From possessor agreement to object marking:
the grammaticalization path of the Udmurt -*(j)ez* suffix

Katalin É. Kiss (Research Institute for Linguistics of the Hungarian Academy of Sciences) **&** **Orsolya Tanczos** (Research Institute for Linguistics of the Hungarian Academy of Sciences)

1. The problem

A characteristic feature of Uralic languages is the use of possessive agreement in non-possessive – mostly determiner-like – functions (Collinder 1960; Schlachter 1960; Hajdú 1964; Sinor 1978; Rédei 1988; Leinonen 1998; Winkler 2001, 2011; Nikolaeva 2003; Fraurud 2001; Gerland 2014; Janda 2015, etc.). The 3SG possessive agreement suffix appears to have obtained the widest range of roles in Udmurt, where in addition to encoding a 3SG possessor (1a), it is said to express explicit or implicit contrast (1b,c), and to mark accusative case on definite, or specific indefinite objects (1d).

(1)a. *Sasha-len   kniga-jez*
    Sasha-GEN   book-3SG   'Sasha's book'

  b. *Ulizy-vylizy   kyk bratjos,   pokchi-jez kuaner, byzym-ez   uzyr.*
     lived-were.3SG   two brothers   young-*(j)ez* poor   old-*(j)ez*   rich
     'There lived two brothers, the younger one was poor, the older one was rich'

  c. *Buskel'jos-len   badžym-ez pi-zy   armiyś   bertyz   ini.*
     neighbors-GEN   elder-*(j)ez* son-3PL   army.from   returned.3SG already
     'The elder son of the neighbors has already returned   from army service'

  d. *mon (ta) kniga-jez   lydz-i.*
     I   this   book-*(j)ez* read-PRET.1SG
     'I read this book.'

We will claim that these cases are manifestations of three cognate -*(j)ez* suffixes with different morphological properties and different functions:

1. -*(j)ez* encoding the phi-features of the possessor (1a)
   Its form covaries with the person/number of the possessor; it attaches to the possessed NP.
2. -*(j)ez* encoding partitivity (1b,c)
   Its form is invariant; it attaches to an adjective or a quantifier.
3. -*(j)ez* encoding accusative case (1d)
   It is invariant with respect to person and number; it is attached to the object nominal.

We will reconstruct the gramaticalization processes relating the three suffixes on the basis of evidence from the sister languages (Hungarian, Khanty, Mansi, and Tundra Nenets).

2. The grammaticalization path from *of -jez2*

The grammaticalization processes could start in contexts like (1b), where the -*(j)ez*-marked phrase contains a pro possessor, and a possessum with an empty nominal head (corresponding to the English pronominal 'one'). The phonologically null pro could be ignored, and -*jez* could be reanalyzed as a general partitivity suffix, signalling that the referent of the noun phrase is part of a referent present in the domain of discourse. When the empty nominal head was also ignored, -*jez* came to be reanalyzed as a partitive-contrastive suffix of adjectives and quantifiers. I.e.:

(2)i. [$_{DP}$ pro$_i$ [$_{NP}$ *pokchi Ø-jez$_i$*]] → ii. [$_{NP}$ *pokchi Ø-jez*] → iii. [$_{AP}$ *pokchi-jez*]

(1b) represents stage (ii) (as the suffix -*jez* does not agree with the plural pro inferrable from the context), whereas (1c) represents stage (iii). A phrase containing a -*jez*-marked adjective or quantifier can combine with a possessive -*jez*:

(3) *Ivan-len   kyk-ez   brat-ez*
     Ivan-GEN   two-PRTV   brother-3SG 'Two brothers of Ivan'

The change from possessive agreement to partitivity marking, hypothetical in Udmurt, is documented in Hungarian, a sister language. The Hungarian partitivity suffix *-ik,* appearing on adjectives and quantifiers, was an allomorph of 3PL possessive agreement in Old Hungarian. In Old Hungarian documents, an *-ik*-marked element is always the possessum of a of possessive construction with a 3PL pro possessor. The pro possessor is always coreferent with a contextually given antecedent (4).

(4) *Valanac ot   hat kọ   vedrec$_i$ [$_{DP}$ pro$_i$ mēdèn-Ø-ic$_i$]   foglaluā kèt kọblọt.* (1416)
     were   there six   stone buckets   every-one-3PL taking   two vats
     'There were six stone buckets and every one of them measured two vats.'

In the Middle Hungarian period (after 1500), *-ik*-marked elements also appear as determiners and modifiers of nouns (*minden-ik fiú* 'every-ik boy', and after 1660, we attest occurrences bearing productive possessive agreement morphemes (*minden-ik-ük* every-ik-3PL 'every one of them'). These facts indicate that the silent pro possessor disappeared, and *-ik* ceased to encode any phi-features; it came to be reanalyzed as a general partitivity morpheme. The Hungarian 3SG possessive agreement morpheme *-jA* has run a similar course of grammaticalization.

3. The grammaticalization path of *-jez*3
Many Uralic languages, among them Khanty (Nikolaeva 2001; Dalrymple & Nikolaeva 2011), Mansi (Virtanen 2014, 2016), Hungarian (É. Kiss 2013), Tundra Nenets (Nikolaeva 2014), display DOM (differential object marking and/or differential object–verb agreement), and their objects are targeted by DOM iff they are familiar; iff they are topical (Nikolaeva 2001). (In Modern Hungarian, the familiarity requirement has been reanalyzed as a definiteness requirement.) In Udmurt, an object is marked by *-(j)ez* iff it is specific (i.e., definite or specific indefinite). Compare:

(5)a. What did you do?   b. What did you do with the fish?
     Choryg pös'ti.   *Choryg-ez pös'ti.*
     fish   cooked.1SG   fish-ACC   cooked-1SG
     'I cooked fish.'   'I cooked the fish.'

If object-marking encodes the familiarity–topicality of the object in the Uralic languages with DOM, it must do so in Udmurt, as well. I.e., *-jez*, analyzed traditionally as an accusative suffix, must have assumed its object-marking role as a familiarity-marking morpheme. Familiarity is a notion subsuming partitivity; the referent of a familiar NP is a subset, whereas the referent of a partitive NP is a proper subset, of a referent present in the domain of discourse (cf. Enc 1991). The familiarity-marking function of *-jez* must have evolved by the extension of its partitivity-marking role. The starting point of grammaticalization again must have been the possessive construction with a pro possessor, where pro could be ignored and *-jez* could assume a general [+partitive] meaning. This option only survived in the context of objects, where [+partitive] came to be reinterpreted as [+familiar].

(6)i. [$_{DP}$ pro$_i$ [$_{NP}$ NP-*jez$_i$*]] →   ii. [$_{NP}$ NP-*jez*]   → iii.[$_{NPobj}$ NP-*jez*]
                3SG   [+partitive]   [+familiar]

The case of *-jez* shows that grammaticalization, involving morphological decategorization, morphological simplification (paradigm loss), and semantic bleaching can affect not only content words but also inflectional elements.