular non-human (neuter)
NAR : narrative
NEG : negation
NP : non-human (neuter) plural
O : oblique stem
OF/N : oblique stem, singular feminine or neuter
OHP : oblique stem, human plural
OM : oblique stem, singular masculine
ONP : oblique stem, non-human plural
(P) : used as a participle
PCV : perfective converb

PF : perfective
PL : plural
PTC : participle
QUOT : quotative

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