## Licensed to license: Deficient probes in West Circassian nominalizations Ksenia Ershova (kershova@mit.edu)

**Introduction.** This talk argues for a context-dependent, counter-cyclic view of  $\phi$ -probe feature deficiency: verbal probes must be licensed by the highest head in the extended projection ( $C^0$ ) in order to agree with and license nominal arguments. This is supported by verbal nominalizations in West Circassian (WC), which, despite being as large as TP and including the full range of verbal  $\phi$ -probes, cannot expone verbal  $\phi$ -agreement, assign case or license arguments. The proposal may be extended to other instances of probes being licensed by a higher projection, e.g. ERG-assigning  $v^0$  in Hindi (Legate 2008) or genitive of negation in Russian (Bailyn 2004).

**Polypersonal agreement and full clause structure.** WC is polysynthetic, with separate verbal morphemes exponing  $\phi$ -agreement with each core argument; e.g. the verb in (1) includes prefixes indexing the ergative agent (ERG), absolutive theme (ABS), and benefactive applied argument (IO).

WC has ergative agreement and case marking and has high absolutive syntax (see e.g. Bittner and Hale 1996; Coon et al. 2021 on Inuit and Mayan); this is shown by conditions on parasitic gaps (not shown here; Ershova 2021) and reciprocal binding: the ABS theme of a transitive verb binds the ERG agent and not vice versa (2). The prefix ze(re)- is neutralized for  $\phi$ -features and marks agreement with an ERG reciprocal pronoun: this is evident from the variable position of REC for different types of bound arguments (cf. REC in comitative position in 3), case marking on the antecedent, and the possibility of an overt anaphor alongside this morpheme (Ershova to appear).

- (2) mə çəf-xe-r **Ø-** qe- **zere-** Be- \$wež'əx this person-PL-ABS **3ABS-** DIR- **REC.ERG-** CAUS- dance.PL 'These people are making each other dance.'
- (3) wone Ø- ze- de- t- §'əʁ house 3ABS- REC.IO- COM- 1PL.ERG- build.PST 'We built a house together (lit. with each other).'

ERG and IO are introduced as specifiers by  $v^0$  and  $Appl^0$  respectively, and ABS moves to Spec,TP (4; Ershova 2019, 2021, to appear). The polypersonal agreement in (1) is the result of Agree between  $T^0$ ,  $v^0$ , and  $Appl^0$  and their specifiers (ABS, ERG, and IO respectively). This agreement, in addition to valuing the  $\phi$ -features of the probes, licenses the nominal arguments (Kalin 2018).

$$(4) \qquad [_{\text{TP}} \ D_{abs}^{\textbf{P}} \ T_{[\phi]} \ [_{v\textbf{P}} \ D_{erg}^{\textbf{P}} \ v_{[\phi]} \ [_{\textbf{ApplP}} \ D_{to}^{\textbf{P}} \ \textbf{Appl}_{[\phi]} \ [_{\textbf{VP}} \ t_{abs}]$$

**Deficient probes in nominalizations.** Predicates may be nominalized with a specialized suffix: in this case, regular  $\phi$ -agreement is disallowed. Nominalizations may not include overt tense morphology, and argument DPs are not licensed as in a finite clause, but are instead incorporated as an NP or expressed as a possessor, triggering possessive agreement (Ershova 2020) (5; cf. 1).

(7) ja- aχče- **κe-** k̄wa -č'e 'her manner of spending (=causing to perish) money' 3sg.poss- money- CAUS- go -NML

Despite the lack of verbal  $\phi$ -agreement and clause-level argument licensing, nominalizations include structure up to TP. This is shown by applicatives, e.g. comitative in (6), and v-type morphology such as causative  $\mathcal{B}e$ - (7). Additionally, they may be modified by temporal adverbs (8; cf. the non-derived nominal in 9) and clausal adjuncts (not shown here).

(8) **mafe-qes** wjə- t<sup>w</sup>əčan- k<sup>w</sup>e -n (9) \* **mafe-qes** peredač' day-each 2SG.POSS- store- go -NML day-each broadcast 'your going to the store every day' Intended: 'everyday broadcast'

**Probes are licensed to license.** I propose that  $\phi$ -probes are by default featurally deficient, specified only for number (#) and not person ( $\pi$ ), and acquire their full feature values when the highest head in their extended projection is merged:  $C^0$  in the verbal domain and  $D^0$  in the nominal domain. The proposal is reminiscent of Chomsky's (2008) feature inheritance, but applies long distance and to multiple functional heads. Following Kalin (2018, 2019), nominal licensing involves checking the valued  $\phi$ -features of the corresponding argument by an agreement probe; if the probe only bears a subset of the relevant features, the nominal remains unlicensed.

Appl<sup>0</sup>,  $v^0$  and  $T^0$  are thus initially merged as deficient probes. Appl<sup>0</sup> and  $v^0$  select for their corresponding specifiers and check their number features; at this stage arguments remain unlicensed due to their unchecked [ $\pi$ ] features.  $T^0$  probes with [#] and attracts the absolutive theme as the only goal with an unchecked [#] feature (10). In a finite sentence like (1)  $C^0$  merges above  $T^0$  and assigns the [ $\pi$ ] probe to the lower verbal heads, licensing them to check [ $\pi$ ] on their specifiers and expone full  $\phi$ -agreement (10). A nominalized structure as in (5)-(8) contains a nominalizing head above TP instead of  $C^0$ , leaving the lower verbal heads unable to license their specifiers, correctly ruling out verbal  $\phi$ -agreement.

The featural deficiency of the  $\phi$ -probes correctly predicts that nominal arguments which are fully specified for  $\phi$ -features cannot be licensed by verbal functional heads in nominalizations. The proposal also predicts that  $\phi$ -deficient nominals which are not specified for  $[\pi]$  may appear in nominalizations – this is confirmed by structurally diminished incorporated NPs in the above examples and the possibility of agreement with anaphoric pronouns, which are underspecified for  $\phi$ -features (12-13; see e.g. Kratzer 2009). Because anaphors are only specified for [#], they may be licensed by a deficient [#] probe regardless whether  $C^0$  is merged higher in the clause: e.g. the ERG reciprocal in (12) successfully agrees with  $v^0$ , but the absolutive DP must move to Spec,PossP for licensing (14). Additionally, the possibility of the ERG reciprocal in (12) confirms that  $\phi$ -deficient  $T^0$  is present in nominalizations and triggers ABS raising to Spec,TP; cf. (2).

(12) ja- **zere**- wəç'ə -ç'e (13) ja- **ze- fe-** lež'ež'ə -ç'e 3PL.POSS- **REC.ERG-** kill -NML 3PL.POSS- **REC.IO- BEN-** work -NML 'the way they kill each other' 'their working for each other'

(14) 
$$[PossP DP_{\checkmark\#,\checkmark\pi}]$$
  $Poss_{[\#,\pi]}$   $[nP NML [TP < DP_{\checkmark\#,\pi}] > T_{[\#]}$   $[vP rec_{[\checkmark\#]} v_{[\#]}]$   $[tabs]$ 

**Select references.** • Bailyn 2004. In *WAFL*. •Coon et al. 2021. *Language*. •Ershova 2019b. UChicago diss. •Ershova 2020. *NLLT*. •Ershova 2021. *LI*. •Ershova to appear. *Language*. lingbuzz/005168. •Kalin 2018. *Syntax*.