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Are there subject anaphors?

Abstract: A generally accepted universal property of anaphors in reflexive and reciprocal constructions is that they cannot occur in the subject position of a main clause with a non-subject binder in the same clause. In this article a number of languages are examined that have reflexive elements resembling subjects. But it is argued that some of them can be shown not to be anaphoric pronouns or never to occur in the subject position of active main clauses. Even those languages such as Sanzhi Dargwa (Nakh-Daghestanian) in which anaphoric pronouns can fulfill more prominent semantic functions than their binders are claimed not to have subject anaphors simply because they do not have subjects. The article also offers a semantic explanation for why anaphors can and sometimes even must occur as agents and experiencers in reflexive (and reciprocal) constructions in Sanzhi Dargwa and in other related languages.

Keywords: alignment, anaphora, binding, case, grammatical relations, logophor, Nakh-Daghestanian, reciprocal, reflexive, syntax, transitivity

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1 Universal properties of reflexive and reciprocal constructions

It is widely assumed that antecedents in clause-bound reflexive and reciprocal constructions cannot be more prominent – i.e., be higher on a hierarchy of grammatical roles or semantic functions or having more subject properties – than the reflexives and reciprocals. Various ungrammatical English sentences such as (1) have been listed, and numerous papers on reflexive and reciprocal constructions cite equally ungrammatical sentences from other European and non-European languages.

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- (1) a. **Himself/Herself washed/hit/praised/saw John.*
 b. **Each other washed/hit/praised/saw the girls.*

We can formulate the principle from which the ungrammaticality of (1) is assumed to follow as (2).

- (2) Control Principle (henceforth CP):

No language has locally bound reflexive or reciprocal pronouns in subject position.

Before we turn to the main issue of this article, the universal validity of CP, the term “subject” needs to be clarified at least roughly. I adopt the clustering or feature-based definition of subject that lies at the heart of most discussions of subjects in typology (cf. Keenan 1976, LaPolla 1993, Givón 1997, Van Valin & LaPolla 1997: 250–270, Onishi 2001). Languages are said to have subjects whenever they have a relatively large number of arguments that share certain properties across a cluster of constructions, or, in other words, that are privileged arguments within their constructions. To be privileged in this sense means to show special behavior in morphology, syntax, semantics, or discourse structure. I assume that the central factors for the notion of subject are morphosyntactic. The most widely employed morphosyntactic properties for identifying subjects are dependent marking (case, adpositions), head-marking (verbal indexing), valency changing operations (passivization, antipassivization), relativization site, conjunction reduction, raising and control, quantifier floating, switch-reference marking, anaphora¹ binding, and possessor ascension.

For an argument to be semantically privileged means that it bears certain semantic roles or functions (e.g., agent in contrast to patient). The role of semantic functions in reflexive constructions will be dealt with in Section 4.4. If we want to claim that an argument exhibits special discourse behavior, we need to make reference to notions such as givenness and topic, usually referring to tendencies that can be easily overridden; therefore, discourse factors will not be taken into consideration here. By adopting a definition of subject that is based on features it should be clear that there cannot be a straightforward dichotomy between languages with and without subjects. Rather there are languages in which certain classes of arguments have more or fewer subject properties depending on which and how many constructions are used to prove their privileged status.

¹ In this article I use the term “anaphor” only in reference to reflexive and reciprocal pronouns. I will also use the terms “binder” for the antecedent of an anaphor and “bindee” for referring to the anaphors themselves.

The Control Principle (2) has been explicitly claimed to be universally valid not only by more formally-oriented, but also by functionally-oriented linguists and typologists:²

[...] it is always the object or patient noun phrase which exhibits any special marking for reflexivization. (Faltz 1985: 28)

In every ergative language, as in every accusative language, the ‘antecedent’, i.e. the controller, of reflexivity is A (or S, where it is extended to intransitives). This appears to be a universal and is related to the universal category of subject – that role which semantically controls the activity is also the grammatical controller in a reflexive construction [...]. (Dixon 1994: 138–139)³

The more clearly two arguments differ in prominence, the easier it is for the more prominent argument to antecede the anaphor. Less prominent arguments cannot antecede more prominent arguments. (Haspelmath 2007: 2096)

If, of the two arguments involved in a reflexive or reciprocal construction, one is in subject function, then that argument will be the controller. (Dixon 2012: 152)

In Generative Grammar, the CP is usually attributed to c-command and Principle A (“An anaphor must be bound within its governing category”) of the Binding Theory (Chomsky 1981). Their combination assures that reflexive and reciprocal pronouns have antecedents within the same clause and that they are not the subjects of their clauses. Since their first formulation, these principles, including the c-command constraint, have been investigated and restated over and over, usually without questioning or challenging the CP which follows from Binding Theory. For instance, Pollard & Sag (1992: 266) write that “[a]n anaphor must be coindexed with a less oblique coargument, if there is one”. Similar claims of the validity of CP can be found in Bresnan (2000: 218), de Vos (2007), Marelj (2011), and many more. The Reflexivity Theory of Reuland (2011) rejects the Binding Theory and proposes a new model that, though still making use of c-command, dispenses with Principle A. Reuland admits the possibility of subject anaphors if the anaphors fulfill certain morphosyntactic characteristics. The applicability of his model to the languages treated in this article will be discussed in Section 4.5.

The CP formulated as in (2) considers only syntactic prominence. Falk (2009) differentiates between prominence in terms of grammatical roles (= functional status) and prominence in terms of semantic functions (= argument status). If the

² See also Evans (2008: 61), though he restricts CP to reciprocals involving free NP expressions.

³ This version has found its way into the Universals Archive at the University of Konstanz (<http://typo.uni-konstanz.de/archive/intro/>).

binder of an anaphor is not the subject, it must at least fulfill the more prominent semantic function.

The antecedent of an anaphora must be the most prominent element in its clause. This prominence can be either in terms of functional status or argument status. [...] Crucially, there appears to be no language in which the P argument outranks the A for the purposes of anaphora. (Falk 2009: 62, 66)

Only a few scholars have called into question the validity of the CP by identifying reflexive constructions that posit problems (cf. Everaert 2000, 2011, 2013; Postal & Ross 2009). Albanian and Georgian are repeatedly cited relevant languages. Albanian has nominative-accusative case marking, with subjects marked by the nominative and objects by the accusative. In (3a) the subject is an NP controlling the reflexive pronoun in object position. In contrast, in (3b) the reflexive pronoun occupies subject position and is controlled by an NP in the dative.

(3) Albanian (Indo-European)

- a. *mësuesi nuk e duroi më veten*
 teacher NEG CLIT endure.ACT more REFL.ACC
 ‘The teacher could not endure himself any longer.’ (Hubbard 1983: 68)
- b. *vetja nuk iu durua më mësuesit*
 REFL.NOM NEG CLIT endure.NACT more teacher.DAT
 ‘The teacher could not endure himself any longer.’ (Hubbard 1983: 68)

Similarly in Georgian, which has ergative-absolutive case marking in some of its TAM forms, the pronoun *šen* in (4a) is in the ergative and controls the complex reflexive phrase *šeni tavi* in the absolutive. This example can be contrasted with (4b) where the reflexive phrase takes ergative and the controlling pronoun absolutive case marking.

(4) Georgian (Kartvelian)

- a. *šen ac’ame šen-i tav-i*
 2SG.ERG tormented 2SG.POSS-NOM REFL-NOM
 ‘You tormented yourself.’ or ‘You made yourself suffer.’ (Amiridze 2003)
- b. *šen-ma tav-ma gac’ama (šen)*
 2SG.POSS-ERG REFL-ERG tormented (2SG)
 ‘It was yourself who tormented you.’ or ‘It was yourself who made you suffer.’ (Amiridze 2003)

In principle, there are three possible alternatives for explaining away constructions that seem to contradict the CP:

- (i) the constructions do not contain anaphors, but use other pronouns or no pronouns at all for the expression of reflexivity and reciprocity;
- (ii) the subject positions in which anaphors can occur are not real subject positions;
- (iii) the language does not have subjects.

In this article I explore all three alternatives. I will largely restrict myself to reflexive constructions. Although reflexive and reciprocal pronouns are often treated together as anaphors, with the CP assumed to be valid for both, this does not need to be the case. A number of authors have argued that reflexive and reciprocal constructions should be analyzed separately because they differ in their syntactic properties (cf. Lebeaux 1983, Heim et al. 1991, Everaert 2000, Bhat 2004: 85–87). This is partially true for the languages investigated here. However, I will take a short look at reciprocal pronouns as far as this is relevant for the investigation of the CP.

The structure of the article is as follows: In Section 2 I will discuss Albanian, Georgian, and similar examples, and show that for these languages alternative explanations of the types (i) and (ii) are available. In Section 3 I will add a third type of language to the discussion that appears to have subject anaphors, coming from the Oceanic and Nakh-Daghestanian families. Section 4 provides a detailed case study of reflexive anaphors and grammatical relations in one Nakh-Daghestanian language (Sanzhi Dargwa), including syntactic, semantic, and pragmatic attempts to explain the particularities of reflexivization. Section 5 discusses subject anaphors in reciprocal constructions and Section 6 concludes.

2 Are there subject anaphors?

2.1 Derived subjects: Albanian and Toba Batak

In Albanian some transitive predicates with nominative subjects and accusative direct objects (5a) have derived counterparts in which what functions as the subject in the transitive clause is marked by the dative, and the former direct object takes the nominative case (5b). The latter construction, called “inverse” by Hubbard (1983), is only available with a restricted set of verbs, e.g., ‘surprise’, ‘feel sorry for’, ‘endure’, ‘believe’, ‘like’, ‘annoy’, ‘seem’, and a few more. With some of these verbs the inverse construction is optional (e.g., ‘believe’, ‘annoy’), with

others (e.g., ‘feel sorry for’, ‘seem’) it is obligatory.⁴ As Hubbard himself notes, these verbs denote mental activities and have experiencers as subjects. Not all psych verbs undergo inversion. In the constructions with nominative and dative (5b), the verb must be marked as being NON-ACTIVE.

(5) Albanian (Indo-European)

- a. *Agimi e kujton kengën*
 Agimi CLIT remembers.ACT song.ACC
 ‘Agimi remembers the song.’ (Postal & Ross 2009: 12, cited from Hubbard 1980: 84)
- b. *kenga i kujtohet Agimit*
 song CLIT remembers.NACT Agimi.DAT
 ‘Agimi remembers the song.’ (Postal & Ross 2009: 12, cited from Hubbard 1980: 84)

If inverse constructions contain reflexive pronouns, then they must occur in the nominative case position and their antecedents must take the dative (6a, 3b), the reverse being ungrammatical (6b).

(6) Albanian (Indo-European)

- a. *vetja iu çudit Agimit*
 REFL.NOM CLIT surprised Agimi.DAT
 ‘Agimi surprised himself.’ (Postal & Ross 2009: 12, cited from Hubbard 1980: 90–91)
- b. **Agimi iu çudit vetes*
 Agimi CLIT surprised REFL.DAT
 Intended meaning: ‘Agimi surprised himself.’ (Postal & Ross 2009: 12, cited from Hubbard 1980: 90–91)

Furthermore, in passive sentences of ditransitive predicates and reflexives, the reflexive pronoun is marked again with the nominative and its antecedent appears in the dative, never the other way around (7).

(7) Albanian (Indo-European)

- vetja i përshkrua Agimit prej gruasë*
 REFL.NOM CLIT described.NACT Agimi.DAT by woman
 ‘Himself was described to Agim by the woman.’ (Hubbard 1983: 67)

⁴ See Hubbard (1985: 83–87) for a more extended list of these predicates.

Postal & Ross (2009), following Hubbard (1980), analyze (3b), (6a), and (7) as intransitive clauses that have been derived from their transitive counterparts by means of a special morphological marking on the verb (non-active marking) and by changing the grammatical roles and the case marking of the arguments. That is, the nominative arguments in (3b), (5b), (6a), and (7) are derived subjects.⁵ Initial non-derived subjects such as the nominative in (5a) or (8a) cannot be expressed by reflexive pronouns:

(8) Albanian (Indo-European)

- a. *Agimi pa veten në pasqyrë*
 Agimi see REFL.ACC in mirror
 'Agimi sees himself in the mirror.' (Hubbard 1983: 64–65)
- b. **vetja pa Agimin në pasqyrë*
 REFL.NOM see Agimin.ACC in mirror
 Intended meaning: 'Agimi sees himself in the mirror.' (Hubbard 1983: 64–65)

Albanian is not the only language that permits subject anaphors if they occur in passives. In Toba Batak (Austronesian), the passive subject can be a reflexive (*dirina (sandiri)*) bound by the passive agent (*si-Torus*) (9a), or the other way around (9b). The grammatical roles are indicated by word order; in the passive the agent must immediately follow the verb. In the active voice the reflexive can never be a subject.

(9) Toba Batak (Austronesian)

- a. *di-ida si-Torus dirina (sandiri)*
 PASS-see HON-Torus REFL
 'Himself was seen by Torus.' (Cole & Hermon 2008: 174)
- b. *di-ida [dirina (sandiri)] si-John*
 PASS-see REFL HON-John
 'John was seen by himself.' (Cole & Hermon 2008: 174)

Albanian and Toba Batak demonstrate that anaphors may occur in the position of derived subjects such as nominal subjects of passive constructions or subjects in inverse constructions. These subjects maintain certain subject properties (e.g., being marked for nominative case), but they are not full-fledged subjects

⁵ Alternatively it has been claimed that in (3b), (5b), and (6a) the NPs marked with the dative are subjects and the anaphors objects (Woolford 1999: 270). In this case the Albanian data would not be relevant for the question of subject anaphors.

(e.g., verbs show default 3rd person singular agreement in Albanian) and they are not agents. Furthermore, verbs in such constructions need special marking (non-active in Albanian and passive in Toba Batak). This means that a modified version of the CP is needed so as to be compatible with the Albanian and Toba Batak evidence:

(10) CP1:

No language has locally bound reflexive pronouns in non-derived subject position.

A short look at semantic roles is also revealing. The Albanian data are not problematic since in the inverse construction the experiencer (the NP in the dative) controls the stimulus (the anaphor in the nominative). This means that the more prominent semantic function acts as the binder and the less prominent function as the bindee, which is what we expect. For Toba Batak a determination of the semantic roles is still needed.

2.2 Nominal anaphors: Modern Greek, Basque, and Georgian

In Georgian, Modern Greek, and Basque reflexivization is expressed by means of a reflexive phrase. In the examples indicated by square brackets in the glosses, this phrase contains a head noun with the meaning ‘head’ in Georgian and Basque, and ‘self’ in Greek. In reflexive constructions the head noun is obligatorily accompanied by a possessive pronoun and an additional definite article in Greek. In Greek, which follows a nominative-accusative pattern, the reflexive phrase is allowed to occur in the nominative case as the subject of its clause with a binder in the dative or in the accusative (11a, b). In Georgian and Basque, which have ergative alignment, the reflexive can occur in the ergative controlled by an optional NP in the absolutive.⁶ Like in Albanian, usually not all verbs permit nominative or ergative anaphors. For instance, in Georgian dative experiencer verbs are not allowed at all in this construction (Amiridze 2006: 212, 227–228). In Greek, normally only unaccusative psych verbs with derived subjects permit nominative reflexives (Anagnostopoulou & Everaert 1999). Similar restrictions are found in Basque (de Rijk 2008: 367).

⁶ Grammatical relations in Georgian are complicated and controversially debated. I follow Harris (1981: 276) who analyzes ergative arguments as in (4a, b) and (12) as (initial) subjects.

(11) Greek (Indo-European)

a. *o eaftos tu_i tu aresi tu Petru_i*
 [the REFL.NOM his] CLIT.DAT likes the Petros.DAT
 ‘Himself pleases/appeals to Petros.’ (Anagnostopoulou & Everaert 1999: 108)

b. *o eaftos tu_i ton provlimatizi/apasxoli/enoxli ton*
 [the REFL.NOM his] CLIT.ACC puzzles/worries/bothers the
Petro_i
 Peter.ACC
 ‘Peter puzzles/worries/bothers himself.’ (Postal & Ross 2009)

(12) Georgian (Kartvelian)

čem_i-ma tav-ma m-i-xsn-a
 [1SG.POSS-ERG REFL-ERG] 1SG.NOM-PRV-save-3SG.ERG.AOR.INDIC
 (*me_i*)
 1SG.NOM
 ‘[Something related to] myself saved me.’ (i.e., my past doings, personal charm, etc. helped me to escape)⁷ (Amiridze 2006: 195)

(13) Basque (isolate)

neure_i buruak -_i izutu nau
 [1SG.GEN head.ERG] 1SG.ABS frightened AUX.1SG.ABS.3SG.ERG
 ‘I have frightened myself.’ (Everaert 2000: 71)

The reason why reflexive phrases can occupy the subject position in these three languages is their structure. Outside of reflexive constructions, the heads of these constructions are used as ordinary nouns. For instance, the Greek reflexive phrase *o eaftos tu* is referential; it permits a reified substantive reading (‘his/her self’), which is the reason why it can occur without antecedent (see Horrocks 1994: 94). Even within the reflexive construction the heads preserve a range of nominal properties, like triggering agreement on the verb. It is only the possessive pronoun that agrees with the antecedent and thus induces the reflexive reading. Therefore, Iatridou (1988) proposes indexing along the following lines:

⁷ As can be seen in this example, reflexive constructions with reversed case marking do not have exactly the same reading as their ordinary counterparts in Georgian. Amiridze (2006: 226–238) describes this as “aspect/property” reading of the anaphors (4b), (12). She adds that the subject in the ergative in reflexive (and reciprocal) constructions is not an agent anymore, but rather a cause, and the nominative object is a theme or stimulus. On such an analysis Georgian does not violate the CP, not only for structural reasons but also for semantic reasons since (4b) and (12) do not have a reflexive interpretation.

(14) Greek (Indo-European)

o Costas_i ton_j θavmazi [ton eafton tu_i]_j
 the Costa CLIT.ACC admires the REFL.ACC his
 ‘Coostas admires himself.’, lit. ‘Costas_i admires it_j [the self of him]_j.’
 (Iatridou 1988: 700)

The same indexing can be adopted for Georgian (Everaert 2001, Reuland 2011: 264) and Basque (Everaert 2000). The indexing makes it clear that it is actually only the possessive pronoun that establishes the coreference between reflexive phrase and binder. This means that Georgian, Greek, and Basque reflexive constructions rather resemble English sentences such as *His (own) intelligence frightens John* (Horrocks 1994: 94) or German sentences such as *Das/sein eigene(s) Selbst erschreckte Jan*. And the Georgian and Basque reflexive constructions in (12) and (13) can be paraphrased with ‘My head saved me’ and ‘My head has frightened (me)’. In such sentences there are no subject anaphors, but only possessor anaphors. Therefore, (11) to (13) do not constitute counterexamples to the CP. It remains open to further research whether languages with similarly structured reflexive phrases also permit subject anaphors. Since according to Schladt (2000) the vast majority of his 148 languages sample has reflexive constructions grammaticalized from body part terms, nouns such as ‘self’, ‘person’, or ‘soul’, this is what one would expect.⁸

8 However, this expectation might be disappointed. I was able to test four more languages with body part reflexives, the Omotic language Wolaitta, the Semitic languages Amharic and Modern Hebrew, and Yoruba. The first three languages do not seem to allow subject anaphors. For Yoruba some exceptions seem possible. Yoruba makes use of reflexive phrases containing the word *ara* ‘body’ and a possessive pronoun:

(i) *o fi iyà jẹ araà rẹ*
 2SG take suffering eat [body.POSS 2SG.POSS]
 ‘You punished yourself.’ or ‘You made yourself suffer.’ (Joseph D. Atoyebi, personal communication)

Subject anaphors are allowed if the reflexive occurs in apposition with a nominalized NP (ii) in which the reflexive is nevertheless the head of the subject phrase. As can be seen from the translation in (ii), the construction with the reflexive in subject position differs slightly in its semantics from (i), where the reflexive functions as object.

(ii) *ológògóró araà rẹ fi iyà jẹ araà rẹ*
 drunk [body.POSS 2SG.POSS] take suffering eat [body.POSS 2SG.POSS]
 ‘Your drunken self punished yourself.’ or ‘Your drunken self made yourself to suffer.’ (Joseph D. Atoyebi, personal communication)

3 A third type of “subject anaphors”: Oceanic and Nakh-Daghestanian languages

The third type of reflexive constructions potentially violating the CP (and also CP1) has largely been neglected in the literature. In these constructions what looks like reflexive pronouns function as agents of transitive clauses or experiencers of affective clauses, but they do not have the structure of possessive phrases and there is no verbal derivation whatsoever involved. Such constructions are found in a number of Oceanic languages including Samoan, Tuvaluan, and East Futunan and are very common in Nakh-Daghestanian languages.

In reflexive constructions of Oceanic languages (cf. Moysse-Faurie 2003, 2008, 2011) pronouns can be in the absolutive or ergative (15, 16). In the Samoan example (16) word order is fixed, i.e., the binder must precede the bindee.

(15) Tuvaluan (Oceanic)

- a. *ne taa nee Lusi a ia loa*
 PST strike ERG Lusi [ABS 3SG INT]
 ‘Lusi killed himself/?him.’ (Besnier 2000: 203)
- b. *ne taa a Lusi nee ia loa*
 PST strike ABS Lusi [ERG 3SG INT]
 ‘Lusi killed himself/?him.’ (Besnier 2000: 203)

(16) Samoan (Oceanic)

- a. *sa sogi e Ioane ia lava*
 PST cut ERG John [3SG INT]
 ‘John cut himself.’ (Chapin 1970: 369, Mosel 1991: 179)
- b. *sa sogi Ioane e ia lava*
 PST cut John [ERG 3SG INT]
 ‘John cut himself.’ (Chapin 1970: 369, Mosel 1991: 179)

However, the pronouns employed in these constructions are not special reflexive pronouns, but ordinary 3rd person pronouns (Mosel & Hovdhaugen 1992: 121, Besnier 2000: 374–376), normally accompanied by emphatic or intensifying particles.⁹

Now, do examples (15b) and (16b) challenge the CP? This does not seem to be the case. First, it is not clear whether the notion of “subject” or similar notions are

⁹ See Moysse-Faurie (2008) for an overview of the use of intensifying or emphatic particles in reflexive constructions in Oceanic languages.

applicable to the Oceanic languages. It has been argued that Samoan lacks the category of subject (Mosel 1987, Mosel & Hovdhaugen 1992: 717). Moyses-Faurie's (2003) analysis of East Futunan points in the same direction. In this case the languages would not have subject anaphors simply because they lack subjects at all.

Second, as mentioned above the pronouns used in reflexive constructions are in fact normal 3rd person pronouns that do not necessarily express reflexivity – in which case they do not qualify as anaphors. In fact, it is rather common for languages of that area to make use of personal pronouns in reflexive constructions, often in combination with intensifiers. At this point it becomes obvious that the origin of reflexive pronouns and their grammaticalization paths matter. If it is possible to use an ordinary personal pronoun in a reflexive construction, then one should not be surprised to also find it in subject position. If an additional marker such as an intensifier is needed to trigger the reflexive reading, this might lead to restrictions on the possible positions of the pronoun-intensifier complex. When the pronoun-intensifier complex fully grammaticalizes into a purely reflexive pronoun that can no longer be separated into two parts, then we get a full-fledged anaphor which, according to the CP, should no longer be possible to occur in subject position. It is possible that some Oceanic languages are in the middle of such a grammaticalization process.

A more serious threat to the CP are the Nakh-Daghestanian languages. Reflexive constructions in Nakh-Daghestanian are mainly expressed through complex reflexive pronouns that consist of reduplicated logophoric pronouns.¹⁰ Some languages also allow simple logophoric pronouns to occur in reflexive constructions, but since this is not the norm I will restrict myself to complex pronouns. There is no marking of reflexivity on verbs. Nakh-Daghestanian reflexive constructions exhibit a very peculiar characteristic because they allow reflexive pronouns to be the experiencers and in some languages even the agents of their clause.¹¹ For instance, in (17a) the binder is in the dative functioning as experiencer, and the anaphor in the absolutive fulfilling the role of the stimulus. In (17b) the case marking is reversed; the anaphor is now in the dative, the case which is normally reserved for the higher role. I will call this phenomenon REVERSAL OF MARKING.

10 Logophoric pronouns are pronouns used in subordinate clauses that indicate coreference with the subject of the main clause, and the predicate in the main clause is a verb of speech, thought, knowledge, or emotion.

11 The same is true for reciprocal pronouns, see Section 5.

- (17) Lezgian¹² (Nakh-Daghestanian)
- a. *Alidiz wičiz_wič k'anzawa*
 Ali.DAT REFL love.IMPF
 'Ali loves himself.'
- b. *Ali wič_wičiz k'anzawa*
 Ali REFL.DAT love.IMPF
 'Ali loves himself.'

The question to be answered now is whether the Nakh-Daghestanian examples represent serious challenges to the CP or whether an alternative explanation is available.

4 Anaphors and grammatical roles in Nakh-Daghestanian

4.1 A case study of Sanzhi Dargwa

Reflexive constructions as in the Lezgian examples (17a, b) are found in the majority of the Nakh-Daghestanian languages. Kibrik (1997: 284, 300–301) cites instances from Icarı Dargwa, and many more examples primarily from Chama-lal, Tindi, and Archi are provided in Kibrik (2003). Ljutikova (1997) presents an account of Tsakhur reflexives. Yamada (2004, 2013) analyzes Avar reciprocal constructions that exhibit the same phenomenon, and Comrie et al. (2011) explore reflexive and reciprocal constructions in the Tsezic languages. Furthermore, reflexive (and reciprocal) constructions illustrating the reversal of roles are also found in recent grammars of Bagvalal (Ljutikova 2001), Tsakhur (Toldova 1999), Icarı Dargwa (Sumbatova & Mutalov 2003: 166–171), Khwarshi (Khalilova 2009: 428–453), and Hinuq (Forcker 2013: 671–674).

In this section I will analyze reflexive constructions in Sanzhi Dargwa. Sanzhi Dargwa makes use of simple and complex pronouns in reflexive constructions. The simple pronouns are not specialized reflexive pronouns, but rather logophors that are also widely used outside the local domain of reflexivization (see Table 1 for a partial paradigm). If an appropriate discourse referent has been established, they can be used like personal pronouns. They can even refer to 1st or 2nd

¹² This and all following unattributed examples from Nakh-Daghestanian languages have been gathered by the author during fieldwork in Daghestan.

Table 1: Reflexive pronouns in Sanzhi Dargwa

	Simple reflexives (logophors)		Complex reflexives (singular)	
	Singular	Plural	Case copying	Genitive reflexive
Absolutive	<i>ca-w /-r /-b</i>	<i>ca-b /-d</i>	<i>cinni ca-w/-r /-b</i>	<i>cinna ca-w/-r /-b</i>
Ergative	<i>cinni</i>	<i>čul</i>	<i>cinni ca-w/-r /-b</i>	<i>cinna cinni</i>
Genitive	<i>cinna</i>	<i>čula</i>	<i>cinni cinna</i>	#
Dative	<i>cinij</i>	<i>čuj</i>	<i>cinni cinij</i>	<i>cinna cinij</i>

persons since these are speech act participants and therefore always established. They also occur in long distance reflexivization. They are clearly morphologically and syntactically distinct from demonstrative pronouns. The latter distinguish various forms according to the location of the referent of the pronoun. Demonstrative pronouns never occur in local reflexive constructions and can modify nouns. Logophoric pronouns do not modify nouns and in contrast to demonstrative pronouns are marked for gender (in the absolutive). Thus, the pronouns used in reflexive constructions of Sanzhi Dargwa are not personal or demonstrative pronouns, in contrast to Oceanic languages, nor are they nouns or of nominal origin, in contrast to Greek, Georgian, or Basque.

In the following section I will only analyze complex reflexive pronouns. They come in two types depending on the case marking of one of the parts. One part of a complex reflexive pronoun, usually, but not necessarily the first part, either copies the case of the binder (Table 1 displays these pronouns with an ergative binder) or is in the genitive.

The complex reflexive pronouns are in complementary distribution with personal or demonstrative pronouns and pattern with reflexives in other languages. The complex reflexive pronouns must be locally bound (18a). The usual c-command requirement holds, i.e., a possessor cannot control a reflexive pronoun (18b).

- (18) a. *Madina-j b-ik-ul=ca-b [aba cinij ca-r*
 Madina-DAT N-want-CVB=COP-N mother REFL.DAT REFL-F
či<r>až-ib-le]
 see<F>-PRET-CVB
 ‘Madina_i wants that the mother_j sees herself_{*i/j}.’
- b. *Madina-la aba cinij ca-r či<r>ig-ul=ca-r*
 Madina-GEN mother REFL.DAT REFL-F see<F>-CVB=COP-F
 ‘Madina’s_i mother_j sees herself_{*i/j}.’

Within a ditransitive construction the direct or the indirect object can function as binder (although simple reflexive pronouns would be preferred in such examples):

- (19) a. *Pat'imat-li Rašid_i surratic:e-w cin-na cinij_i*
 Patimat-ERG Rashid picture.IN-M REFL-GEN REFL.DAT
či<w>ižaq-ul-de
 show<M>-CVB-PST
 'Patimat showed Rashid_i to himself_i on the picture.'
- b. *Pat'imat-li či<w>ižaq-ul-de Arsen-ni-j_i surrat-le-w*
 Patimat-ERG show<M>-CVB-PST Arsen-OBL-DAT picture-SPR-M
či-w_i cinij ca-w
 on-M REFL.DAT REFL-M
 'Patimat showed to Arsen_i himself_i on the picture.'

The reflexive pronoun is interpreted as a bound variable:

- (20) *har durhu^ε-j cin-na ca-w či<w>až-ib*
 every boy-DAT REFL-GEN REFL-M see<M>-PRET
 'Every boy saw himself.'

With transitive and affective¹³ predicates the distribution of the cases in reflexive constructions is free, i.e., either the binder or the pronoun takes the ergative or the dative case suffix:

- (21) a. *Rasul-li cin-ni ca-w / cin-na ca-w*
 Rasul-ERG REFL-ERG REFL-M REFL-GEN REFL-M
gap.w.iṛq'-ul=ca-w
 praise.M-CVB=COP-M
 'Rasul is praising himself.'
- b. *Rasul ca-w cin-ni / cin-na cin-ni*
 Rasul REFL-M REFL-ERG REFL-GEN REFL-ERG
gap.w.iṛq'-ul=ca-w
 praise.M-CVB=COP-M
 'Rasul is praising himself.'

¹³ Affective predicates require an argument in the dative that is normally an experiencer and a second argument in the absolutive that mostly functions as the stimulus. Affective predicates include verbs such as 'see', 'hear', 'know', or 'want, like'.

- c. *Rasul-li-j cinij ca-w / cin-na ca-w*
 Rasul-OBL-DAT REFL.DAT REFL-M REFL-GEN REFL-M
č̣i:g-ul=ca-w
 see.M-CVB=COP-M
 ‘Rasul sees himself.’
- d. *Rasul cinij ca-w / cin-na cinij*
 Rasul REFL.DAT REFL-M REFL-GEN REFL.DAT
č̣i:g-ul=ca-w
 praise.M-CVB=COP-M
 ‘Rasul sees himself.’

There is no semantic or pragmatic difference between reflexive constructions with standard and with reversed marking. This is true independently of the valency pattern of the predicate. The semantic differences between reflexive constructions with standard and with reversed marking that have been reported for other Nakh-Daghestanian languages have not been attested (further discussion in Section 4.3).

The reversal of the marking is prohibited for co-arguments of extended intransitive verbs that are marked with spatial cases. For example, ‘believe’ requires an argument in the absolutive and another argument in the dative. The binder of the reflexive pronoun must be in the absolutive (22a), and any change in case marking leads to ungrammaticality (22b). (A similar restriction has been observed for the Oceanic language East Futunan (Moysse-Faurie 2003: 12).)

- (22) a. *Šamil č̣i<w.w>irχ-ul=ca-w cin-na cinij*
 Šamil believe<M>-CVB=COP-M REFL-GEN REFL.DAT
 ‘Šamil believes in himself.’
- b. **Šamil-li-j č̣i<w.w>irχ-ul=ca-w cin-na ca-w*
 Šamil-OBL-DAT believe<M>-CVB=COP-M REFL-GEN REFL-M
 Intended meaning: ‘Šamil believes in himself.’

There are some restrictions on word order, concerning both standard reflexive constructions and those with reversed marking, but most of the logically available positions for binder and reflexive pronoun are permissible. For instance, examples (21a, b) could also be reordered as in (23):

- (23) a. *Rasul-li ca-w cin-ni gap.w.iṛq’-ul=ca-w*
 b. *Rasul cin-ni ca-w gap.w.iṛq’-ul=ca-w*
 c. *cin-ni Rasul ca-w gap.w.iṛq’-ul=ca-w*
 d. *ca-w cin-ni Rasul gap.w.iṛq’-ul=ca-w*
 ‘Rasul is praising himself.’

This means that the internal order of the case-copying reflexive pronoun is free, the pronoun can also be split up and precede the binder under certain circumstances. However, there are certain restrictions on pronouns preceding the binder (24a), and not every split is allowed (24b). Furthermore, the internal order of the genitive reflexive pronoun cannot be changed (24c).

- (24) a. **cin-ni ca-w Rasul-li gap.w.iṛq'-ul=ca-w*
 b. **cin-ni gap.w.iṛq'-ul=ca-w Rasul ca-w*
 c. **Rasul-li ca-w cin-na gap.w.iṛq'-ul=ca-w*
 Intended meaning: 'Rasul is praising himself.'

The freedom of word order is probably a result of the fact that the part of the complex reflexive pronoun that copies the case from the binder functions as an emphatic reflexive that is added to the simple logophor and thus enforces the reflexive interpretation. In other words, the two parts of the case-copying reflexive pronoun are independent of each other and do not form one word or one constituent. The situation is different with the genitive reflexive which really does form one constituent since the genitive reflexive on its own does not have an independent function.

In sum, in Sanzhi Dargwa reflexive constructions the anaphors can clearly function as A (agents and experiencers). These constructions are not derived or inverted, but plain reflexive constructions with basic transitive and affective verbs. Under certain circumstances these anaphors can also precede their binders. Since the anaphors are not personal or demonstrative pronouns, but must be locally bound, the Sanzhi Dargwa data look like a violation of the CP (and CP1). However, this line of argumentation is crucially dependent on whether the notion of subject can be applied to Sanzhi Dargwa.

4.2 Does Sanzhi Dargwa have subjects?

Nakh-Daghestanian languages including Sanzhi Dargwa have rich case systems and semantic roles such as agent, patient, experiencer, stimulus, recipient, etc. are formally marked by means of case suffixes. But the question to answer before we can claim that Sanzhi Dargwa has or does not have subject anaphors is whether there are enough indications for grouping privileged S and A arguments in various constructions together under the heading of subject. In order to answer this question it is necessary to go through some tests. I will pick out the most common tests for subjecthood and apply them to Sanzhi Dargwa.

Concerning morphological marking, Sanzhi Dargwa has ergative case marking. Only S can unambiguously be identified by its case marking, which is always absolutive. In contrast, A can be marked with the absolutive, ergative, or dative, and O with the absolutive, dative, or certain spatial cases. Sanzhi Dargwa shows gender/number agreement with arguments in the absolutive, which can be, depending on the predicate type, S, A, or O. Furthermore, it has person agreement with many verb forms. With intransitive predicates agreement is triggered by the S argument, and with transitive predicates either by A or O, according to the person hierarchy 2>1>3. Thus, if there is a 2nd person argument (regardless of whether it is A or O), the verb takes a 2nd person agreement. There are no agreement suffixes for 3rd persons. Word order is in principle free, though A-O-V is preferred.

Dixon (1994: 131) notes that the imperative is not a useful subjecthood test since in most, if not all, ergative languages the addressee is the agent in the ergative and not the absolutive patient. Sanzhi Dargwa behaves accordingly: A arguments can be addressees of imperatives, but never O arguments. Relativization does not single out any syntactic position or grammatical relation, because almost all positions can be relativized, including S, A, O, and G, as is typical for Nakh-Dagesthanian languages (cf. Daniel & Lander 2012).

- (25) a. [_ *k:alk:i-le-r* *či-r* *kajč-ib-il*] *durħu^f*
 ABS tree-SPR-ABL on-ABL fall.M-PRET-PTCP boy
 ‘the boy who fell from the tree’ (S)
- b. [_ *t’ams:a* *b-arq’-ib-il*] *rurs:i*
 ERG carpet N-make-PRET-PTCP girl
 ‘the girl who made the carpet’ (A)
- c. [*rurs:i-l* _ *b-arq’-ib-il*] *t’ams:a*
 girl-ERG ABS N-make-PRET-PTCP carpet
 ‘the carpet made by the girl’ (O)

In control constructions A and O (as well as S) are controlled by an argument from the matrix clause:

- (26) a. *Murad-li-j* *a-b-ik-ul-de* [_ *ʔa^ʔli* *q:urt<w>arq’-ij*]
 Murad-OBL-DAT NEG-N-want-CVB-PST ERG Ali push<M>-INF
 ‘Murad did not want to push Ali.’ (controllee = A)
- b. *Murad-li-j* *b-ik-ul=ca-b* [_ *Madina* *či<r>až-ij*]
 Murad-OBL-DAT N-want-CVB=COP-N DAT Madina see<F>-INF
 ‘Murad wants to see Madina.’ (controllee = A)

- c. *Murad-li-j b-ik-ul-de [ʔaʕli-l _ gap<w>arq'-ij]*
 Murad-OBL-DAT N-want-CVB-PST Ali-ERG ABS praise<M>-INF
 'Murad_i wanted Ali to praise him_i.' (controllee = O)
- d. *Murad-li-j b-ik-ul=ca-b [Madina-j _*
 Murad-OBL-DAT N-want-CVB=COP-N Madina-DAT ABS
či<w>až-ib-le]
 see<M>-PRET-CVB
 'Murad_i wants Madina to see him_i.' (controllee = O)

The situation is different in raising constructions, because here only S and A can be raised to the matrix clause:

- (27) a. *Madina r-aʔaš:-ib [_ ħaʕħaʕ<r>ik'-ul]*
 Madina F-begin-PRET ABS laugh<F>-CVB
 'Madina began to laugh.' (controllee = S)
- b. *Murad w-aʔaš:-ib [_ maʕʔlun-te kerx-ul]*
 Murad M-begin-PRET ERG snake-PL kill-CVB
 'Murad began to kill snakes.' (controllee = A)
- c. *Murad w-aʔaš:-ib [_ maʕʔaʕlim či:rB-ij]*
 Murad M-begin-PRET DAT teacher understand-INF
 'Murad began to understand the teacher.' (controllee = A)

O arguments cannot be raised (28). This means that there is a weak indication for subjecthood with S/A arguments as subjects.

- (28) a. **maʕʔlun-te d-aʔaš:-ib [Murad-li _ kerx-ul]*
 snake-PL NPL-begin-PRET Murad-ERG ABS kill-CVB
 Intended meaning: 'The snakes began to be killed by Murad.'
- b. **maʕʔaʕlim w-aʔaš:-ib [Murad-li-j _ či:rB-ij]*
 teacher M-begin-PRET Murad-OBL-DAT ABS understand-INF
 Intended meaning: 'The teacher began to be understood by Murad.'

As the counterpart to coordination in European languages, Nakh-Dagesthanian languages use converb constructions. Coreferent arguments are left covert in one of the clauses (preferably, but not necessarily, in the converb clause). Again, these constructions do not unequivocally indicate a category of subject. An overt S argument in the first clause can correspond to a covert A or O in the second clause (29a, b). If the first clause contains two arguments A and O, then an implicit S in the second clause can be coreferent with any of these two arguments. However, coreference with O is less preferable, i.e., in (29c) the S

argument in the second clause can be coreferent with O in the first clause, or with another argument previously established in the context.¹⁴ In contrast, in (29d) coreference between the A in the first clause and S in the second clause is the preferred reading, and coreference with a 3rd person is rather unlikely.

- (29) a. *aba_i sa<r>eβ-ib-le, _{-i} Madina r-aχ-un*
 mother come<F>-PRET-CVB ERG Madina F-feed-PRET
 ‘Mother came and fed Madina.’ (S = A)
- b. *nursi_i sa<r>eβ-ib, aba-l _{-i} r-aχ-un*
 daughter come<F>-PRET mother-ERG ABS F-feed-PRET
 ‘The daughter came and the mother fed (her).’ (S = O)
- c. *ata-j Madina_i či<r>až-ib-le, _{-i/j} razi r-iχ-ub*
 father-DAT Madina see<F>-PRET-CVB ABS happy F-become-PRET
 ‘Father saw Madina and (she) got happy.’ (O = S)
- d. *Murad-li-j_i Madina či<r>až-ib-le, _{-i} ag-ur*
 Murad-OBL-DAT Madina see<F>-PRET-CVB ABS GO-PRET
 ‘Murad saw Madina and went away.’ (A = S)

To sum up, there is no justification for establishing a category of ergative-alignment subject comprising S and O. The only indication for syntactic accusativity and the corresponding subject category comprising S and A are raising constructions. Reflexivization fits into this wider picture in the sense that it does not single out S and A as opposed to O. It only establishes a split within A and O between those A arguments that are marked by ergative or dative on the one hand and those that are marked by the absolutive on the other hand. Thus, Sanzhi Dargwa is only morphologically ergative. This claim is not surprising; it has been made repeatedly by Kibrik (1997, 2003) and other scholars for various other Nakh-Daghestanian languages (Nichols 1980, Crisp 1983, Haspelmath 1991, Comrie et al. 2011).

From this follows that Sanzhi Dargwa does not contradict the CP (or CP1) since this principle is only stated in terms of grammatical relations. If the CP would be formulated with regard to semantic functions Sanzhi Dargwa would represent a violation since the semantic functions of agent and experiencer can be taken over by anaphors. Explanations for the reversed case marking will occupy us next.

¹⁴ Coreference with A in the first clause is excluded due to the feminine agreement on the verb in the second clause.

4.3 A pragmatic account of reversed marking

Ljutikova (1997, 1999, 2000) and also Toldova (1999) explain the reversal of case marking in Tsakhur reflexive constructions with the notions of “empathy focus” and “point of view”. The antecedent NP of an anaphor is within the scope of an empathy focus. For instance, in (30a) the antecedent is the agent, and the speaker looks at the situation from the point of view of the agent. In contrast, in (30b) the patient is the antecedent, and the speaker looks at the situation from the point of view of the patient. The reduplicated reflexive stresses the grammatical role of the antecedent. This observation corresponds to similar statements on Icarí Dargwa examples in Kibrik (1997).

(30) Tsakhur (Nakh-Daghestanian)

- a. *Xorbi himaʔa, bajram-e: wuʒ-e: wuʒ get-u,*
 lie do.PROH Bajram-ERG REFL.M-ERG REFL.M beat-PFV
še-na deš
 other-ATT COP.NEG

‘Don’t deceive (me), Bajram beat himself and no other.’ (Bajram didn’t beat any other person.) (Ljutikova 1999: 246)

- b. *Xorbi himaʔa, bajram wuʒ-e: wuʒ get-u menni*
 lie do.PROH Bajram REFL.M-ERG REFL.M beat-PFV more
šawa-ʒa-r deš
 who.ERG-RESTR-M COP.NEG

‘Don’t deceive (me), Bajram beat himself and no other.’ (No other person beat Bajram.) (Ljutikova 1999: 246)

Ljutikova (1999) continues that the canonical situation is when the most agentive role in a clause is in the empathy focus (30a). The canonical reflexive construction with the antecedent fulfilling the most agentive role permits a wider range of syntactic and semantic environments. If a non-agentive semantic role is emphasized, the result is a more marked construction (30b). Some semantic roles such as beneficiary, addressee, and location are so weak that one can hardly look at a situation from their point of view (31b).

(31) Tsakhur (Nakh-Daghestanian)

- a. *rasul wuʒ ʒu-l-e jišonaʔ-a-wo-r*
 Rasul REFL.M REFL.M.OBL-SPR-ABL talk-IPFV-COP-M
 ‘Rasul is talking to himself.’ (Ljutikova 1999: 247)

- b. **rasul-u-l-e* *wuž* *žu-l-e* *jišonaʔ-a-wo-r*
 Rasul-OBL-SPR-ABL REFL.M REFL.M.OBL-SPR-ABL talk-IPFV-COP-M
 Intended meaning: ‘Rasul is talking to himself.’ (Ljutikova 1999: 247)

However, Ljutikova’s approach has a number of disadvantages. First, the difference in semantics that she describes for Tsakhur examples such as (30a, b) can be grasped only in special contexts and does not seem to be so salient in most of the other languages investigated. For instance, Yamada (2013) discusses Avar reciprocal constructions with reversed case marking which were simply ambiguous between an agent-focus and a patient-focus reading, with the ambiguity unresolved by case marking. The same is true for Sanzhi Dargwa and other Nakh-Daghestanian languages that I have tested (Avar, Lezgian, Hinuq, Tsez, and Lak). In general, my informants could not find any semantic or pragmatic differences between constructions with standard and with reversed marking, not even if special contexts were given or phrases such as ‘more than X’ were added. Even in Tsakhur the semantic difference seems rather be due to the last part of the sentence. For instance, (30b) contains the negative indefinite pronoun *šawažar* ‘nobody’ marked with the ergative, which therefore must be compared to the preceding reflexive pronoun in the ergative. Second, this approach is very vague. Ljutikova does not elaborate on the term “empathy focus”, and it is not obvious in which sense beneficiaries or locations are weaker than agents. Third, the approach cannot explain why with some constructions in some languages a reversal of case marking is obligatory: e.g., in Bezhta reciprocal constructions with transitive and affective predicates only reversed case marking is allowed (Comrie et al. 2011).

4.4 A semantic account for the reversed marking

For many languages discussed so far it is not so much the canonical transitive verbs with agent and patient-like arguments, but rather affective verbs, psych verbs, verbs with non-canonical agents, etc. which permit the reversed case marking. In fact, in Nakh-Daghestanian languages clear tendencies can be observed: all languages for which reversed case marking is attested allow it with affective verbs requiring experiencers and stimulus arguments, but only some languages allow it with transitive verbs that require agents and patients. For example, Sanzhi Dargwa has reversed case marking with transitive and affective verbs and complex reflexive pronouns. With simple reflexive pronouns only affective verbs permit both types of case marking (32a, b). With transitive verbs and simple reflexives only the standard case marking pattern is possible (32c, d).

(32) Sanzhi Dargwa (Nakh-Daghestanian)

- a. *itij ca-w čiči<w>ig-ul=ca-w*
 3SG.DAT REFL-M see<M>-CVB=COP-M
 ‘He_i sees himself_i.’ or ‘He_i sees him_i.’
- b. *it cinij čiči<w>ig-ul=ca-w*
 3SG REFL.DAT see<M>-CVB=COP-M
 ‘He_i sees himself_i.’ or ‘He_i sees him_i.’
- c. *itil ca-w gap.w.irq’-ul=ca-w*
 3SG.ERG REFL-M praise.M-CVB=COP-M
 ‘He_i is praising himself_i.’ or ‘He_i is praising him_i.’
- d. *it cin-ni gap.w.irq’-ul=ca-w*
 3SG REFL-ERG praise.M-CVB=COP-M
 ‘He_i is praising him_i.’, ‘*He_i is praising himself_i.’

The strongest restrictions concern bivalent verbs of the extended intransitive type which have one goal, source, or location-like argument. In Sanzhi Dargwa as in most other Nakh-Daghestanian languages, these verbs permit only standard case marking patterns (22b), (32b). The tendencies may be explained by the following hierarchy of semantic functions (see also Ljutikova (2001) for a similar suggestion for Tsakhur):

(33) agent < experiencer, non-canonical agent < stimulus < patient < goal

The closer two semantic functions are on the hierarchy, the more properties they share; the further apart they are, the fewer properties they share. Arguments of transitive verbs, i.e., agents and patients, share at most very few properties. The same can be said about the arguments of extended intransitive verbs such as ‘look at’ which have experiencers/non-canonical agents and goals as arguments that share very few to no properties. In contrast, experiencers and stimuli are very close on the hierarchy of semantic functions because they lack many of the properties that oppose agents to patients. For instance, experiencers do not cause an event or change of state, and stimuli are not causally affected nor do they undergo a change of state. Movement cannot be said to be a typical property of experiencers, and stimuli are not typically stationary. Experiencers are sentient, but usually not volitional.

Semantic functions that are more similar to each other can be more easily reversed in reflexive constructions in which one and the same referent(s) have two semantic functions at the same time. In a sentence such as *Peter knows himself* experiencer and stimulus have the same referent; the semantic roles are not especially useful as identifiers for the arguments here because they are so

similar. If, as in Sanzhi Dargwa, the grammar does not link semantic functions to grammatical roles which would in other languages preclude the anaphor from occurring in certain positions, the distribution of semantic roles can be variable.

Although for Albanian, Greek, Georgian, and Basque morphosyntactic explanations for the existence of apparent subject anaphors were provided, it is nevertheless worth noting that also in these languages only certain verb classes license anaphors in derived subject positions or other nominal elements as subjects in reflexive constructions.¹⁵ These verb classes typically have arguments with the semantic functions of experiencers and stimuli or non-canonical agents.

4.5 Reuland's new syntactic approach to reflexivity

As mentioned in the introduction, Reuland (2011) dismisses Chomsky's Binding Theory and comes up with a new model for reflexivity, building on Reinhart & Reuland (1993) and other previous works. He does not deny the possibility of subject anaphors, and cites Modern Greek and Georgian as relevant languages (Reuland 2011: 263–264). According to Reuland, the possibility of subject anaphors depends on the morphosyntactic features for which the anaphor is specified. If it lacks certain features, such as gender and number as German *sich* does, it is excluded from the subject position in simple finite clauses. Since the Greek and Georgian anaphors have the structure of possessive NPs and are fully feature-specified, they can occur in subject position. Reuland's model further does not exclude the possibility of other types of complex anaphors in subject position, as long as they are sufficiently specified for φ -features. Tsakhur *wuʒ wuʒ* is classified as a complex anaphor that involves pronoun doubling (Reuland 2011: 207, 236). The only Tsakhur example that Reuland cites has canonical case marking, and reversed case marking remains unexplained (Reuland 2011: 379). However, it seems that within Reuland's model the reversal of case marking is made possible by the morphosyntactic features carried by the Nakh-Daghestanian anaphors. They are specified for gender, number, case, and partially for person. This allows them to take over a larger variety of positions in the clause than anaphors in other languages. Nevertheless, it remains to be explained why transitive predicates behave differently from affective predicates with respect to the reversal of case marking. As shown in Section 4.4 above, in Sanzhi Dargwa only the complex reflexive but not the simple reflexive pronoun can occur in the

¹⁵ This also applies to the Oceanic languages. For Toba Batak the only example cited has the verb 'see', which also takes an experiencer and a stimulus argument.

ergative position, though both pronouns carry exactly the same features. In other Nakh-Daghestanian languages not even complex reflexives permit reversed case marking with transitive predicates, though with affective predicates this is easily possible (cf. Forker 2013: 671–674 on Hinuq).

5 A note on reciprocal constructions

Most linguists working on anaphora assume that the CP is valid for both reflexive and reciprocal constructions. However, there is ample indication that reflexives and reciprocals quite often differ in their morphological and syntactic properties. In this Section I will briefly discuss reciprocals that are similar to the reflexive constructions in the languages investigated here. I exclude Basque, because the reciprocal pronoun cannot occur in the ergative position (de Rijk 2008: 368), and the Oceanic languages, because they usually do not make use of reciprocal pronouns (cf. Mosel & Hovdhaugen 1992: 180–184, 191; Besnier 2000: 212; Moysse-Faurie 2008).

In Greek, subject reciprocals seem to be ungrammatical. In the standard reciprocal construction the antecedent is in the nominative case and triggers verb agreement (34a). If the case marking is reversed the result is an ungrammatical or at least very marginal sentence (35b).

(34) Greek (Indo-European)

a. *o Petros ke i Maria provlimatizun o enas ton*
 the Peter and the Maria trouble.3PL the one the.ACC
allo
 other.ACC

‘Peter and Mary trouble each other.’ (Harris Hadjidas, personal communication)

b. **ton Petro ke ti Maria provlimatizi o*
 the.ACC Peter.ACC and the.ACC Maria.ACC trouble.3SG the
enas ton allo
 one the.ACC other.ACC

Intended meaning: ‘Peter and Mary trouble each other.’ (Harris Hadjidas, personal communication)

Georgian and partially Albanian permit reciprocal pronouns in subject position. In Georgian, the use of reciprocal pronouns as subjects leads to a similar change in meaning as already observed with reflexive pronouns (Amiridze 2006: 214). In Albanian, at least the verb *pëlqej* ‘like’ seems to permit subject anaphors,

and possibly also some of the other verbs that can occur in the inverse construction. Compare (35a), where the binder is in the nominative and the reciprocal in the dative, with (35b), where the case marking is reversed. The nominative argument triggers plural verb agreement in both cases.

(35) Albanian (Indo-European)

- a. *burrat i pëlqejnë njëri_tjerit*
 man.PL CLIT like REC.DAT
 ‘The men like each other.’ (Dalina Kallulli, personal communication)
- b. *burrave u pëlqejnë njëri_tjetri*
 man.PL.DAT CLIT like REC.NOM
 ‘The men like each other.’ (Dalina Kallulli, personal communication)

In Nakh-Daghestanian languages reciprocal constructions basically follow the same case-marking rules as reflexive pronouns and exhibit the same syntactic behavior, including the reversal of case marking. Reciprocal pronouns are structurally similar to complex reflexives because they also consist of two parts, the reduplicated numeral ‘one’.

(36) Sanzhi Dargwa (Nakh-Daghestanian)

- a. *Madina-l=ra Dinara-l=ra calli ca / calla ca*
 Madina-ERG=and Dinara-ERG=and one.ERG one one.GEN one
gap.b.iṛq’-i
 praise.HPL-PST
 ‘Madina and Dinara praised each other.’
- b. *Murad=ra Rašid=ra calli ca / calla calli*
 Murad=and Rashid=and one.ERG one one.GEN one.ERG
q:urt.b.ik’-ul=ca-b
 push.HPL-CVB=COP-HPL
 ‘Murad and Rashid are pushing each other.’
- c. *Musa=ra Murad=ra callij ca b-aḷx-u*
 Musa=and Murad=and one.DAT one HPL-know-PRS
 ‘Musa and Murad know each other.’
- d. *Musa-j=ra Murad-li-j=ra callij ca b-aḷx-u*
 Musa-DAT=and Murad-OBL-DAT=and one.DAT one HPL-know-PRS
 ‘Musa and Murad know each other.’

In (37), where the binder of the reciprocal is a quantificational expression, it is shown that the reciprocal pronoun expresses variable binding and not just coreference.

(37) Sanzhi Dargwa (Nakh-Daghestanian)

liil durh-n-a-j callij ca b-alχ-u
 all<HPL> boy-PL-OBL-DAT one.DAT one HPL-know-PRS
 ‘All boys know each other.’

To conclude, it seems that the same conclusions can be drawn for reciprocals as for reflexive constructions, namely that they do not occur in non-derived subject positions. In all languages in which reciprocals occur in unexpected positions they are morphologically complex, consisting of a reduplicated form of the numeral ‘one’ (Georgian, Nakh-Daghestanian) or a complex phrase with the literal translation ‘(the) one (the) other’ (Albanian), which suggests that the morphological structure and the origin of the reciprocals heavily influence their syntactic behavior.

6 Conclusion

In this article I have tried to answer the question whether there are subject anaphors. The short answer is no, at least not in non-derived subject positions. To date no language has been found that has reflexive (or reciprocal) pronouns in non-derived subject position in clause-bound reflexive or reciprocal constructions. Constructions that appear to have subject anaphors can be analyzed as either containing nominals or personal pronouns instead of anaphoric pronouns, as containing only derived subjects, or as lacking subjects altogether.

Even if there are no subject anaphors, reflexivization (and reciprocalization) may still be used as a diagnostic for subjecthood. However, the test is now different from the traditional assumption (“anaphors are bound by subjects”), which has long been shown to give the wrong results. Instead, the test works as follows: whatever position of a bivalent verb cannot be fulfilled by an anaphor is the subject position. If we cannot identify such a position in a given language, we can take this as an argument for saying that the language lacks subjects.

With respect to semantic roles, I have shown that there are languages in which anaphors can be agents controlled by patientive NPs. One such example is the Nakh-Daghestanian language Sanzhi Dargwa. I have also argued that reflexive constructions in this language as well as in a number of other languages (Albanian, Greek, Georgian, Basque) show a somewhat particular behavior, such as reversed case marking, if the predicate is an affective or psych verb (‘see’, ‘hear’, ‘remember’, ‘endure’, ‘torment’, etc.), and that this is because of the semantic closeness of the experiencer and the stimulus function.

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Abbreviations: 1/2/3 = 1st/2nd/3rd person; ABL = ablative; ABS = absolutive; ACC = accusative; ACT = active voice; AOR = aorist; ATT = attributive; AUX = auxiliary; CLIT = clitic; COP = copula; CVB = converb; DAT = dative; ERG = ergative; F = feminine; GEN = genitive; HON = honorific; HPL = human plural; IMPF = imperfective; IN = location 'in'; INDIC = indicative; INF = infinitive; INT = intensifier; IPFV = imperfective; M = masculine; N = neuter; NACT = non-active voice; NEG = negation; NOM = nominative; NPL = neuter plural; OBL = oblique stem; PASS = passive; PFV = perfective; PL = plural; POSS = possessive; PRET = preterite; PROH = prohibitive; PRS = present; PRV = pre-radical vowel; PST = past; PTCP = participle; REC = reciprocal; REFL = reflexive; RESTR = restrictive; SG = singular; SPR = location 'on'.

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