Reflexives in West Circassian: Ingredients of Subject Orientation

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- **1 Introduction.** Reflexives in West Circassian (WC; or Adyghe) are expressed via an affix on the predicate and are subject oriented. This suggests an analysis along the lines of Labelle (2008); Schäfer (2008), but a number of properties set WC apart from typologically similar cases: the reflexive morpheme cannot be analyzed as a valency reducing operator, a type of Voice⁰ or agreement with the external argument. Instead, the reflexive morpheme marks agreement with a reflexive pronoun in the position of the semantically bound argument, per Sportiche (2014); Ahn (2015). Furthermore, the range of possible antecedents precludes an analysis wherein the head responsible for reflexive co-indexation Voice_R introduces the external argument. Instead, building on Ahn (2015), reflexive Voice_R must be merged above the potential antecedent, with reflexive binding established via movement of the reflexive and its antecedent to positions above Voice_R.
- **2 Reflexives are licensed via Voice_R.** WC is polysynthetic, with free word order, radical pro-drop, and arguments cross-referenced on the verb (Arkadiev et al. 2009, a.o.). Due to pro-drop, the main way of expressing reflexivity is via the replacement of the agreement prefix for the bound argument with the reflexive morpheme $z(\partial)$ -. Thus, depending on the position of $z(\partial)$ in (1)-(2), the agent may be interpreted as co-referent either with the theme (1), or the benefactive applied object (2).

(1) Theme- IO- Agent- $\mathbf{z_{i/*j^-}}$ $\mathbf{a_{j^-}}$ fe- $\mathbf{s_{i^-}}$ thač'əß REFL.ABS- 3PL.IO- BEN- 1SG.ERG- wash.PST a. 'I washed myself for them.'

b. * 'I washed them for themselves.'

The variable position of $z\partial$ - is especially evident in the presence of overt absolutive agreement morphology, as e.g. in (3), where the absolutive subject serves as the antecedent for the applied argument.

(2) Theme- IO- Agent-Ø_j- zə_{i/*j}- fe- s_i- thač əßex 3ABS- REFL.IO- BEN- 1SG.ERG- wash.PST.PL a. 'I washed them for myself.' b. * 'I washed them for themselves.'

> (3) wə_i- **zə**_i- f- jeǯež'əʁ 2SG.ABS- **REFL.IO**- BEN- study.PST 'You studied for yourself.'

Subject orientation is evinced by the fact that the argument referenced by reflexive z(a)- may only be bound by the external argument (1a), (2a), and not by the applied object (1b) or theme (2b). This sets reflexives apart from reciprocals, which are expressed via the prefix ze(re)-. Unlike reflexives, reciprocals are not subject-oriented, and may be bound e.g. by an absolutive theme (4); cf. (2b).

(4) tə_i- **ze_i-** f- jə- š'aʁ 'S/he brought us together 1PL.ABS- **REC.IO**- BEN- 3SG.ERG- bring.PST (lit. s/he brought us to each other).'

Following Labelle (2008); Ahn (2015) (cf. also Sportiche's (2014)'s projection HS), I propose that reflexivity in WC is established via a specialized reflexive Voice head which ensures that the only available antecedent for the reflexive is the external argument.

3 zə- is agreement with the bound argument. It is evident from the variable position of $z(\partial)$ -in (1)-(3) that the reflexive morpheme cannot be analyzed as the subject oriented reflexive si/se in Romance. It cannot be an exponent of the external argument, as proposed e.g. by Pesetsky (1995), nor can it be the spellout of reflexive Voice_R itself, as argued by Labelle (2008) for French and by Ahn (2015) for reflexive verbal morphology cross-linguistically: if that were the case, we would expect this morpheme to have a fixed position within the verbal form, as opposed to it appearing in the exact position of ϕ -agreement with the bound argument. $z\partial$ - also does not act as a valency-reducing operator: the ergative agent of a transitive verb is still assigned ergative case and triggers ergative cross-reference marking despite the presence of $z\partial$ - in (5).

(5) šə-xe-m xə-m **zə-** Ø- x- **a-** dzež'əʁe -x horse-PL-OBL(=ERG) sea-OBL REFL.ABS- 3SG.IO- LOC- 3PL.ERG- throw.PST -PL(ABS)

'The horses threw themselves into the sea.' (Rogava & Keraševa 1966:267)

The properties of $z\partial$ - also cannot be captured via Schäfer's (2008) analysis of the Russian reflexive marker -sja as an identity function. This marker merges as the complement of V^0 , ensuring that the theta-role of the theme remains unsaturated until the external argument is merged and co-indexed with the theme via predicate conjunction. This denotation captures the subject-oriented and locality constrained nature of this marker in Russian, as well as its possibility only with naturally reflexive predicates. The WC reflexive marker $z\partial$ -, however, is not limited to theme positions (2) and may productively attach to all types of predicates, not just naturally reflexive ones, e.g. 'throw' in (5).

To summarize, the marker $z \rightarrow$ tracks agreement with a syntactically active reflexive pronoun in the thematic position of the bound argument. This argument must be bound by the highest DP within vP, but need not be locally adjacent to it, thus making a predicate conjunction account untenable.

- **4 Movement to reflexive Voice**_R. The reflexive Voice_R head which licenses z-cannot be the head that introduces the external argument (cf. Labelle 2008): for unaccusative verbs with high applicatives, which lack an external argument, the applied argument can bind the theme (6). Assuming that high applicatives are introduced via Appl⁰ (Pylkkänen 2008), one would need to posit a reflexive Appl_R, predicting that applied arguments are generally possible antecedents, counter to fact (1).
- (6) Theme- IOzə- s- şwe- š'təb REFL.ABS- 1SG.IO- MAL- freeze.PST 'I froze against my will.'

Building on Ahn (2015), I propose that reflexive binding is established via reflexive $Voice_R$. Syntactically, $Voice_R$ selects for vP and hosts two uEPP features: REFL, which attracts the reflexive to Spec, VoiceP, and D, which attracts the highest DP within its c-command domain (7a). Semanti-

cally, $Voice_R$ co-indexes the two arguments (7b). The original analysis proposed by Ahn (2015) can account for the facts, but relies on the presence of an additional functional head $Pred^0$, for which there is no independent evidence in WC. The movement analysis of z- is further supported by the incompatibility of this marker with syntactic islands such as coordinate structures (not shown here).

- (7) a. Voice_R: [uEPP(REFL); uEPP(D)]
- b. $[Voice_R] := \lambda P \lambda x \lambda y \lambda e. P(e) \& x=y$

The derivation of (1) is shown in (8). Voice_R is merged above vP and attracts two DPs to its specifier: the highest DP in its c-command domain via uEPP(D), and the reflexive anaphor via uEPP(REFL). As specifiers of Voice_R, the two arguments are semantically co-indexed. The applied object in (1) cannot bind the reflexive pronoun due to locality conditions on Move: only the highest DP within vP is an eligible goal for uEPP(D) on $Voice_R$ (8). In (6), on the other hand, since the applied argument is the highest DP below $Voice_R$, it can freely move to bind the reflexive pronoun.

(8)
$$[VoiceP DP_i REFL_{i/*j} [Voice_{[uepp(refl); uepp(d)]}] [vP DP_i(ERG) [ApplP DP_j(IO) [VP REFL(ABS)]]]]]$$

- **5 Implications.** In addition to expanding the typology of reflexive voice, this analysis sheds light on a puzzling mismatch in directionality between reflexive and reciprocal binding in WC. Given the local subject oriented nature of reflexives in WC, they are not necessarily a reliable diagnostic for surface subjecthood (cf. Caponigro & Polinsky 2011:79). In fact, if we turn to reciprocals, the absolutive theme binds a reciprocal in the ergative position (Letuchiy 2010) this is evident from the absolutive case marking on the antecedent DP (9), as well as from the position of the reciprocal marker in the ergative agreement slot (10). This suggests that WC is a high absolutive language in Coon et al.'s (2014) terms: the absolutive DP moves to a position c-commanding the external argument and is thus the surface subject. Reciprocals then simply require binding in the CP domain.
- (9) mə wənaʁwe-xe-r Ø- zer- e- wəχwəmež'əx (10)tə- zer- e- ṣ̂e this family-PL-ABS 3ABS- REC.ERG- PRS- protect.PL 1PL.ABS- REC.ERG- PRS- know 'These families protect each other.'