On the empirical scope and theoretical status of the OC-NC generalization*

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Abstract. The article discusses the OC-NC generalization (Landau 2004, 2015) that establishes a relationship between the obligatory control nature of a construction, on the one hand, and its semantic (tensedness/attitude) and formal (morphological agreement) properties. I discuss three counterexamples attested in languages of the Caucasus and demonstrate that complements of desiderative verbs in these languages violate predictions of Landau's generalization: agreeing tensed complements instantiate obligatory control or uninflected tensed complements are non-controlled. I also give further references to other potential counterexamples and discuss issues raised by the empirical evidence and ultimately argue that no such typological universal holds.

Keywords: obligatory control, infinitive, Nakh-Daghestanian, Kartvelian,

1 The OC-NC Generalization

Landau's (2004, 2006) cross-linguistic research into the syntax of control structures has established a relationship between the obligatory control nature of a construction, on the one hand, and its semantic and formal properties, on the other hand. The initial formulation proposed that semantic tense (understood as a possibility of independent temporal modification of the embedded verb) and agreement morphology on the embedded verb determine whether a construction is an obligatory control (OC) or no control (NC) structure, as shown in (1).

(1) The OC-NC generalization

In a fully specified complement clause (i.e., a clause in which the I head carries slots for both [T] and [Agr]):

a. If the I head carries both semantic tense and agreement ([+T,+Agr]), NC obtains.

b. Elsewhere, OC obtains.

According to Landau's Generalization, OC constructions represent an elsewhere case; that is, OC PRO is licensed in environments where lexical DPs and *pro* fail to be licensed. The latter, according to Landau's Generalization, require the presence of semantic tense and morphological agreement on the embedded predicate. Failure to satisfy either of the two conditions leads to the OC pattern. Importantly, Landau's generalization offers clear typological implications, as spelled out in (2).

(2) Typological predictions about OC complements (Landau 2015: 8)

a. Untensed complements (excluding small clauses) will universally be in the OC class, *regardless of inflection*.

b. Uninflected complements (i.e., [-Agr]) that are nevertheless non-defective (so a [T] slot is present) will universally be in the OC class, *regardless of semantic tense*.

In a recent book, Landau (2015) has proposed a revised formulation of the generalization in line with his latest theoretical developments in analysis of obligatory control where the difference between two familiar types of OC—i.e., OC into tensed and untensed complements (Landau 2000, 2004)—is reformulated in terms of (non-)attitude complements. Landau's revised generalization is given in (3).

(3) Landau's generalization (2015 revision)

[+Agr] blocks control in attitude complements but not in non-attitude complements.

Or: [+Agr] blocks logophoric control but not predicative control.

Remarkably, as Landau (2015: 7) explicitly states, neither of these two formulations needs a reference to factors other than attitude/tensedness and agreement, such as finiteness (e.g., finite but not non-finite), a specific φ-feature (e.g., person but not gender or number), or structural size of the complement (e.g., CP but not TP).[1]

Empirical support for the proposed generalization has been adduced from languages belonging to different branches of Indo-European as well as from Basque (isolate), Turkish (Turkic), Hungarian (Finno-Ugric), Arabic (Semitic), and some other language families. Overall, the OC-NC generalization is claimed to be "the only successful description of patterning of OC and NC complements" (Landau 2015: 8) and thus receives considerable theoretical significance: a theory of control that can derive it would clearly be superior to those that cannot. In fact, both theories of control proposed by Idan Landau—his 2004 Agree model and his 2015 Two-Tiered model—were developed with this goal in mind, so that the derivation of the generalization is hardwired into their design.

The goal of the current article is to discuss three counterexamples to Landau's generalization attested in languages of the Caucasus and ultimately argue that no such typological universal holds. In Section 2, I begin with an extended discussion of Khuduts Dargwa, a language of the Nakh-Daghestanian family. I demonstrate that agreeing complements of desiderative verbs instantiate OC in this language, thus violating Landau's generalization. Section 3 documents a similar counterexample

from Georgian (Kartvelian). In Section 4, I show that Udi, another Nakh-Daghestanian language, exhibits another violation of Landau's generalization: its uninflected tensed complements are non-controlled. Section 5 gives further references to other potential counterexamples and discusses issues raised by the empirical evidence presented in the article.

2 [+Agr] in Khuduts Dargwa OC complements

Khuduts is a language of the Dargwa branch of the Nakh-Daghestanian family spoken by around 1,200 native speakers living in or originating from the village of Khuduts (Dakhadaevskij rajon, Daghestan, Russia). It is a morphologically ergative, *pro*-drop, SOV language.

2.1 Basics of Khuduts Agreement

Like virtually all languages of the Nakh-Daghestanian family, Khuduts possesses verbal gender agreement which, together with case marking, operates on an ergative basis: intransitive subjects and transitive objects in the (unmarked) absolutive case determine gender agreement on the verb, whereas transitive subjects in the (marked) ergative case never do so (see van den Berg 2005: 155–159 for an overview of gender agreement in Nakh-Daghestanian), argument case marking and verbal gender agreement is exemplified in (4) and (5).[2]

(4) rursːi r-isː-ul=ca-r

girl(ABS) F.SG-cryːIPF-CVB=AUX-F.SG

'The girl is crying.'

(5) rasul-li ħinc-bi {d/*w}-iʕ-un

Rasul-ERG apple-PL(ABS) {N.PL/*M.SG}-steal:PF-AOR

'Rasul (male name) stole the apples.'

Not all verb stems can have a gender agreement prefix/infix: each verb stem is lexically specified to either host or not host a gender agreement slot. The following example shows the perfective stem of the verb 'go' which has no agreement prefix and thus looks the same regardless of the gender of the absolutive argument.

(6) { rursːi / gal / qʼʷaˤl } ag-ur

girl(ABS) boy(ABS) cow(ABS) go:PF-AOR

'The girl / boy / cow went away.'

For verb stems that do host such a slot, gender agreement is obligatory and appears on all verbal forms, both finite and non-finite; the appearance of such verb stems without a gender marker is simply ungrammatical. In other words, morphologically, the gender prefix may be conceived of as part of the verbal stem. In the absence of a clause-mate absolutive argument, the gender agreement slot on the verb is filled in with the default (neuter singular) marker *b*-.[3] The gender agreement prefix in Khuduts reflects both gender (masculine, feminine, or neuter) and number (singular or plural) features of the absolutive argument, see Table 1.

TABLE 1

Moreover, Khuduts has what can be called *person agreement parasitic on gender agreement*; that is, person features of some arguments can be seen in the system of gender agreement. More specifically, morphological exponence for agreement with the plural personal pronouns *nusːa* 'we' and *ʕušːa* 'you all' is different from that with

other human plural arguments. The latter require the human plural marker *b*-, as shown in Table 1, whereas first and second person plural pronouns obligatorily employ the marker *d*-, as in (7).

(7) nusːa d-isː-ul=da

we(ABS) 1/2PL-cry:IPF-CVB=1

'We are crying.'

The gender agreement marker on the verb thus makes gender, number, and, in plural, [participant] features of the clause-mate absolutive argument visible.[4] Example (7) also shows that Khuduts features person agreement proper expressed in the suffixal position.[5] Unlike gender agreement, person agreement is restricted to finite contexts, with one exception to be shown below. Either the subject or the direct object may serve as controller of person agreement, whichever is higher on the person hierarchy 2 > 1 > 3; that is, a second person subject or direct object, when present, always controls person agreement. In the absence of second person arguments, it is the first person subject or direct object that will trigger person agreement. Third person agreement only appears in sentences where both core arguments are third person.[6]

The two subsystems of verbal agreement are independent of each other and cross-reference φ-features of different arguments, as shown in example (8).[7]

(8) du sːika b-uc-ib-da

I(ERG) bear(ABS) N.SG-catch:PF-AOR-1

'I caught a bear.'

As is seen, the gender agreement prefix *b-* (neuter singular) here shows gender and number of the absolutive direct object ('bear'), whereas the first person marker *-da* cross-references person of the ergative subject.

In what follows, I assume that the person–number probe is associated with T^0 in Khuduts, whereas the gender–number probe is located on v^0. Primary evidence about the structural locus of person agreement comes from an observation in the literature on Dargwa languages (Sumbatova and Lander 2014: 118–119) that person agreement markers and overt tense markers occupy the same morphological slot in the verb. This is seen especially clearly in the progressive and resultative where the existence of pairs of present and past forms allows us to detect the relative morphological position of tense and person markers. Present tense forms of the progressive and resultative are overtly marked for person, but have no overt (present) tense marking. Past tense forms, however, demonstrate the opposite: they feature an overt past tense marker, but do not show person distinctions.[8] Examples (9) and (10) illustrate the progressive forms.

(9) Present Progressive: no overt tense marking, overt person inflection

a.	b.	c.
b-irq'-ul=da	b-irq'-ul=di	b-irq'-ul=ca-b
N.SG-do:IPF-CVB=1	N.SG-do:IPF-CVB=2SG	N.SG-do:IPF-CVB=AUX-N.SG
'(I) am doing (it).	'(You) are doing (it.)	'(S/he) is doing (it).'

(10) Past Progressive: overt tense marking, no overt person inflection

b-irq'-ul=di

N.SG-read:IPF-CVB=PST

'(I / you / we / you all / he / she / they) was/were doing (it).'

This complementary distribution of (finite) tense and person marking naturally follows if we assume that they represent the spell-out of the same functional head T^0: the morphological resources of the language do not allow the overt expression of both tense and person, so person marking can appear when tense is zero-marked but is blocked when tense is overtly marked.

With regard to gender–number agreement, low (*v*P) nominalizations are usually used as a primary diagnostic of the locus of gender agreement in Nakh-Daghestanian languages (cf. Gagliardi et al. 2014 for Lak and Tsez; Polinsky 2016 for Archi). Such evidence is not available in Khuduts which apparently lacks low nominalizations. It is clear, however, that case licensing and gender–number agreement, unlike person agreement, are not related to finiteness, as seen from the ability of (high?) nominalizations agree in gender–number and license appropriate cases on clausal arguments, see (11) and (12).

(11) aba-j b-uχːu-l=ca-b [nusːa sa-d-ač'-ni]
mother-DAT N.SG-know:IPF-CVB=AUX-N.SG we(ABS) PV-1/2PL-come:PF-NMLZ
'Mom knows that we came.'

(12) aba-j b-uχːu-l=ca-b [atːa-l q'uˤl-i
mother-DAT N.SG-know:IPF-CVB=AUX-N.SG father-ERG cow-PL(ABS)
d-ic-ni]
N.PL-sell:PF-NMLZ
'Mom knows that dad sold the cows.'

Based on these examples, I conclude that the gender–number probe resides either on v^0 or on defective (non-finite) T^0. Further research is definitely needed; for the time being, none of these options would affect the following discussion.

2.2 Infinitival Complementation in Khuduts

Khuduts Dargwa possesses two different verb forms that can be used in complements of modal, aspectual, implicative, and desiderative verbs (the following discussion is confined to desiderative verbs). One form, traditionally called “infinitive”, bears, like any other verb form in Khuduts, obligatory gender agreement with the clause-mate absolutive argument (subject of intransitive embedded verb or direct object of transitive embedded verb), as the examples in (13) demonstrate.

(13) desiderative verbs: ‘want’

a. madina-j [ħinc-bi d-ic-ij] b-ikː-ul=ca-b

Madina-DAT apple-PL(ABS) N.PL-sell:PF-INF N.SG-want:IPF-CVB=AUX-N.SG

‘Madina (female name) wants to sell the apples.’

b. madina-j [ka-r-iž-ij] b-ikː-ul=ca-b

Madina-DAT PV-F.SG-sit:PF-INF N.SG-want:IPF-CVB=AUX-N.SG

‘Madina wants to sit down.’

In example (13a) the embedded verb is transitive and thus agrees with its absolutive direct object; in example (13b) the embedded verb is intransitive and therefore agrees with its (unexpressed) absolutive subject. Below, I refer to this form as “gender-inflected infinitive”.

In addition, Khuduts, as well as a few neighboring Dargwa languages, has developed a new infinitive on the basis of an adverbial form originally expressing purpose (‘in order to’) which also can appear in complements of modal, aspectual, implicative, and desiderative verbs. Again, like any other verb form in Khuduts, it includes an obligatory gender agreement prefix. An important difference in this new infinitive is

that it also includes a morphological slot for person agreement, the only non-finite verb form that does so in Khuduts. This is shown in (14), cf. (13) above.

(14) desiderative verbs: 'want'

a. aba-j [ħinc-bi d-ic-ar-aj] b-ikː-ul=ca-b

mother-DAT apple-PL(ABS) N.PL-sell:PF-3-INF N.SG-want:IPF-CVB=AUX-N.SG

'Mother wants to sell the apples.'

b. madina-j [ka-r-ig-ar-aj] b-ikː-ul=ca-b

Madina-DAT PV-F.SG-sit:PF-3-INF N.SG-want:IPF-CVB=AUX-N.SG

'Madina wants to sit down.'

In what follows, this form will be referred to as "person-inflected infinitive." As with finite verbs, the prefixal and suffixal agreement slots are independent of each other. With intransitive embedded verbs, both cross-reference the φ-features of the absolutive embedded subject, as in (14b). With transitive verbs, prefixal agreement is always with the absolutive direct object, whereas suffixal agreement depends on the relative person specification of the subject and direct object, as shown in (15) and (16).

(15) ʕu$_i$ q'ast b-arq'-ib-di-w [Δ$_i$ ħinc-bi

you.SG(ERG) decision N.SG-do:PF-AOR-2SG-Q ERG apple-PL(ABS)

d-iʔ-atː-aj]

N.PL-steal:PF-2-INF

'Did you decide to steal apples?'

(16) atːa-l$_i$ q'ast b-arq'-ib [Δ$_i$ ʕu ʔaħ

father-ERG decision N.SG-do:PF-AOR ERG you.SG(ABS) good

r-arq'-itː-aj]

F.SG-do:PF-2-INF

'Father decided to heal you.'

In (15), person agreement on the embedded verb is with the null embedded subject, since the latter is higher on the person hierarchy than the embedded direct object ('apples'). By contrast, in (16), the embedded direct object ('you') is higher than the null embedded subject and thus controls person agreement in the embedded clause. We thus see that both infinitives have obligatory prefixal agreement reflecting gender, number, and [participant] features of the clause-mate absolutive argument. In addition to gender agreement, person-inflected infinitive features a separate person agreement slot reflecting person of the argument higher on the hierarchy 2 > 1 > 3.

It is not a straightforward task to determine the predictions of Landau's (2004, 2015) approach with respect to the control behavior of such agreeing complements. Landau's theories handle control structures in languages with pure subject agreement structurally represented as features of a φ-probe on T^0.[9] Neither gender agreement nor person agreement in Khuduts is subject-oriented: gender agreement is determined on the basis of morphological case and thus can be with the subject or the direct object; person agreement is regulated by a person hierarchy and therefore can also be controlled by either of the two core arguments.

In a similar vein, both modifications of Landau's approach do not explicitly address the special role of T^0: would another agreeing functional head in the clausal spine, say v^0, play a similar role in the distribution of OC and NC patterns? As far as I can see, it would, and the identity of the agreeing functional head would make no difference in either the 2004 Agree theory or the 2015 Two-Tiered theory.

Assuming that the crux of both versions of Landau's theory lies on valuation of an agreeing functional head by the subject's φ-features, one could extend the scope of the theory suggesting that the theory predicts that whenever a functional head, be it v^0 or T^0, in the tensed/attitude embedded clause receives the subject's φ-features, the embedded clause is predicted to be non-controlled. By contrast, agreement with other arguments in the embedded clause must have no effect on control properties of the embedded clause.

If this interpretation is on the right track, Landau's generalization predicts that tensed/attitude infinitival complements of desiderative verbs should display different behavior depending on the transitivity of the embedded predicate and the relative position of the core argument on the person hierarchy. Transitive complements where gender agreement is with the direct object should be OC structures, whereas intransitive complements where agreement is with the null subject should be NC structures. In a similar vein, the generalization predicts that person agreement may also affect the OC or NC status of the person-inflected infinitival complement, depending on the particular configuration of the person values of the subject and direct object.

In what follows, I concentrate on intransitive infinitival complements where both gender and person agreement on the infinitive show the φ-features of the null absolutive subject which, according to Landau's generalization, should lead to NC. I argue that neither gender-inflected nor person-inflected infinitival complements in Khuduts obey Landau's generalization: tensed (attitude) infinitival complements are uniformly OC structures.[10]

2.3 Diagnosing OC

For the purposes of the current paper, seven desiderative predicates have been checked in Khuduts: *bikː-* 'want' (stative), *hut bikʼʷij* 'strive, be eager', *razi biχʷij* 'agree', *uruχ biχʷij* 'become afraid', *ħadur biχʷij* 'get ready', *qʼast barqʼij* 'decide', and *pikri barqʼij* 'think' (the latter takes an infinitival complement only in the meaning 'plan, intend' but never as a propositional verb). For reasons of space, I only provide examples with the matrix verb *qʼast barqʼij* 'decide'.[11] If not specifically indicated, other desiderative verbs listed above demonstrate identical behavior in all relevant aspects. (17) provides a baseline example of infinitival complementation with desiderative verbs (when showing identical behavior, gender- and person-inflected infinitives are both given in a single example separated by a slash).

(17) aba-l [urkaraqi r-uqʼˤ-ij / r-uqʼ-aˤn-aj] qʼast
mother-ERG to.Urkaraq F.SG-go:PF-INF F.SG-go:PF-3-INF decision
b-arqʼ-ib
N.SG-make:PF-AOR
'Mother decided to go to Urkaraq.'

The presence of a null subject in such examples is evidenced by two facts. First, only absolutive arguments trigger gender agreement on lexical verbs in Khuduts—no other feminine absolutive argument than the embedded subject can be identified in (17). Second, the embedded subject may be lexicalized under focus in the form of an overt reflexive or personal pronoun, as in (18).

(18) aba-l_i [ca-r_i=gina urkaraqi r-uqʼˤ-ij / r-uqʼ-aˤn-aj]
mother-ERG self(ABS)-F=only to.Urkaraq F.SG-go:PF-INF F.SG-go:PF-3-INF
qʼast b-arqʼ-ib

decision N.SG-make:PF-AOR

'Mother decided to go to Urkaraq herself/alone.'

In this example, the infinitival complement features its own subject in the absolutive case, as required by the embedded intransitive verb *buq'ˤij* 'go', different from the matrix subject in the ergative case. The embedded subject, however, still must be co-valued with the matrix subject, and disjoint reference is impossible. That the absolutive case of the reflexive in (18) indeed stems from selectional requirements of the embedded predicate can be seen from the fact that only dative case of the reflexive is grammatical with embedded dative subject verbs, as in (19).[12]

(19) aba-l_i [cin-ij_i=gina prezident či-w-až-ij /

mother-ERG self-DAT=only president(ABS) PV-M.SG-go:PF-INF

či-w-ag-ar-aj] q'ast b-arq'-ib

PV-M.SG-go:PF-3-INF decision N.SG-make:PF-AOR

'Mother decided to see the president herself.'

The 2004 Agree version of Landau's generalization applies to complements that are both inflected for the φ-features of the subject and tensed. With regard to φ-feature inflection in infinitival complements, a full match in all φ-features is required between the matrix subject and the embedded subject in intransitive infinitival complements of desiderative verbs. A partial match (e.g., only in gender but not number or person) is impossible.[13] See the examples in (20) where the agreement shown is the only grammatical option.

(20) a. atːa-l_i [Δ_i urkaraqi uq'ˤ-ij / uq'-aˤn-aj]

father-ERG ABS to.Urkaraq (M.SG)go:PF-INF (M.SG)go:PF-3-INF

q'ast b-arq'-ib

decision N.SG-make:PF-AOR

'Father decided to go to Urkaraq.'

b. {rurs:-ba-l / gul-a-l} [Δ_i urkaraqi b-uqʼˤ-ij /

girl-PL-ERG boy-PL-ERG ABS to.Urkaraq M/F.PL-go:PF-INF

b-uqʼ-aˤn-aj] qʼast b-arqʼ-ib

M/F.PL-go:PF-3-INF decision N.SG-make:PF-AOR

'The {girls / boys} decided to go to Urkaraq.'

c. ʕušːa$_i$ [Δ_i urkaraqi d-uqʼˤ-ij / d-uqʼ-aˤtː-aj]

you.PL(ERG) ABS to.Urkaraq 1/2PL-go:PF-INF 1/2PL-go:PF-2-INF

qʼast b-arqʼ-ib-da

decision N.SG-make:PF-AOR-2PL

'You decided to go to Urkaraq.'

The following example demonstrates that infinitival complements of desiderative verbs may host a future-denoting temporal adverbial and thus should be diagnosed as tensed.[14]

(21) aba-l [čːaʕal urkaraqi r-uqʼˤ-ij / r-uqʼ-aˤn-aj]

mother-ERG tomorrow to.Urkaraq F.SG-go:PF-INF F.SG-go:PF-3-INF

qʼast b-arqʼ-ib

decision N.SG-make:PF-AOR

'Mother decided to go to Urkaraq tomorrow.'

The 2015 Two-Tiered theory of control deals with matrix verbs in terms of attitude vs. non-attitude rather than tensedness. The Khuduts desiderative verbs listed above have been tested for the *de re* / *de dicto* ambiguity (Landau 2015: 18–19; Pearson, submitted) indicative of attitude contexts, and they appear to yield the same

entailment pattern in substitution of definite descriptions as their English counterparts. Imagine the following scenario. There are two friends, Rasul and Ali. When they were young and lived in their native village, they spent a lot of time together and often threw vodka-drinking parties. At some point, Rasul moved far away from the village for a new job in a different region. After many years away from the village and without having maintained any contact, he goes back and one of the important points on his to-do list is to throw a party to drink vodka with Ali again. What he does not know, however, is in the years that have elapsed, Ali has become a totally different person: he is very religious and now serves as a mullah at the local mosque, and thus no longer drinks vodka at all. Example (22) is a truthful description of Rasul's intentions, whereas example (23) does not truthfully describe Rasul's epistemic/bouletic state of mind.

(22) rasul-li [ʕali-cːil ʕaraq'i d-erčː-ij / d-erčː-ar-aj]
Rasul-ERG Ali-COM vodka(ABS) N.PL-drink:PF-INF N.PL-drink:PF-3-INF
q'ast b-arq'-ib
decision N.SG-make:PF-AOR
'Rasul decided to drink vodka with Ali.'

(23) rasul-li [malla-cːil ʕaraq'i d-erčː-ij / d-erčː-ar-aj]
Rasul-ERG mullah-COM vodka(ABS) N.PL-drink:PF-INF N.PL-drink:PF-3-INF
q'ast b-arq'-ib
decision N.SG-make:PF-AOR
'Rasul decided to drink vodka with a/the mullah.'

As can be seen, the definite description *Ali* cannot be substituted for the definite description *mullah* inside the infinitival complement of a desiderative verb without

changing the truth value, which shows that the desiderative verbs in Khuduts are attitude verbs and must thus be within the scope of Landau's (2015) Two-Tiered theory of control.

Infinitival complements of desiderative verbs are thus attitude, tensed and inflected, and therefore must be subject to Landau's generalization in both the 2004 and 2015 versions; that is, predicted to be uncontrolled when agreeing with the null subject in gender and/or person. Contrary to this prediction, empirical evidence suggests that they constitute a textbook example of OC.

The two types of infinitival complements behave identically with respect to OC diagnostics. The only difference between them concerns availability of disjoint embedded subjects expressed by an overt DP.[15] Gender-inflected complements of all desiderative verbs uniformly prohibit referentially disjoint overt subjects, as seen in (24).

(24) *aba-l [rasul urkaraqi uqʼˤ-ij] qʼast
mother-ERG Rasul(ABS) to.Urkaraq (M.SG)go:PF-INF decision
b-arqʼ-ib
N.SG-make:PF-AOR
intended: 'The mother decided that Rasul would go to Urkaraq.'

Instead, a different complementation pattern with perfective converb must be used, as in (25).

(25) aba-l [rasul urkaraqi ag-ur-ri] qʼast
mother-ERG Rasul(ABS) to.Urkaraq go:PF-AOR-CVB decision
b-arqʼ-ib
N.SG-make:PF-AOR

‘The mother decided that Rasul would go to Urkaraq.’

Person-inflected complements of different desiderative verbs, however, behave differently. The verb *razi biχʷij* ‘agree’ allows a disjoint overt embedded subject without restrictions, as seen in (26).

(26) rasul razi w-iχ-ub [aba čːaʕal urkaraqi
Rasul(ABS) agree M.SG-LV:PF-AOR mother(ABS) tomorrow to.Urkaraq
r-uq’-aˤnaj]
F.SG-go:PF-INF.3
‘Rasul agreed that mother would go to Urkaraq tomorrow.’

Disjoint overt subjects of person-inflected complements with the verbs *bikː-* ‘want’ and *pikri barq’ij* ‘plan, intend’ are considered marginally acceptable by some speakers (three out of five consultants) but only when in scope of the focus-sensitive clitic =*gina* ‘only, alone’, as in (27). Other speakers (two out of five consultants) find such examples unacceptable. None of the five consultants accepts non-focused lexical embedded subjects in person-inflected complements of these verbs.

(27) ???rasul-li-j b-ikː-ul=ca-b [madina=gina čːaʕal
Rasul-OBL-DAT N.SG-want:IPF-CVB=AUX-N.SG Madina(ABS)=only tomorrow
urkaraqi r-uq’-aˤn-aj]
to.Urkaraq F.SG-go:PF-3-INF
‘Rasul wants only Madina to go to Urkaraq tomorrow.’

The remaining verbs *hut bikʼʷij* ‘strive, be eager’, *uruχ biχʷij* ‘become afraid’, *ħadur biχʷij* ‘get ready’, and *q’ast bar’qij* ‘decide’ allow no DPs, either plain or focused, in the position of the subject of a person-inflected complement, as shown in (28).

(28) *rasul-li q'ast b-arq'-ib [madina(=gina) urkaraqi

Rasul-ERG decision N.SG-make:PF-AOR Madina(ABS)=only to.Urkaraq

r-uq'-aˤn-aj]

F.SG-go:PF-3-INF

intended: 'Rasul decided that (only) Madina would go to Urkaraq.'

This restriction on disjoint overt subjects equally concerns first and second person arguments, as seen in (29).

(29) *rasul-li q'ast b-arq'-ib [ʕu(=gina) urkaraqi

Rasul-ERG decision N.SG-make:PF-AOR you.SG(ABS)=only to.Urkaraq

r-uq'-aˤtː-aj]

F.SG-go:PF-2-INF

intended: 'Rasul decided that (only) you would go to Urkaraq.'

Importantly, the matrix subject is the only eligible antecedent for the null embedded subject independently of whether or not an overt disjoint subject is allowed, as confirmed by a number of diagnostics.[16] First, only sloppy readings are allowed under complement ellipsis, as shown in (30).

(30) ʕu$_i$=ra q'ast b-arq'-ib-di [Δ_i r-uq'ˤ-ij /

you.SG(ERG)=ADD decision N.SG-made-2SG ABS F.SG-go:PF-INF

r-uq'-aˤtː-aj], aba-l$_j$=ra q'ast b-arq'-ib

F.SG-go:PF-2-INF mother-ERG=ADD decision N.SG-make:PF-AOR

i. 'You decided to go, and mother decided (to go), too.'

ii. *'You decided to go, and mother decided (that you would go), too.'

Second, the null embedded subject cannot be interpreted as referentially disjoint from the matrix subject, nor can it have an arbitrary reading, as shown in (31)–(33).

(31) *aba-l_i [Δ_j urkaraqi r-uq'$^{\varsigma}$-ij / r-uq'-a$^{\varsigma}$n-aj]

mother-ERG ABS to.Urkaraq F.SG-go:PF-INF F.SG-go:PF-3-INF

q'ast b-arq'-ib

decision N.SG-make:PF-AOR

intended: 'Mother$_i$ decided that she$_j$ would go to Urkaraq.'

(32) *aba-l_i [Δ_j urkaraqi r-uq'$^{\varsigma}$-ij / r-uq'-a$^{\varsigma}$tː-aj]

mother-ERG ABS to.Urkaraq F.SG-go:PF-INF F.SG-go:PF-2-INF

q'ast b-arq'-ib

decision N.SG-make:PF-AOR

intended: 'Mother$_i$ decided that you$_j$ would go to Urkaraq.'

(33) *aba-l_i [Δ_{arb} urkaraqi b-uq'$^{\varsigma}$-ij / b-uq'-a$^{\varsigma}$n-aj]

mother-ERG ABS to.Urkaraq H.PL/N.SG-go:PF-INF H.PL/N.SG-go:PF-3-INF

q'ast b-arq'-ib

decision N.SG-make:PF-AOR

intended: 'Mother$_i$ decided that one$_{arb}$ would go to Urkaraq.'

Third, the antecedent must c-command the null embedded subject, as shown in (34).

(34) *rasul-la$_i$ aba-l_j [Δ_i urkaraqi uq'$^{\varsigma}$-ij / uq'-a$^{\varsigma}$n-aj]

Rasul-GEN mother-ERG ABS to.Urkaraq (M.SG)go:PF-INF (M.SG)go:PF-3-INF

q'ast b-arq'-ib

decision N.SG-make:PF-AOR

intended: 'Rasul$_i$'s mother$_j$ decided that he$_i$ would go to Urkaraq.'

Fourth, the null embedded subject must find an antecedent in the immediately dominating clause and cannot be associated with an antecedent two clauses up, as illustrated in (35).

(35) *rasul-li-j b-uχ:-ul=ca-b [aba-l [Δ_i urkaraqi
Rasul-OBL-DAT N.SG-know:IPF-CVB=AUX-N.SG mother-ERG ABS to.Urkaraq
uq'$^{\varsigma}$-ij / uq'-a$^{\varsigma}$n-aj] q'ast b-arq'-ni]
(M.SG)go:PF-INF (M.SG)go:PF-3-INF decision N.SG-want:IPF-NMLZ
intended: 'Rasul$_i$ knows that mother$_j$ has decided that he$_i$ will go to Urkaraq.'

An anonymous reviewer notes that constructions with embedded *pro* also often prefer a closer antecedent and the examples in (34) and (35) thus do not necessarily show the OC PRO nature of the null embedded subject.[17] Note, however, that the closest higher argument is excluded from the set of antecedents in those examples due to gender agreement on the embedded verb: the latter shows masculine singular agreement, whereas the closest antecedent 'mother' is feminine singular. The only masculine singular argument in the sentence is the more distant DP *Rasul* which makes it the only possible antecedent for the null subject of the embedded infinitive. The sentences are nevertheless not grammatical which ascertains that non-c-commanding or non-closest c-commanding arguments are not eligible antecedents of the infinitival subject.[18]

More generally, if an antecedent other than the closest matrix subject were ever in principle possible, we would expect to observe mismatches between the φ-features of the matrix subject and the gender/person agreement on the intransitive embedded verb. The robust fact of the grammar of Khuduts, however, is that φ-features

appearing on the intransitive infinitive, partial control factored out (see footnote 13), can never be different from the φ-features of the closest matrix subject.

Based on the diagnostics above, we can conclude that both types of complements with desiderative verbs—gender- and person-inflected infinitives—instantiate OC with both transitive and intransitive embedded verbs. This is unexpected: according to (my interpretation of) Landau's generalization, the constellation of properties we observe in Khuduts infinitival complements should lead to NC or OC, depending on transitivity of the embedded verb.

Importantly, this pattern is not just a quirk of Khuduts but rather a typical trait of the whole family, in at least the part concerning the behavior of gender-inflected infinitives (person-inflected infinitives are restricted to Khuduts and a few neighboring Dargwa languages). A Nakh-Daghestanian language typically has only gender agreement and no person agreement. Gender agreement across Nakh-Daghestanian looks very much the same as described above for Khuduts: verb stems are lexically specified as either having or not having a gender agreement prefix; those verb stems that do have the prefix must have it in all verb forms, finite and non-finite; φ-features shown by the agreement prefix include gender and number of the clause-mate absolutive argument (an extensive discussion of gender agreement in the distantly related language Archi of the Lezgic branch can be found in Bond et al. 2015).

Like in Khuduts, the presence of gender agreement in infinitival complements of desiderative verbs does not automatically lead to NC in other Nakh-Daghestanian languages either. The variation may concern availability of disjoint lexical subjects in complements of some individual verbs (similar to what is observed in Khuduts

person-inflected complements). For example, languages of the Avar-Andic and Tsezic branches typically allow lexical embedded subjects in infinitival complements of the verb 'want', whereas Tabasaran (Lezgic branch) does so in infinitival complements with the verb 'be afraid'. The nature of null subjects in such complements, *pro* or PRO, requires further investigation. However, the majority of desiderative predicates in these languages still ban overt lexical DPs in the position of the infinitival subject and can only host a bound PRO or reflexive/pronominal subject (see the discussion of Tsez matrix verbs in Polinsky 2015).

3 [+Agr] in Georgian OC Complements

Georgian is a morphologically split-ergative Kartvelian language with pro-drop and person agreement. Person agreement in transitive finite sentences is determined by the first or second person direct object or, in case the direct object is third person, by the first or second person subject (see Harris 1981: 28-32 for details of person agreement). All intransitive sentences and a subset of transitive sentences thus show person agreement with the subject.

According to Vamling's (1989: 60) description, desiderative verbs like *vpikrob* 'think, intend', *vap'ireb* 'intend', *vp'irdebi* 'promise', *vubrʒaneb* 'order', *movitxov* 'demand', *varc'muneb* 'persuade', *msurs* 'want', and *vgegmav* 'plan' take a subjunctive (optative) complement where the verb bears agreement marking for person–number. The controller of person agreement in subjunctive complements is determined in the same way as in indicative clauses. As predicted by Landau's generalization, many desiderative predicates allow non-controlled complements with either a lexical subject or *pro*, as shown in (36).

(36) m-inda, rom (ma-n) ga-ak'et-o-s

1-want that he-ERG PV-make-OPT-3

'I_i want that he_j / pro_j shall do it.' (Vamling 1989: 86)

However, some desiderative verbs only allow a controlled reading of the null embedded subject and require that the subjunctive complement bear agreement features identical to those of the matrix subject. Vamling (1989: 82–87) indicates that the subject-control verb *vap'ireb* 'intend' and several object-control verbs like *vubrʒaneb* 'order', *nebas vrtav* 'permit', *vemudarebi* 'beg', and *varc'muneb* 'persuade' require obligatory co-reference of the matrix argument (subject or object respectively) and embedded subject of the subjunctive complement. The pattern reported by Vamling is independently confirmed at least for the verb *vap'ireb* 'intend' (other verbs have not been tested).

This verb takes tensed complements, as evidenced by the possibility of a temporal mismatch between the matrix and complement clauses. Subjunctive complements feature a subject argument that can either materialize in the form of personal pronoun or remain unexpressed, as in (37).

(37) samšabat-s me v-ap'irebd-i, rom (me) st'at'ia

Tuesday-ADV I(NOM) 1-intend-PST that I(NOM) article(NOM)

ga-m-e-gzavn-a xutšabat-s

PV-1-PLUPRF-send-3 Thursday-ADV

'On Tuesday, I intended to submit the paper on Thursday.' (Today is already Sunday, but I haven't submitted it yet).

However, the verb allows no disjoint reference of the overt or null embedded subject, see (38).

(38) *v-ap'ireb, rom {Vano / is / Δ} c'a-vid-e-s tbilis-ši

1-intend that Vano(NOM) he(NOM) NOM PV-goes-OPT-3 Tbilisi-ALL

intended: 'I intend that Vano/he/*pro* goes to Tbilisi.'

Example (39) shows that the null embedded subject cannot pick up its reference from a c-commanding antecedent two clauses up.

(39) *vano-m_i ici-s, rom me v-ap'ireb, rom Δ_i c'a-vid-e-s

Vano-ERG know-3 that I(NOM) 1-intend that NOM PV-goes-OPT-3

tbilis-ši

Tbilisi-ALL

intended: 'Vano knows that I intend that he goes to Tbilisi.'

Georgian thus appears to provide another counterexample to Landau's generalization. Despite its geographical proximity to Nakh-Daghestanian, Georgian is genealogically unrelated to and structurally very different from the latter, both in general and with respect to control constructions. Nakh-Daghestanian infinitival constructions are non-finite and usually only inflect for gender and number. Georgian subjunctive clauses are finite (in the sense that they may be used as an independent utterance), inflect for person and are introduced by the complementizer *rom*. Georgian subjunctive complements with the verb 'intend' thus should probably count as an independent counterexample.

4 [-Agr] in Udi NC Complements

So far we have seen two counterexamples attesting to the possibility of inflected OC complements of desiderative verbs. Recall, however, that Landau's generalization gives one more prediction about tensed (attitude) complements: [-Agr] complements

should universally be controlled. The present section sets out to document a counterexample to this second prediction and show that non-inflected tensed complements can be NC.

Udi is a language of the Lezgic branch of the Nakh-Daghestanian family originally spoken in Azerbaijan, now also in Georgia and Russia, by around ten thousand native speakers. Udi is only distantly related to Khuduts discussed above; both go back to the same Proto-Nakh-Daghestanian language dated to around 4,000 years ago. Udi is morphologically ergative, allows free *pro*-drop and has basic SOV word order. Udi has been heavily influenced by Iranian languages as well as Armenian and Azerbaijani dominating in the area. In many respects, it is structurally more similar to these languages than its fellow Nakh-Daghestanian languages. Udi is one of three Nakh-Daghestanian languages lacking prefixal gender agreement of the type discussed above in Section 2. Instead, it developed (independently of Dargwa) obligatory person–number marking in finite clauses, always controlled by the subject, irrespective of its morphological case—ergative or absolutive. Morphophonologically, the subject markers are clitics attached to the focused constituent (a detailed description of person marker placement in Udi can be found in Harris 2000, 2002). Syntactically, they function like regular agreement markers; in particular, a default third person singular marker appears in "failed agreement" contexts, see Preminger (2009).

Let us consider first the verb *čureces* 'want' which can combine with three different types of complements: (a) a finite subjunctive complement, (b) a nominalization in absolutive case, and (c) a nominalization in dative case. The finite subjunctive complement is of NC type and thus is totally well behaved from the point

of view of Landau's generalization. Nominalized complements, however, are more unusual. Neither of the two types of nominalizations is inflected for person or number, and both are thus predicted to be OC complements.[19] The actual distribution is different: the absolutive nominalization is an OC construction with a PRO subject, as expected, whereas the dative nominalization is an NC construction that allows either a lexical DP or *pro* as embedded subject. To illustrate null subjects in Udi, example (40) shows the PRO subject of an absolutive nominalization, while (41) shows the pro_i subject of a dative nominalization and the pro_j subject of a finite verb.

(40) zu$_i$ [PRO$_i$ taj-sun]=ez čur-esa

I(ERG) ABS go-NMLZ(ABS)=1SG want-LV:PRS

'I want to go.'

(41) [*pro*$_i$ ʒuhutː-χo-j pačːaʁ-a vaˁ-jnakː čːevkː-sun-a] *pro*$_j$

1SG Jew-PL-GEN king-DAT you.PL-BEN pull.out-NMLZ-DAT 2PL.ERG

čur=nan=sa

want=2PL=LV:PRS

(Context: You have a custom that I release one prisoner to you at the Passover.)

'Do you want me to release the king of the Jews to you?' (John 18:39, unpublished translation by Georgi Kechaari)

As is seen from (41), the dative nominalization allows a non-controlled reading of the null embedded subject. Furthermore, some desiderative verbs only select for nominalized complements in the dative that allow both lexical DPs and null pronouns in the subject position. While the coreferent interpretation of the null subject is more

easily available, disjoint readings are also possible if a discourse topic has been established.

(42) [tːija taj-sun-a]=z qːiˤ-b-sa

there go-NMLZ-DAT=1SG afraid-LV-PRS

(i) 'I am afraid to go there.'

(ii) 'I_i am afraid of *pro*$_j$ going there.'

Furthermore, nominalized complements in the dative are regularly used with propositional predicates like 'say', 'think', 'believe' and interrogative predicates like 'ask', 'understand', 'know', and so forth. Again, both overt DPs and *pro* are allowed in the subject position of such complements.

(43) *pro*$_i$ veˤ=te=z [*pro*$_j$ mija ej-sun-a]

ABS believe=NEG=1SG ABS here come-NMLZ-DAT

'I_i don't believe he$_j$/she$_j$/they$_j$ came here.'

(44) *pro*$_i$ [*pro*$_j$ mani ga-n-uχun bak-sun-a] p-es te=tːun

ERG ABS which place-OBL-ABL become-NMLZ-DAT say-INF NEG=3PL

bak-saj

can-PST

'They$_i$ (villagers) could not say where they$_j$ (newcomers) come from.' (Georgi Kechaari, Orayin. Baku, 2001)

As is seen from the examples above, non-controlled *pro* subjects are in principle possible in Udi nominalized complements with desiderative predicates, contrary to the predictions of Landau's generalization.

5 Discussion

Previous work apparently showed that tensed/attitude complements in many languages obey the predictions of Landau's generalization. The question then arises as to what makes OC constructions in languages of the Caucasus so different from what we see in other languages. While a number of different parameters could be considered responsible for this deviation, I propose that the first necessary step is to reconsider the status of Landau's generalization itself and ask another question: Is it really a typological universal?

As mentioned at the outset, a small but non-trivial sample of languages initially appears to support the generalization. Moreover, some apparent counterexamples identified in the literature, as for example in Brazilian Portuguese and Finnish have been shown to fall out of the scope of the generalization due to the nature of the null embedded subject (*pro* rather than PRO), and thus to not be actual counterexamples (see Landau 2013: 94–95 and reference therein).

Nonetheless, the OC-NC generalization has never been tested on a reasonably large sample. Languages known so far to obey it belong to a limited number of linguistic families and are almost exclusively spoken in the Europe-Balkans-Middle East linguistic area, thus representing only a small portion of the world's linguistic diversity. Admitting that the pattern observed by Landau (2004, 2015) is probably more frequent typologically (though only a balanced sample of languages would allow us to estimate its frequency worldwide), I suggest that the counter-evidence attested in the languages of the Caucasus shows that it is not universal.

It should be noted here that Caucasian languages are not the only case against Landau's generalization. Although descriptive work often leaves properties of null subjects with control verbs without proper discussion, especially with verbs other than

‘want’, several potential candidates can be located. In Maltese (Semitic), for example, embedded verbs obligatorily inflect for person and number of the subject. Haspelmath (2013: 54) indicates that the verb ‘want’ can be used with or without the complementizer *li*. In the former case, the construction represents NC; in the latter case, the null embedded subject is obligatory interpreted as coreferent with the matrix subject, see (45) and (46).

(45) It-tifel j-rid j-iġi d-dar kmieni.
DEF-boy 3SG.M.IPFV-want 3SG.M.IPFV-come DEF-house early
‘The boy wants to come home early.’

(46) It-tifel j-rid li j-iġi d-dar kmieni.
DEF-boy 3SG.M.IPFV-want that 3SG.M.IPFV-come DEF-house early
‘The boy wants him to come home early.’

Crucially, some desiderative verbs that require an overt complementizer also appear to license only OC complements. The verb *ipprepara* ‘prepare’, for example, requires the complementizer *biex* but allows no disjoint reference of the null subject (an overview of complementation in Maltese can be found in Borg and Fabri 2016).

(47) *L-istudent ipprepara biex n-aħsel il-kelb.
DEF-student prepare.PFV.3SG.M to 1SG.IPFV-wash DEF-dog
intended: ‘The student prepared for me to wash the dog.’ (Ray Fabri, personal communication)

Another promising area is Meso-America where languages of different families have been reported to select for different types of clausal complement depending on whether the embedded subject is the same as or different from the matrix subject (Palancar 2012 [Otomi, Oto-Manguean]; England 1983: 298–303 [Mam, Mayan];

Clemens et al. 2015: 435 [Ch'ol, Mayan]). The distribution is similar to that found with Maltese 'want': inflected complements introduced by a complementizer are NC, whereas complementizer-less inflected complements are reported to require obligatory coreference of the matrix and embedded subjects.

Landau's own earlier work also identified counterexamples to the generalization. In Hebrew, finite complement clauses with desiderative verbs show OC pattern (see Landau 2004 for an extensive discussion). European Portuguese has also been spotted as deviating from the predictions of Landau's generalization (Landau 2013: 94–95).

As far as uninflected complements are concerned, Imbabura Quechua seems to provide a counterexample parallel to the Udi one discussed above. Imbabura Quechua has two types of clausal (non-nominalized) complements, neither of which is inflected for φ-features (Cole 1985: 37–38). With the verb 'want', *-ngapaj* complements require obligatory coreference between the matrix subject and the null embedded subject, whereas *-chun* complements, in contrast, are non-controlled. The latter complement type allows both overt DPs, as evident from examples in Cole (1985: 37), and *pro* subjects, as ascertained by examples from the Bible translation into Imbabura Quechua (transcription preserved, glosses mine).[20]

(48) Muna-ni Juzi pay-paj mama-ta riki-chun.
want-1 José he-of mother-ACC see-SBJV
'I want José to see his mother.'

(49) Maijan-da-ta cacha-ri-chun muna-nguichi?
which-ACC-Q go-CAUS-SBJV want-2PL
(Context: it was the governor's custom at the festival to release a prisoner chosen by the crowd. So when the crowd had gathered, Pilate asked them:)

'Which one do you want me to release?' (Matthew 27:17)

Finally, English subjunctive complements also represent a counterexample to Landau's generalization. They are tensed complements of desiderative verbs that do not show morphological agreement with the subject, and thus must obey Landau's (2004) version of the generalization.[21] As long as they are also attitude complements, they must also be in scope of the 2015 version. Yet, they allow no controlled null (or for that matter overt) pronoun in the subject position, as in (50).[22]

(50) a. Her father preferred that she go to school in Boston.

b. We agreed that she go back home.

c. I have decided that she go on leave due to injury.

In face of contradicting evidence, a natural move would be to ensure some escape routes that would allow us to explain away emerging counterexamples as apparent. For example, in Landau's 2004 system, the deviant behavior of Hebrew inflected complements has been accounted for by interaction of two independent phenomena. On the one hand, the properties of C and I heads in Hebrew lead to licensing of PRO in such complements. On the other hand, the (language-specific) absence of third person *pro* excludes a non-controlled reading of third-person null subject and thus only leaves a third-person PRO subject. The problem, however, is that such explanations often look like *ad hoc* stipulations. In the Hebrew case, licensing of PRO in inflected tensed complements heavily relies on the C head being specified as [+T, +Agr]. Given that Hebrew complementizers never show overt agreement, this explanation is not only unfalsifiable but actually lacks any empirical support at all (see McFadden 2014 for a similar point about Landau's Agree model).[23]

Another way to deal with counterexamples to the generalization could be to introduce additional qualifications and thus restrict its empirical scope. As noted in the introduction, the current formulations of the generalization do not include any reference to properties other than attitude/tensedness and agreement. However, both theoretical models developed by Landau (2004, 2015) only derive the generalization on the assumption that tensed/attitude complements are full CPs. Moreover, the 2015 Two-Tiered model even predicts that less-than-CP attitude complements should not be affected by the presence of agreement morphology and will always be OC, similar to what is observed in untensed/non-attitude complements.

Restricting Landau's generalization to CP complements would indeed cast doubts on the counter-evidence presented above. Indeed, gender-inflected complements in Khuduts and elsewhere in Nakh-Daghestanian lack an overt complementizer and thus may instantiate a structure less than CP (though not necessarily so: see below). The same is true for other counterexamples mentioned earlier in this section. Two considerations are relevant here.

On the one hand, some of the counter-evidence would still survive through this restriction: Georgian and English subjunctive complements are introduced by overt complementizers but still violate Landau's generalization. There is also some evidence that Khuduts person-inflected infinitives may also represent a structure bigger than TP. Morphologically, they include a person agreement slot associated with the T head and the person-infinitival marker -*aj*. Importantly, only C-level elements may follow person markers in Khuduts: aside from the person-inflected infinitive marker, those include question markers (*yes/no*-question marker -*u*, *wh*-question marker -*i*), logophoric complementizer *hebli*, and embedded question

complementizer *-l*. Syntactically, both gender- and person-inflected infinitival constructions pattern with biclausal sentences rather than simple clauses with respect to binding of complex reflexives. The complex reflexive can be bound by a c-commanding clause-mate argument but can never have an antecedent outside its clause. Examples (51) and (52) illustrate.

(51) ʕali cin-erka ca-w pikri ik'-ul=akːu

Ali(ABS) self-ABL self-M.SG(ABS) thought (M)say:IPF-CVB=AUX:NEG

'Ali$_i$ does not care about himself$_i$.'

(52) *madina-j b-uχːu-l=ca-b ʕali cini-j cin-erka pikri

Madina-DAT N.SG-know-CVB=AUX-N.SG Ali(ABS) self-DAT self-ABL thought

ʕa-ik'^{w}-ni

NEG-(M)say:IPF-NMLZ

intended: 'Madina$_i$ knows that Ali$_j$ does not care about her$_i$.'

Similar to the biclausal example in (52) and in contrast to the monoclausal example in (51), infinitival constructions with desiderative verbs do not allow binding of the complex reflexive inside the embedded clause by the matrix subject, see (53).[24]

(53) *rasul-li q'ast barq'ib [cin-il cin-erka pikri

Rasul-OBL(ERG) decision made self-ERG self-ABL thought

ʕa-ik'^{w}-ij / ʕa-ik'^{w}-ar-aj]

NEG-(M)say:IPF-INF NEG-(M)say:IPF-3-INF

intended: 'Rasul$_i$ decided not to care about himself$_i$.'

Further investigation is definitely needed to determine whether Khuduts gender- and person-inflected infinitives demonstrate any syntactic behavior indicative of a major clausal (phasal) break.

On the other hand, the restriction to CP complements would equally void much of the evidence presented in support of Landau's generalization. Turkish and Basque nominalized complements (Landau 2006, Landau 2013: 93) would then probably be discarded. Only part of the remaining evidence represents indisputable CPs, such as Arabic, Persian, Romanian, and Albanian structures introduced by overt complementizers. If the CP status of a clausal complement is a matter of empirical evidence rather than theoretical assumption, then it is yet to be shown that other examples brought in support of the generalization, such as Hungarian and Portuguese infinitives or Greek and Bulgarian subjunctives, represent full-fledged CPs and not, say, TPs or FinPs.[25] Some evidence will inevitably be disqualified. For example, Landau claims that Welsh desiderative complements are a good example of the OC-NC generalization at work, assuming that they represent CPs (Landau 2006: 167–169). However, Borsley et al. (2007: 86–87) report that infinitival complements in Welsh have binding properties different from indicative complements in complex sentences but similar to what is found in monoclausal configurations: a pronominal subject of the infinitival clause must be disjoint in reference to a matrix NP, whereas an anaphor in the infinitival clause can be bound by an NP in the matrix clause (see also Tallerman 1998: 92). While this fact can probably be accommodated within a CP-approach, it indicates that the latter cannot be taken for granted.

As noted above, Landau concentrates on the familiar pattern of person agreement between the subject and the finite verb, while leaving unspecified a number of other

parameters, thus making straightforward application of the generalization to other types of agreement difficult. Agreement in Khuduts differs significantly from that canonical pattern with respect to the nature of φ-features involved (separate morphological slots / syntactic probes for argument–verb agreement in gender–number and in person), the identity of the controller (ergative agreement in gender–number, hierarchical agreement in person), and the identity of the agreeing functional head (finite T^0 for person, defective T^0 or v^0 for gender–number). As long as the embedded subject's φ-values are present on a functional head in the clausal spine, current versions of Landau's generalization block the formation of the control relation between the matrix controller and the embedded subject, and thus fail to predict the OC status of infinitival complements with less canonical agreement properties, such as in Khuduts. The role of these parameters still needs to be clarified.

In a wider perspective, the whole idea that the PRO or *pro* status of the null embedded subject should correlate with agreement apparently stems from the assumption that the latter is a necessary factor involved in the licensing of *pro*. While it is indeed so in some languages, such as Germanic or Romance, this is not universally true, since radical *pro*-drop languages are known to disassociate *pro* from agreement. Crucially, the latter type includes not only agreement-less languages, such as Chinese and Korean, but also regular subject agreement languages, like Turkic or Dravidian (see the discussion in Holmberg 2010: 122–123). If agreement is not a theoretical prerequisite to *pro* licensing, then we can expect the two phenomena to diverge. Presence of agreement in tensed complements then does not necessarily mean that the category in question is *pro*. This is exactly what we see in languages of the Caucasus that allow free omission of arguments depending on appropriate

discourse conditions but are insensitive to whether the arguments agree or not. As we saw, agreeing tensed/attitude complements feature OC PRO subjects in these languages. In a similar vein, absence of agreement morphology in tensed/attitude configurations is not a sufficient condition for PRO licensing either.

The examples discussed in this article also reiterate one important point long known from previous work (Wurmbrand 2001): matrix verbs do not always easily lend themselves to treating in terms of classes and often need to be handled on a verb-by-verb basis. As we saw, Khuduts person-inflected complements with desiderative verbs, though uniformly licensing PRO null subjects, vary with respect to the availability of disjoint overt subjects. Similarly, Georgian subjunctive complements vary with regard to the nature of their null subject: some license OC PRO, whereas some others license overt DPs or *pro*. Udi nominalized complements demonstrate that typical non-finite (nominalized) complements within the same language may also diverge with respect to the nature of their null subjects (cf. Sundaresan and McFadden's [2009] generalization restricting but not banning *pro* from non-finite complements).

Overall, theoretical significance of the OC-NC generalization seems to be overstated in Landau's work. Although apparently having initial empirical support, the current version of the generalization cannot stand up against additional empirical evidence. Before incorporating the derivation of the generalization into the universal syntactic theory of OC, we still need to further investigate interaction between OC and morphological agreement. Inspecting the behavior of matrix verbs in languages with different agreement properties, we will hopefully arrive at a more fine-grained typology of such interaction and then see whether anything like the OC-NC

generalization arises in a non-trivial set of clausal complements. Such a generalization may well arise. Much work, however, is needed even in well-studied languages like English, let alone less well-known languages, such as Nakh-Daghestanian and Kartvelian.

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Table 1. Morphological exponence of gender–number agreement in Khuduts.

	N	F	M
SG	b-	r-	w- / zero
PL	d-		b-

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[1] "The complements may differ in category (IP vs. CP vs. DP), mood (indicative vs. subjunctive), or morphological tense (subjunctive vs. infinitive), but each one falls on a definite side of the [±Agr] divide. The other grammatical features do not matter. The fundamental claim of the Agree model [retained in a modified form in the Two-Tiered Theory of Control—DG] is that all we need to know about the control behavior of a complement (whether it displays OC or NC) are two pieces of information: the value of its [T] feature and the value of its [Agr] feature."

[2] The abbreviations follow the Leipzig Glossing Rules (https://www.eva.mpg.de/lingua/resources/glossing-rules.php); I have modified others' glosses to match the rules where possible, and have added the following items

not in the Leipzig list: ADD – additive clitic, AOR – aorist, IPF – imperfective stem, LV – light verb, OPT – optative, PF – perfective stem, PLUPRF – pluperfect, PV – preverb.

[3] Following Landau (2004: 839; 2015: 6, 88), I consider the feature [Agr] to be purely morphological: [+Agr] is present when there is overt agreement morphology; [-Agr] (sometimes also called "abstract Agr") is present when no overt morphological realization of φ-features is observed on the verb. Importantly, [+Agr] does not mean that every single lexical root and/or cell in a paradigm must have overt exponence. It is enough to have at least some φ-feature distinctions in morphology. In particular, this means that all Khuduts verbs lexicalize a syntactic structure with a gender probe, irrespectively of whether or not a specific verb hosts the gender agreement slot. This point is also relevant in the discussion of non-agreeing desiderative complements in Sections 4 and 5.

[4] The same pattern of gender agreement with plural personal pronouns is found in most other Dargwa languages (e.g., van den Berg 2001: 13 on Aqusha) as well as some other Nakh-Daghestanian languages: Archi from the Lezgic branch (Chumakina et al. 2007), and Chechen and Ingush from the Nakh branch (Nichols 2011). A typologically oriented discussion of this agreement pattern can be found in Baerman and Corbett (2013). In particular, they conclude that person agreement parasitic on gender agreement cannot be analyzed as a kind of default agreement and needs a reference to person feature.

[5] Khuduts possesses two series of person markers, one is used in the Aorist, Present and Past Progressive, the other is used in the Generic Present, Past Habitual, and the person-inflected infinitive. Phonologically, person markers in the first series

are clitics, whereas those in the second series are suffixes. I know of no difference between the two series in their morphosyntactic behavior.

[6] It is impossible to establish which of the two argument controls agreement in this case, since third person inflection does not show distinctions in other features, such as number or gender.

[7] First and second person pronouns do not morphologically distinguish between ergative and absolutive forms in Khuduts. Interlinear glosses in this and other examples show the case of such pronouns as appropriate for the syntactic position of the pronoun.

[8] An unrelated quirk of the Dargwa system is that the past tense marker *-di* looks the same as the second person singular marker *-di*. It is not clear whether or not they are diachronically related to each other. Synchronically, they are usually considered simply being homonymous.

[9] Note that this fact alone seriously undermines claims about universality of the OC-NC generalization.

[10] Transitive infinitival complements of desiderative verbs display identical behavior in all aspects examined below, except for the controller of gender agreement: as explained earlier, transitive embedded verbs agree in gender with their absolutive direct object rather than with the ergative subject.

[11] The verb *q'ast bar'qij* 'decide' is a transitive verb with an ergative subject. Morphologically, this is a complex verb consisting of the transitive light verb *barq'ij* 'do, make' and the non-inflecting component *q'ast* 'decision'. Gender agreement on the light verb is invariably neuter singular; person agreement is with the subject.

[12] Transitive embedded predicates also license the ergative reflexive pronoun in the subject position. In constructions with the verb *q'ast barq'ij* 'decide', however, the licenser of the ergative reflexive in the embedded clause is not immediately seen on the surface, since both the matrix and embedded verbs are transitive. When a desiderative verb belongs to a different valency class (intransitive or dative subject), the embedded transitive verb is the only possible licenser of the ergative case on the reflexive pronoun.

(i) madina-j b-ikː-ul=ca-b [cini-l=gina q'^{w}aˤl
Madina-DAT N.SG-want:IPF-CVB=AUX-N.SG self-ERG=only cow(ABS)
b-ircː-ij / b-ircː-ar-aj]
N.SG-milk:PF-INF N.SG-milk:PF-3-INF
'Madina wants to milk the cow herself.'

[13] This is true without exceptions for singular antecedents/agreement. Plural agreement on the embedded intransitive infinitive is possible in the presence of a singular matrix subject in partial control environments. I leave the discussion of partial control in Khuduts and other Dargwa languages for another occasion.

[14] Recall that "tensed" is understood here as availability of temporal mismatches between the matrix and embedded clauses. Whether or not this property should be called tensedness is an open issue (see Wurmbrand 2014 for a different approach to tense in infinitives). What is important for me here is that it is the property deemed relevant for Landau's Generalization.

[15] Following Sundaresan and McFadden (2009) and Sundaresan (2014), I assume that availability of the disjoint overt subject in the complement clause is

orthogonal to the question about the category of null subjects. The latter must be established on its own using standard diagnostics to distinguish between PRO and *pro*.

[16] Data from the neighboring Qunqi Dargwa may also be relevant in this respect. In this language, only a person-inflected infinitive can be used in the complement of a desiderative verb. In contrast to Khuduts, however, all desiderative verbs (seven verbs have been inspected cognate to the Khuduts ones discussed here) uniformly prohibit overt DP subjects in embedded clauses, i.e., they follow the pattern observed above for Khuduts gender-inflected complements rather than Khuduts person-inflected complements.

[17] The reviewer suggests that the most straightforward way to establish whether the embedded subject is PRO or *pro* is to exclude the matrix subject from the set of potential antecedents by setting up a condition B situation in examples like *Rasul knows that mother wants _ to go with her*. If the sentence can be read as "Rasul$_i$ thinks that his mother$_j$ wants him$_i$ to go with her$_j$", then the null subject behaves like *pro*, rather than PRO. However, the proposed diagnostics is not applicable, since third-person pronominals in Khuduts have anti-subject orientation and can never be bound by a subject, be it local or non-local. *Mother* therefore could not serve as an antecedent of the overt pronoun even if the null embedded subject were *pro* with reference to a more distant antecedent.

[18] As another anonymous reviewer points out, the examples above could also result from an intervention effect such that the closest potential controller must always be chosen despite there being other legitimate controllers. To the best of my

knowledge, however, the two options cannot be teased apart in Khuduts. In particular, no impersonal (passive) constructions can be formed from desiderative verbs in the language.

[19] The conclusion that Udi nominalized clauses must be qualified as [-Agr] is confirmed by two facts. First, no overt morphological agreement can ever be seen between the subject and the head of the nominalized clause. Second, the matrix clause and the nominalized embedded clause constitute a single domain with respect to person agreement which is seen in Udi from the ability of matrix person clitics to be attached to the constituents of the nominalized clause. No agreeing clause in Udi, indicative or subjunctive, can host a person clitic associated with the subject of another agreeing clause (Harris 2002).

[20] https://www.bible.com/bible/264/mat.27.17 (last accessed August 25, 2017).

[21] As mentioned in footnote 3, [-Agr] means that overt morphological agreement is never present, while [+Agr] indicates that agreement is seen at least in some cells of the φ-feature paradigm of at least some lexical item(s). The English finite past tense is thus minimally different from the English subjunctive: the former shows agreement on the single verb *be*, enough to be qualified as [+Agr], whereas the latter shows agreement not even on the verb *be* and thus is [-Agr].

[22] Unlike subjunctive complements in some other languages (Landau 2004: 855–860), English subjunctive constructions are uncontrolled without an additional disjoint reference requirement: overt pronouns in the subjunctive complement can still be accidentally coreferent with the matrix subject as in *She$_i$ asked that she$_i$ be allowed to stay here*.

[23] It is also not clear whether/how this analysis could be recast in terms of the Two-Tiered theory of control. Landau (2015) never discusses the Hebrew agreeing complements.

[24] That the complex reflexive in (53) is (intended to be) bound by the matrix subject rather than the null embedded subject is seen from the case marking on the reflexive. Each component of the complex (double) reflexive in Khuduts bears its own case marking: one is in the case of the antecedent, the other is in the case of the reflexivized argument (see more on complex reflexives in Nakh-Daghestanian in Ganenkov and Bogomolova, in preparation). The ergative marking of the reflexive in (53) appropriate for the subject of the transitive matrix verb *q'ast barq'i* 'decide' is ungrammatical. The absolutive case of the reflexive as required by the intransitive embedded verb *pikri bik'ʷij* 'care' would be fine here, cf. case marking of the complex reflexive in (51) above.

[25] Note that even structures with overt complementizer-like elements may be analyzed as less than CP complements, cf. the discussion of the status of the complementizer *ke* in Persian in Ghomeshi (2001), Darzi (2008), and Ilkhanipour (2014). In addition, as McFadden (2014) also suggests, a more detailed classification of CP structures may be needed which will also affect the scope and limits of typological generalizations like the one discussed in this article.