

# Agreement in Some Languages of Daghestan and The Architecture of Grammar

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## I The Northeast Caucasian Languages: Basics

1. The NEC family (van den Berg 2005) consists of at least 30 distinct languages (probably many more, taking into account diversity within some such as “Dargi/Dargwa” — cf. “Italian”). While there are suggestions of a connection with Northwest Caucasian (Abkhaz-Abaza, Circassian, Ubykh), the amount of solid comparative evidence that supports that relationship is limited and controversial; and essentially nothing serious supports the various proposals that have been made asserting connections to other families (Kartvelian, Hurrian-Urartian, Basque, Na-Dene, “Nostratic,” etc.).
2. The languages tend to have large inventories of consonants (40-50; some more, some less), though not as large as those in the Northwest Caucasian languages, and full sets of vowels (sometimes with added nasality, pharyngealization and/or length). Tautosyllabic consonant clusters are rare, unlike the Kartvelian languages.
3. A feature of central importance in nearly all of the languages (except Lezgian, Agul and Udi) is the assignment of nouns to **Noun Classes** (grammatical genders). Typically, some of these are partially based on semantics but primarily arbitrary, and the class system usually includes the marking of number (though number may also be marked separately in some languages). A simple system is that of Avar (Ebeling 1966, Charachidzé 1981), which distinguishes male persons, female persons, and non-persons, and conflates the three in a distinct plural class, each with a distinctive marker:

|      | SG | PL  |
|------|----|-----|
| MASC | w  | r/l |
| FEM  | j  | r/l |
| NEUT | b  | r/l |

4. Somewhat more typical is the system in Archi (Kibrik 2004: 308; Kibrik 1977: I:55 *apud* Harris & Antonenko 2009) with 8 classes, four of which are (minor) variants of the other four:<sup>1</sup>

| Class | SG    | PL |                   |     |             |
|-------|-------|----|-------------------|-----|-------------|
| I     | w     | b  | bosor             | w-i | ‘man is’    |
| II    | d-/r- | b  | ʃonnol            | d-i | ‘woman is’  |
| III   | b     | ∅  | x <sup>s</sup> on | b-i | ‘cow is’    |
| IV    | ∅/-t’ | ∅  | q’onq’            | ∅-i | ‘book is’   |
| V     | w     | ∅  | zon               | w-i | ‘I.MASC am’ |
| VI    | d-/r- | ∅  | zon               | d-i | ‘I.FEM am’  |
| VII   | b     | b  | χalq’             | b-i | ‘nation is’ |
| VIII  | ∅/-t’ | b  | lo                | ∅-i | ‘child is’  |

5. Characteristic of the languages of the family is a basically ergative case-marking pattern. Nouns generally have two stems, one for the Absolutive and another for oblique cases. Hunzib (van den Berg 1995) for example has a number of ways of forming the singular oblique stem, but generally forms the plural oblique by adding *-la*

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<sup>1</sup>It is clear (Chumakina et al. 2007, Chumakina & Corbett 2008) that there are only four singular noun classes in Archi, with two additional plural classes, one essentially for humans and one for non-humans. Kibrik’s analysis of this system as involving eight classes is based on the fact that some nominals, including first and second person plural pronouns and some others, show the “wrong” plural form. The analysis of these facts is complex and interesting, but not directly relevant to my concerns here.

to the basic plural form. Cases other than the Absolutive are formed by adding endings to the appropriate oblique stem; thus, *ože* ‘boy’, GEN *ož-di-s*, ERG *ož-di-l*; *ož-da* ‘boys’, GEN *ož-da-la-s*, ERG *ož-da-l-lo*. The general category of ‘oblique’ is one in terms of which some nominal modifiers in some languages may agree with their head; modifiers do not otherwise agree in case.

6. Apart from the Absolutive (used for the subjects of intransitives<sup>2</sup> and the affected direct object of transitives), overtly marked cases corresponding to grammatical roles include the Ergative (for transitive subjects), sometimes a distinct Instrumental, the Dative (used for the experiencer of some psychological predicates) and the Genitive. In addition, most of the languages have famously rich systems of local cases — sometimes 40 or 50 of these, although generally organized along a small number of dimensions that are orthogonal and marked by separable agglutinative elements.
7. Pronouns have distinct forms for first and second person, sometimes distinguishing inclusive and exclusive in the plural. They have case paradigms related to those of nouns, although some languages (including Tsez, Bezhta, Tabassaran and Udi, among others) do not distinguish Absolutive from Ergative in the first and second person pronouns. Interestingly, in at least one language (Andi), female speakers distinguish first person Absolutive and Ergative forms, but male speakers do not. Demonstratives are used for third person pronouns.
8. Verbs distinguish a number of tenses, and in some languages show distinct perfective *vs.* imperfective stems. Apart from agreement, much of the internal morphology of verbs is irrelevant here. It is worth noting, however, that all of the languages have analytic verbal forms consisting of a gerund or participle together with an auxiliary verb in addition to basic inflected forms.

## 2 Noun Class Agreement in NEC

1. Whether a potentially agreeing element will manifest agreement is to some extent idiosyncratic. The agreement itself may be marked by a prefix, an infix, a suffix, or more than once on the same word. For instance, in Khwarshi (Khalilova 2009: 99ff.), some adjectives show agreement prefixes, some show suffixes, and others show no agreement:

- (a)  $\emptyset$ -*ogu obu* ‘good father(I)’, *y-ogu kad* ‘good girl(II)’, *b-ogu zihe* ‘good cow(III)’, *l-ogu lože* ‘good word(IV)’
- (b) *bercina-y kad* ‘beautiful girl(II)’, *c’odora-w uže* ‘clever boy(I)’, *sihara-b zor* ‘sly fox(III)’
- (c) *goqqu uže/kad/lože/* ‘beloved boy/girl/cow’; *u’ana bekol/mači* ‘red snake/shoe’

2. Commonly, words beginning to a category that may show agreement will be non-agreeing if they begin with a consonant, a fact that might be relegated to the phonology (cluster reduction). In most of the languages, however, at least some vowel initial words also fail to show agreement (color adjectives like *u’ana* ‘red’, *aluk’a* ‘white’, etc. in Khwarshi, as illustrated above), indicating that a lexical specification is involved. In addition, some suffixes contain a ‘slot’ for a class agreement marker independent of any other(s) occurring on the base to which they are added. Some of these will be illustrated below.
3. Throughout the family, verbs agree in Noun Class with the Absolutive DP of the clause or, within the DP, with the head noun. Simple examples from Archi (Kibrik 1997, 2004) are given here:

- (a) *bošor*            *q<sup>o</sup>ʔa*  
       husband(I) I.came  
       The husband came
- (b) *ʔonnol*        *da-qʔa*  
       wife(II) II-came  
       The wife came

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<sup>2</sup>Most syntactically intransitive verbs have Absolutive subjects, although in some languages some such verbs take their subjects in other cases. The most notable phenomenon of this sort is the possibility of Absolutive/Ergative contrasts reflecting semantic differences in Batsbi (Holisky 1987).

- (c) dogi            ba-q<sup>1</sup>a  
 donkey(III) III-came  
 The donkey came
- (d) godo-r    řanna    iqlaw    barsargat'    b-arsar  
 this-II    lady.ERG    always    shawl(III)    III-wears  
 This lady always wears a shawl

4. When the sentence involves an auxiliary and a non-finite form, the agreement pattern is for both verbs (or all, in case of more complex forms) to show agreement with the Absolutive DP:

- (a) diya            w-arřarři            w-i  
 father(I) I-lying.down I-is  
 Father is lying down
- (b) buwa            d-arřarři            d-i  
 mother(II) II-lying.down II-is  
 Mother is lying down
- (c) buwa-mu            ř<sup>o</sup>alli            b-arři            b-i  
 mother(II)-ERG bread(III) III-baking III-is  
 Mother is baking bread
- (d) řanři            barq            ba-sas            e-b-diřugu  
 yesterday sun(III) III-seized be<III>.DUBITATIVE  
 (I wonder whether) there should have been a solar eclipse yesterday
- (e) zon            w-irř<sup>o</sup>mus            k<sup>o</sup>er  
 me(MASC,V) V-to.work be.able<V>  
 I am able to work
- (f) zari            bařəřa            a-b-řas            be-ker  
 me(MASC,V).ERG ring(III) put.on<III> III-be.able  
 I am able to put on a ring

5. What is quite striking about this agreement pattern is the range of elements to which it can extend. This includes some adverbs; more remarkable, perhaps, is the fact that certain pronominal forms, such as the oblique singular first person singular pronoun and the first person plural inclusive ergative pronouns in the examples below all show agreement in noun class with the Absolutive DP of their clause:

- (a) buwa-mu            b-ez            diřa-b-u            ř<sup>o</sup>alli            a-b-u  
 mother(II)-ERG III-me.DAT early<III> bread(III) made<III>  
 Mother made bread for me early
- (b) diya-mu            ř-ez            dita-t'-u            noř'            a-ř-w  
 father(I)-ERG IV-me.DAT early<IV> house(IV) made<IV>  
 Father made a house for me early
- (c) nena-b-u            ř<sup>o</sup>alli            a-bu  
 we.IINCLPL<III> bread(III) made<III>  
 We (inclusive) made bread

6. Harris & Antonenko (2009) discuss an emphatic element *-ej-CM-u* that can be added to various adverbial types, where the 'CM' represents a position for a class marker agreeing, again, with the Absolutive of the clause. This is illustrated below. Particularly striking is the second example, in which an emphatic reflexive pronoun, itself already containing an agreement element *-a-CM-u* agreeing not with the referent of the reflexive but rather with the Absolutive, is reinforced by this suffix and thus doubly linked to the Absolutive rather than to the agent DP with which it is coreferential.

- (a) tu-w-min šanʁ-ej-b-u                      no<sup>ʃ</sup>š                      b-uʔneli  
 he-I-GEN yesterday-EMPH<III> horse(III) III-ran.away  
 His horse ran away ALREADY YESTERDAY
- (b) to-r-min ženn-a-b-ej-b-u                      no<sup>ʃ</sup>š                      b-it'ebrali  
 she-II-gen self-EMPH<III>-EMPH<III> horse(III) III-lost  
 (She) lost her horse by herself

### 3 Noun Class Agreement as a (Potential) Problem for Baker's (2008) Theory

1. The theory of Agreement in Baker 2008 treats basic differences in Agreement systems in terms of two general parameters:

**The Direction of Agreement Parameter:** F agrees with DP/NP only if

- (a) DP/NP asymmetrically commands F (upward agreement); *or*
- (b) F *c*-commands DP/NP (downward agreement; only suggested for Burushaski) *or*
- (c) F *c*-commands DP/NP or *vice versa* (bidirectional agreement).

**The Case-Dependency of Agreement Parameter:** F agrees with DP/NP only if F values the case feature of DP/NP or *vice versa*.

2. The relevance of this here is the following: In auxiliary+verb constructions, one set of languages (e.g., Bantu) have full person-number-gender agreement on both verbs, while another set (e.g., IE languages) only show agreement on the main (finite) verb. Baker argues that the possibility of multiple agreement depends on the setting of the Case-Dependency parameter: if this is “yes,” as in IE, only a single verb can agree with a given argument (without resulting in multiple case assignment to the same DP/NP). If it is “no” agreement can take place with arguments to which the agreeing element does not assign case. The NEC languages manifest extensive multiple agreement (apparently like Bantu), and we would like to know if their structure is consistent with his account.
3. Harris & Antonenko's (2009) argue that it is not:
- (a) Agreement in NEC languages such as Archi is dependent on case, since the class markers always agree with Absolutive DPs,<sup>3</sup> so the value of the “CDAP” must be “yes”.
  - (b) Archi shows agreement with the same Absolutive DP on multiple elements of the clause, some of which cannot be responsible for assigning case to this DP, so the value of the CDAP must be “no.”
  - (c) An alternative mechanism, *Concord*, cannot account for the multiple agreement because, for Baker, concord is universally linked to case marked elements, such as adjectives or participles. In Archi, the multiple agreement shows up on converbs, some adverbs, and some pronouns.
  - (d) Therefore, Baker's theory makes the wrong predictions about languages like those of the NEC family.
4. But the facts cited by Harris & Antonenko do not really pose the problem for Baker's view that they claim to see. Let us first note that the agreement just discussed in Archi is agreement in noun class,<sup>4</sup> as is true for the Absolutive agreement we see in nearly all of the NEC languages. This is important, because Baker makes a point of the difference between agreement in gender and/or number, on the one hand, which is also found in adjectives, and agreement that includes person on the other. The latter is the kind that is characteristic specifically of verbs; he analyzes it as falling under another principle, the “Structural Condition on Person Agreement” for which see Baker (2008: ch. 4) and Baker (to appear).

<sup>3</sup>I ignore here the fact that internal to the DP, class agreement is with the head, which may not be Absolutive. I will assume that DP-internal concord is a matter to be resolved independently of the main facts of agreement within the clause.

<sup>4</sup>Corbett has argued (see Chumakina et al. 2007, Corbett forthcoming: ch. 8) that Archi agreement involves person as well as gender(/noun class). This is based on the fact that first and second person plural DPs trigger the kind of plural agreement usually found for inanimates, rather than that for animates as would be expected. The facts are complex and interesting, but do not in my view show that the language displays agreement *in* person. Rather, person is one of several lexical factors that determine the way DPs behave for the purpose of noun class agreement.

5. That difference matters, because given the content of the kind of agreement under discussion, it could possibly be adjectival rather than verbal in its properties. It is quite clear from the range of agreeing elements illustrated above in Archi sentences that even though this agreement is always with an Absolutive, it is *not* agreement that is linked to case assignment. Surely the adverbs and pronouns that agree with the absolutive DP are not elements that assign case to it. This in turn suggests that such agreement has nothing to do with case assignment, and thus that the logic of the “Case Dependency of Agreement” parameter does not apply. Baker’s discussion of that parameter derives the conclusion that multiple agreement is impossible in case-sensitive agreement systems from the fact that it would entail multiple case assignment to the same nominal. But if the agreement in question is not connected with case assignment, that argument does not apply.
6. So how could Baker approach these facts? I suggest that since the agreement in question is with Absolutive DPs, and Absolutive is precisely the case that is not formally marked (and usually represented by the unelaborated stem) in any of the relevant NEC languages, we could say that the agreeing forms (verbs, adjectives, adverbs, pronouns, emphatic suffixes) are all dominated by a projection of “F<sub>A</sub>” (the functional category characteristic of adjectives in Baker’s system, and the locus of gender agreement).
7. Each such occurrence of F<sub>A</sub> bears the feature [ABSOLUTIVE], and also a set of unvalued Noun Class features. These Noun Class (and in some languages, separate number) features are then filled in by “co-valuation” with a structurally suitable element bearing [Absolutive] case and specified class features. In the case of the main verb, the position of the verb is similarly within a projection of such an F<sub>A</sub>, as  $[_{F_A P} [_{F_A ABS}] V]$ . This structure is in turn (eventually) dominated by T, which provides Tense, while the class agreement is associated with F<sub>A</sub>, and not with T. This whole apparatus is independent of anything that could conflict with the Case Dependency of Agreement parameter.
8. In some of the languages, such as Avar, predicative adjectives (including reduced relative clauses) have two instances of class agreement. One of these might be associated with the adjective directly, and the other might be a corresponding F<sub>A</sub> associated with a null PRED.
9. Also of interest is the possibility of replacing a standard transitive construction, with ergative Agent, Absolutive Patient and consistent agreement in class with the Absolutive by an alternative structure in which both Agent and Patient are marked Absolutive. A representative pair from Archi (Kibrik 2004: 353) is given below.

- (a) diya-mu      horo:key-t'-u      čixir      ∅-c'arši      e-∅-di  
 father(I)-ERG long.ago<IV> wine(IV) IV-drinking AUX<IV>  
 Father was drinking wine a long time ago
- (b) diya      horo:key-w-u      čixir      ∅-c'arši      e-w-di  
 father(I) long.ago<I> wine(IV) IV-drinking AUX<IV>  
 FATHER drank wine a long time ago

Semantically, the effect of the difference is to focus the Agent (*diya* ‘father’) in the ‘double-absolutive’ structure. In terms of the agreement pattern, the effect is to limit agreement with the Patient to the lexical verb that takes this as its object; agreement with the Auxiliary and other sentence constituents is now with the Agent.

10. The ‘double-absolutive’ construction appears in quite a number of the languages of the family, with the same properties in each. It is notable that this construction is only possible with analytic verb forms (or other Aux+V constructions), never with simple inflected forms. This makes it plausible to interpret the difference as one between a mono-clausal and a bi-clausal structure<sup>5</sup> (equivalently, as one with *vs.* without restructuring, or clause union), or as the difference between a simple structure and a sort of cleft (‘father was drinking wine’ *vs.* ‘father was [the one] drinking wine’). Consistent with this analysis is the pair of Lak sentences below (Kibrik 1979: 76):

- (a) ninu      qatluwun-m-ej      čet'      lowsunej      d-ur  
 mother(II) house-III-LOC bread(III) carrying II-Aux  
 Mother is carrying the bread into the house

<sup>5</sup>Cf. Bokarev 1949; Crisp 1980 for suggestions along this line in traditional terms.

- (b) ninu            qatluwun-n-ej    čet'            lowsunej    d-ur  
 mother(II) house-II-LOC bread(III) carrying II-AUX  
 Mother is carrying the bread into the house

These two differ morphologically in that the adverb agrees either with the Patient (in the first case) or the Agent (in the second); semantically, they differ in that in the second case, “emphasis is laid on the fact that mother is going towards the house,” while the first “stresses the fact that the bread is being carried into the house.” This would seem to correspond to a syntactic difference in whether the adverb is a constituent of the higher or the lower clause of a bi-clausal structure.

- II. The same interpretation would seem to be supported by the corresponding construction in Avar, illustrated by the pair below (Ebeling 1966: 79).

- (a) čí-jas:            t'axál            r-ósule-l            r-úgo  
 man(MASC)-ERG books(PL) PL-buying-PL PL-AUX  
 The man buys the books
- (b) či            t'axál            r-ósule-w            w-úgo  
 man(MASC) books(PL) PL-buying-MASC MASC-AUX  
 The man buys the books

In the basic ergative pattern, all agreement is with the single Absolutive phrase. Unlike Archi, however, Avar has two slots for class markers in non-finite forms (as well as with Adjectives and other attributives). The ‘double absolutive’ structure shows that the prefixal slot is oriented toward the Absolutive of the clause in which the lexical verb appears. The suffixal slot, however, is oriented toward the argument to which this clause is an attributive, in structures where these are distinct.

12. These constructions display two Absolutive DPs in what is arguably a complex sentence, and show that the co-valuation of the Noun Class features of an element is with the ‘closest’ Absolutive. All of this is entirely consistent with Baker’s views, since the kind of ‘Agreement’ that is involved is not the sort which the principles in 1 are supposed to characterize. While there is certainly more to say about how to analyze noun class agreement within Baker’s system, it appears to be quite possible, and thus that the facts considered in the preceding sections do not contradict his claims as much as they might appear to.

#### 4 Person Agreement in NEC

1. A different set of potential problems for Baker is posed by the fact that a number of NEC languages have developed a system of person agreement in addition to the usual system of noun class agreement. Although the conditions governing person agreement vary among the languages involved, a distinguishing characteristic of this morphosyntactic pattern is the fact that unlike noun class agreement, it is *not* in general linked to Absolutive DPs.
2. The first problem this poses is due to the simple co-existence of Noun Class agreement and Person agreement, following different principles, in the same language. Baker rejects the “Borer-Chomsky Conjecture,” according to which different functional heads can display different values for the same parameter(s), and asserts that within a given area of grammar, parametric variation characterizes entire languages and not specific constructions. Since the NEC languages with person agreement apparently have two distinct kinds of agreement with distinct properties, it does not seem possible to characterize ‘Agreement’ in a consistent way for such languages, contrary to Baker’s view.
3. This is not really a problem, though, if Noun Class agreement is not really “Agreement” in the relevant sense. The real issues arise when we consider how Person agreement works. Although mentioned in the traditional descriptive literature on the relevant languages, the potential interest of this phenomenon for the study of ergativity was first pointed out by Harris (1994), on the basis of material from Tabassaran. The relevance to the present discussion derives primarily from the fact that person agreement, in languages with consistently Ergative/Absolutive patterns of case marking and noun class agreement, follows a variety of different patterns, and these typically deviate in some way from the pattern of case assignment.

4. In addition to Tabassaran, some degree of agreement in person (as distinct from noun class) is found at least in Lak, most of the Dargi languages, “Batsbi,” Udi, Akhvakh, some dialects of Avar and Hunzib. General surveys of person agreement in the NEC languages can be found in Helmbrecht 1996, Schulze 2007 and van den Berg 2005, among others. Here I simply note the relevant patterns from a number of languages, providing some data in the Appendix, and leaving a more detailed analysis to subsequent work.

5. Systems of Person Agreement:

**Northern Tabassaran:** Northern dialects mark the verb for the person and number of the subject DP regardless of transitivity, in addition to agreement in Noun Class with the Absolutive DP.

**Southern Tabassaran:** These dialects mark the verb for the person and number of the subject, but have different markers for transitive and intransitive clauses. They have no Noun Class system, and show no Absolutive agreement of this sort. In transitive sentences with overt (i.e., first or second person) subject agreement, the subject marker may optionally be followed by a member of the intransitive set agreeing with the object. This is therefore close to a plain ergative/absolutive agreement pattern.

**Hunzib:** A uniform marker appears on present tense verbs with first or second person subject, regardless of transitivity.

**Lak:** First and second person markers (varying somewhat by tense) appear on verbs, agreeing with the Absolutive argument. Some descriptions treat these not as verb morphology but as a floating focus particle.

**Udi:** Described in detail in Harris 2002. A set of markers agreeing in person and number with the subject appears on a focussed element, or on the verb in neutral focus.

**“Batsbi” (Tsova Tush):** Noun Class agreement is with the intransitive subject or the transitive object, although the transitive subject may be ergative or absolutive depending in part on semantic factors. Verbs are also marked for the person and number of the (non-third person) subject, by different markers depending on whether the subject is absolutive or ergative.

**Dargi Languages:** All of these languages have Noun Class agreement with the Absolutive. In addition, there are markers for first and second person arguments, which may be fully or partially syncretic. These agree in some instances (e.g., Kubachi) with the subject, regardless of transitivity, or sometimes in a way that reflects focus. In most of the other languages, a person hierarchy is involved. Where only one argument is non-third person, it is marked, regardless of grammatical relation. Where both are non-third person, various principles choose one or the other depending on the dominance either of Absolutive (Urakhi) or second person (Khaidak).

6. In all of these cases, Person agreement appears only once in a clause, and thus fits the overall pattern of a language with Baker’s “CDAP” set as “yes,” like the I-E languages. Since Noun Class agreement is not, as argued above, really “agreement” in Baker’s terms, the coexistence of the two in the same language does not conflict with Baker’s rejection of the “Borer-Chomsky Conjecture.” The problem resides in the complexities of Person agreement itself. In most cases, some coherent agreement rule could be concocted to pick out the correct class of arguments to trigger this agreement. An apparent exception is furnished by those Dargi languages in which the choice of agreement trigger is based not on a consistent grammatical relation but rather by a hierarchy of person, since there is no reason to expect the syntax to place all arguments with a given value for person in the same structural position.

## 5 The Interaction of Syntax and Morphology in Agreement

1. The agreement systems of the languages of the NEC family present patterns not directly anticipated in the survey which forms the basis of Baker 2008, and initially appear to present significant problems for the generalizations offered in that work. Closer analysis suggests, however, that the systems of Noun Class agreement found throughout the family are not as problematic as they first appear. In part, this is because they do not involve person, and so do not engage the claims made about agreement *sensu stricto* in Baker’s system. If the mechanism responsible for the transmission of noun class features from an Absolutive DP to other elements in a clause is one of ‘co-valuation’ rather than agreement, an analysis consistent with the theory of that work seems possible.

2. Similarly, the apparent problem presented by the presence of two agreement patterns in a single language, following different principles, may not be as serious as it seems for Baker's attempt to provide language-wide (rather than construction-specific) parameters of agreement. Again, if Noun Class concord and Person agreement belong to different sub-systems of grammar, no problem of this sort arises.
3. There are, however, matters still to be resolved. It is necessary, of course, to flesh out (or replace) the analyses suggested above so as to solidify these conclusions. And in the domain of person agreement, it is still necessary to articulate a means by which a person hierarchy can play a role in determining the controller of an agreement relation, in addition to purely structural factors.
4. I suggest that the path to a resolution of this matter lies in adopting a less "Syntactocentric" theory — in the sense of a view that does not assign all of the responsibility for the description of agreement patterns to the syntax. We should realize, that is, that the syntax is responsible for constructing representations of the morphosyntactic properties that can be realized in the forms of words, but that a distinct part of the grammar, the morphology, is responsible for describing the relation between those properties and aspects of overt word form.
5. Surely the syntax is not the place to describe the difference in the location of the noun class agreement marker in *y-ogu kad* 'good girl(II)' vs. *bercina-y kad* 'beautiful girl(II)' in Khwarshi, for example:<sup>6</sup> in both cases, it should simply assure that the property [CLASS II] is available to the rules of realization of adjectival morphology in the language.
6. The facts from southern dialects of Tabassaran suggest the possibility of a morphological account of the person hierarchy facts in Dargi languages. The fact that both subject and object can potentially be marked on verbs in those dialects indicates that the syntax should provide representations including information about both arguments, and that while the rules of the morphology require that the properties of the subject be marked obligatorily, those of the object are marked optionally.
7. Suppose we said much the same about verbs in Urakhi and Khaidak, and allowed the syntax to construct representations marking the properties of both subject and object. We could then say that when the morphology in Khaidak looks at such a representation, if either argument is second person, that is marked and nothing else, while if there is no second person argument, it looks to mark a first person argument. In Urakhi, in contrast, the morphology looks at the features of the patient; if these correspond either to first or to second person, that is marked and nothing else, and otherwise the morphology looks for first or second person in the features of agent. Rules of both sorts are well attested in the morphologies of other languages (Anderson 1992), and an appeal to them can relieve the syntax of a burden it is ill-suited to bear.
8. A very similar proposal is made for quite a different set of languages by Woolford (2011) within a rather different overall grammatical framework. Woolford too assumes that the syntax constructs structures in which all arguments are represented, and that it is then up to other areas of grammar (those relating syntactic form to PF) to determine which of these are overtly represented in particular cases (by clitics and/or affixes).
9. I conclude that while Baker's views cover a great deal of the ground in supporting an account of agreement morphosyntax, there is still work to be done in developing a comprehensive theory of agreement (surprise!). The facts discussed here suggest that the languages of the NEC family can play a significant role in filling out such a theory.

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<sup>6</sup>Khalilova (2009) suggests that what the adjectives taking suffixed class markers, as opposed to those with prefixed markers have in common is that they are borrowed from Avar, a language whose morphology involves class marking suffixes. If this is the correct generalization, it makes it even less likely that any syntactic account of the difference could be correct.



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## Appendix: Person Agreement Data

### Tabassaran and Hunzib:

- Probably the simplest system of Person agreement, and the one most directly contrasting with the principles of Noun Class agreement, is found in the northern dialects of Tabassaran. Here we find a straightforward set of personal endings, agreeing consistently with the (DP corresponding to the English) subject regardless of the transitivity of the verb:

|      | SG  | PL                |
|------|-----|-------------------|
| 1ST: | -za | -ča               |
| 2ND: | -wa | -č <sup>o</sup> a |
| 3RD: | -∅  | -∅                |

The fact that the 3RD person ending is -∅ is surely not an accident: in general, overt person marking in the NEC languages is confined to the marking of speech act participants (1ST and 2ND persons).

- Northern dialects of Tabassaran have only two noun classes — [Human] and [non-Human], in addition to [Plural] — and the southern dialects have lost the class system altogether, but class agreement can still be seen here in addition to person agreement, as shown here (examples from Magometov 1965: 197f.)

#### Intransitives: *ti-CM-xnuw* ‘fly’

|                        |      | SG          | PL                        |
|------------------------|------|-------------|---------------------------|
| (a) Human subject:     | 1ST: | ti-r-xnu-za | ti-r-xnu-ča               |
|                        | 2ND: | ti-r-xnu-wa | ti-r-xnu-č <sup>o</sup> a |
|                        | 3RD: | ti-r-xnuw-∅ | ti-r-xnuw-∅               |
| (b) Non-Human subject: | 1ST: | ti-w-xnu-za | ti-r-xnu-ča               |
|                        | 2ND: | ti-w-xnu-wa | ti-r-xnu-č <sup>o</sup> a |
|                        | 3RD: | ti-w-xnuw-∅ | ti-r-xnuw-∅               |

#### Transitives: *CM-isnuw* ‘catch’

| Subject | Non-Human object ( <i>žaq’a</i> ‘bird’) | Human object ( <i>baj</i> ‘boy’) |
|---------|---|----------------------------------|
| 1SG     | izu b-isnu-za žaq’a                     | izu d-isnu-za baj                |
| 2SG     | iwu b-isnu-wa žaq’a                     | iwu d-isnu-wa baj                |
| 3SG     | duɣu b-isnuw žaq’a                      | duɣu d-isnuw baj                 |

- Southern dialects of Tabassaran have a more complex system. First, as just noted, they have lost the noun class system and thus display no agreement in that category. The person marking system involves a set of suffixes agreeing with the Subject, but the form of these suffixes differs depending on the transitivity of the verb:

| Subject | Transitive        | Intransitive      |
|---------|-------------------|-------------------|
| 1SG     | -za               | -zu               |
| 2SG     | -wa               | -wu               |
| 1PL     | -ča               | -x,u              |
| 2PL     | -č <sup>o</sup> a | -č <sup>o</sup> u |
| 3       | -∅                | -∅                |

- An additional complication in the southern dialect of Tabassaran is the fact that in transitive sentences with first or second person objects, the (obligatory) subject marker may optionally be followed by a marker agreeing with the object, taken from the intransitive subject set. This set really marks the Absolutive, it appears. The best analysis seems to be to say that in the southern dialect, the verb agrees in principle with both subject and object; while the subject marker (taken either from the Ergative or the Absolutive set) is always realized, the object marker is optional. This system is thus much closer to an Ergative agreement pattern than that of the northern dialect.
- Hunzib (van den Berg 1995) also shows agreement with the subject, regardless of the transitivity of the verb, but here the system is much reduced. The agreement marker -č<sup>o</sup> (-č after a vowel) appears on verbs with first or second person subjects, but only in the present tense. There is no further differentiation of subject person and number, and no marking in other forms of the verb.

## Lak:

1. Lak has developed a person marking system (Burchuladze 1979) which distinguishes speech act participants from others. There are two sets of endings, one ("set 2" below) used only in certain past tenses and the other used more generally.

|      | Set 1     |           | Set 2 |      |
|------|-----------|-----------|-------|------|
|      | SG        | PL        | SG    | PL   |
| 1, 2 | -ra       | -ru       | -jaw  | -jaw |
| 3    | -r/-ri/-∅ | -r/-ri/-∅ | -ja   | -ja  |

2. According to Helmbrecht (1996), these endings consistently refer to the Absolutive DP (intransitive subject or transitive object). An exception to this generalization is found in the double-Absolutive construction, where the personal ending on the verb refers to the Agent.

(a) tanal      na      b-uhajs:i-      jaw  
he(I).ERG me(III) III-caught.ASSERT 1/2  
He caught me

(b) tā      na      b-uhajs:i-      ja  
he(I) me(III) III-caught.ASSERT 3  
HE caught me

3. Most descriptions of Lak treat the person marking elements as part of the morphology of the verb. Schulze (2007), however, argues that they are really floating markers attached to a focussed constituent the sentence, appearing on the verb under neutral focus conditions, thus making the system partially similar to that of Udi.

## Udi:

1. Harris (2002) describes the system of person-marking elements in Udi in considerable detail, and I will only summarize that analysis here. The markers themselves are associated with subjects, although there are distinct sets for use with certain experiencer subjects (the 'Inversion' set below) and for certain expressions of possession along with a few other verbs such as *köfil-* 'like', as well as a special 3SG marker for use in content questions.

|     | General           | Inversion | Possession | Question |
|-----|-------------------|-----------|------------|----------|
| 1SG | -zu, -z           | -za       | -bez, -bes |          |
| 2SG | -nu, -n, -ru, -lu | -va       | -vi        |          |
| 3SG | -ne, -le, -re     | -t'u      | -t'a       | -a       |
| 1PL | -yan              | -ya       | -beš       |          |
| 2PL | -nan, -ran, -lan  | -va, -van | -eř        |          |
| 3PL | -q'un             | -q'o      | -q'o       |          |

2. Notice that this system includes overt markers for the third person. As described by Harris, the reference of these markers is consistently to the subject, but as in the Lak case as described by Schulze, the markers themselves appear on a focussed constituent (or on the verb, in the informationally neutral case). The phonology of these elements is particularly interesting, but not relevant to our concerns here.

## "Batsbi" (Tsova Tush):

1. Batsbi (Holisky 1987; Holisky & Gagua 1994; Kojima 2008) has a system of five noun classes, each with characteristic markers in the singular and the plural. A small number of nouns show a plural marker that does not correspond to the one expected from their singular; rather than analyzing these as constituting additional classes, Holisky & Gagua treat them as belonging to one class in the singular, and another in the plural (similar to Chumakina et al.'s (2007) analysis of similar phenomena in Archi).
2. Case marking is generally on an ergative/absolutive basis, although some verbs (e.g. psychological predicates) take their subject in the dative. The principal exception to this is the fact that many intransitive verbs can take their subject in either the absolutive or the ergative case, depending on the agency of the subject with respect to the action. The details of these patterns are described by Holisky (1987). Noun

class agreement is with the intransitive subject or the transitive object; we cannot say that it is with the Absolutive, because in the case of intransitive verbs with ergative subjects, the noun class still agrees with the subject.

3. In addition to (prefixal) noun class agreement, there is also a system of suffixed markers on verbs. These agree with the subject of the sentence regardless of transitivity, but differ depending on whether the subject is Absolutive or Ergative. There are no overt markers for third person agreement, or for first person inclusive plural; the latter is marked with an enclitic pronoun. This system is sensitive to the case of the subject, as in the southern dialect of Tabassaran — a fact that is more prominent since the case of the intransitive subject can vary (and the suffixal markers covary accordingly). Unlike southern Tabassaran, however, it is only the subject that is marked for person.
4. The subject markers themselves are transparently derived from the independent pronouns. Since non-subject pronouns can attach to the verb as clitics, and clitic subject pronouns are excluded when the person (and case) properties of the subject are marked on the verb, the question naturally arises of whether these markers are actually agreement markers, rather than another set of clitics. Two interesting arguments bearing on this issue are provided by Kojima (2008). First, he notes that while cliticized non-subjects are mutually exclusive with the appearance of free pronouns, subject agreement co-occurs freely with independent subject pronouns. Secondly, he argues that while only one non-subject pronoun can be attached to the verb as a clitic, the presence of a subject marker does not preclude the additional attachment of a (single) non-subject clitic. These facts provide evidence for the claim that the subject markers are not themselves clitics.

### Dargi Languages:

1. The most complicated situation with respect to the person marking system is presented by the Dargi languages, which differ considerably among themselves. As mentioned above, there are several of these, and they differ among themselves rather more than the ‘dialects’ of most of the other languages discussed above. Magometov (1976) provides a summary of facts from Urakhi, Khaidak, and Kubachi (with some comparisons with Lak). Magometov 1963 documents the situation in Kubachi in more detail, and Magometov 1982 covers Megeb. van den Berg (1999, 2001) describes Akusha, a language close to the basis for the artificial literary standard (which itself has no native speakers, and only limited acceptance among speakers of other Dargi languages). Sumbatova & Mulatov (2003) describe Icar.
2. All of these languages have a fully functioning system of noun class agreement, organized as elsewhere in the NEC family and marking agreement with the Absolutive DP in the clause. In addition, markers exist for first and second person arguments; the extent to which these are differentiated varies among the languages. Megeb, for example, has only a single marker (*-ra*) for first person singular and plural, and no others. Urakhi distinguishes number in the second person (*-di* from *-dā*) but not in the first (with *-ra* for both). Kubachi distinguishes all four forms.
3. In all of the languages, the person markers are clearly verbal endings, unlike the situation in Udi (and perhaps Lak). A given verb will take at most one marker, but what is interesting is the choice of argument that triggers this. Most straightforward, perhaps, is the situation in Kubachi, but this is still complicated. In this language, the person agreement marker indexes the subject with both transitive and intransitive verbs. In some tense forms, however (including the present progressive), in case the subject is third person, there are two choices: either the subject or the object can be marked, with a corresponding difference of focus.
  - (a) i. id-dil      du      j-ītul sa-w  
       he(I)-ERG me(II) II-hitting AUX-I  
       He is hitting me (woman)
  - ii. id-dil      du      j-ītul-da  
        he(I)-ERG me(II) II-hitting-1SG  
        I(woman) am being hit by him
  - (b) i. aba-dil            gal      w-alex:unni-sa-j  
       mother(II).ERG son(I) I-feeding-AUX-II  
       Mother is feeding (her) son

- ii. aba-dil                    gal        w-*alx:unni-sa-w*  
 mother(II).ERG son(I) I-feeding-AUX-I  
 The son is being fed by (his) mother

Notice that third person agreement here is overt, in the form of a class marker attached to a cliticized auxiliary verb *sa-CM*.

4. The other Dargi languages all involve conditions that can only be stated in terms of a hierarchy of person. In general, the principle is that where one argument of a transitive verb is first or second person, and the other is third, it is the speech act participant that will be marked, regardless of its grammatical role. This leaves forms with speech act participants as both subject and object to be resolved, and different languages approach this differently. In Urakhi, such 'you-and-me' sentences will always mark the object (Absolutive) argument, while in Khaidak it will always be the second person that is marked, regardless of grammatical role. The other languages generally follow one or another of these patterns, although it is possible that different tense forms show different possibilities.
5. The interesting wrinkle introduced by the Dargi languages, then, is the possibility of person agreement being triggered by an argument not determinable in terms of grammatical relations alone (on the basis either of Ergative/Absolutive alignment or Nominative/Accusative), but only by taking into account the category of person as well.