

Valency classes of two-place predicates in Forest Enets

1. Goal of the study

- Describe the distribution of (a set of) two-place predicates of Forest Enets into valency classes, i.e. groups of verbs with the same means of participant encoding.
- Determine the principles of most common patterns of variation in participant encoding.

2. The questionnaire

- The primary set of predicates chosen for investigation comes from the questionnaire created for the typological study of valency classes of two-place predicates at the Department of Linguistic Typology of ILI RAN, see [Сай 2011; Сай 2014].
 - 130 predicate meanings given in a certain context;
 - Each sentence of the questionnaire contains two participants: A — more Agent-like participant; P — more Patient-like participant (in some cases assigned arbitrarily).

- (1) (Я чинил машину). ‘Мои руки пахнут бензином.’ stimulus from the questionnaire
(Я чистила рыбу) ‘Мои руки пахнут рыбой’. stimulus used for Enets
- | | | | | |
|-------------|---------------|-----------------|-------------------|----------------------|
| <i>modʲ</i> | <i>uzi-nʲ</i> | <i>kari-xon</i> | <i>ɔtieʔ-∅</i> | equivalent in Enets |
| I | arm-PL.1SG | fish-LOC.SG | smell(ipfv)-3SG.S | |
| | A | P | | participant labels |
| | NOM | LOC | | participant encoding |

- The questionnaire is biased towards predicate meanings that are often intransitive across languages.

3. The data

- Data elicited during fieldwork in the village of Potapovo in 2015 and 2016.
- Data from glossed texts in forest Enets.

4. Overview of the classes

- Each verb has to be assigned to one class only.
- In case of variation in participant encoding the verbs were classified along the following guidelines:
 - more natural or more frequent
 - intransitive, if both transitive and intransitive frames are possible
 - verbal, if both verbal and non-verbal predicates are available
 - less restricted in terms of the type of participant
- For Enets, the translational equivalents were found for 101 out of 130 sentences of the questionnaire, see Table 1 (as there are 101 verbs, the raw numbers roughly correspond to percentages).

Table 1. Valency classes of verbs organized by means of participant encoding (non-subject participant in bold)

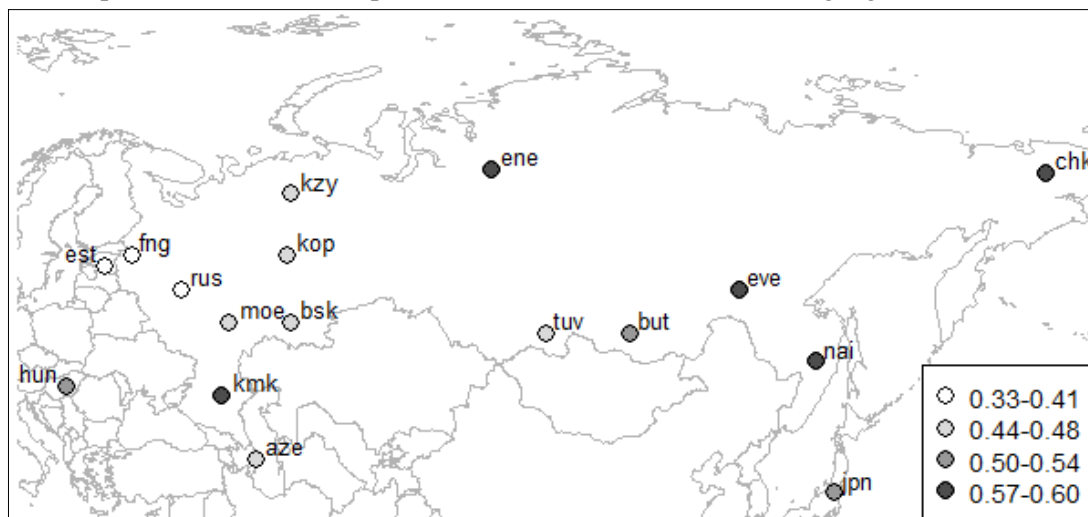
Participant encoding		Examples	Semantic roles of non-subject participant	N of verbs
A	P			
NOM	ACC	<i>sekru</i> ‘bite(pfv)’ <i>dʹazuta</i> ‘meet(pfv)’ <i>piis</i> ‘be afraid(ipfv)’	Patient and other	59
NOM	DAT	<i>sija</i> ‘sink(pfv)’ <i>man</i> ‘say(pfv)’ <i>ediu</i> ‘become glad(pfv)’	Goal, Addressee, Stimulus	10
NOM	LOC	<i>lebitur</i> ‘wave(ipfv)’ <i>tarur</i> ‘fight(ipfv)’	Instrument, Companion	10
NOM	ABL	<i>kaji</i> ‘stay_behind(pfv)’ <i>pajaru</i> ‘be shy(ipfv)’	Source, Stimulus	7
NOM	<i>mi?</i> ‘into’	<i>tʃu</i> ‘enter(pfv)’	Goal	1
NOM	<i>dʹez</i> ‘in the direction’	<i>senir</i> ‘look(ipfv)’	Stimulus	4
NOM	<i>nʹi-z</i> ‘surface-ABL’	<i>kaʔa</i> ‘come down(pfv)’	Source	1
NOM	<i>nʹru?</i> ‘across’	<i>kanie</i> ‘leave(pfv)’ (= ‘cross’)	Path of motion	1
NOM	<i>pʹʷn</i> ‘behind’	<i>dʹazu</i> ‘go(ipfv)’ (= ‘follow’)	Path of motion	1
NOM	<i>nʹe-ʷn</i> ‘surface-PROL’	<i>tudur</i> ‘miss’	Stimulus	1
NOM	NOM	<i>die</i> ‘ache(ipfv)’ <i>tʷri</i> ‘be enough(ipfv)’	Possessor	6

- The classes correspond to more or less expected and common patterns of polysemy of participant encoding means, i.e. cases and postpositions.
- The deviations from transitivity are mostly observed for P-participant.

5. Transitive predicates

- In Enets, as well as in all languages with comparable data, transitive verbs constitute the most numerous class among the predicates.
- It is possible to compare languages in terms of the ratio of transitive predicates to all predicates (from the questionnaire) attested in a given language¹.

Map 1. Ratio of transitive predicates in Enets and some other languages of Eurasia²



¹ Note that for different languages the number and sets of attested verbs are different. If transitivity ratios are counted only for those verbs that are attested in all the languages, the ordering of languages remains similar.

² The map was created using R [R Core Team 2015], with the additional packages ‘rworldmap’ [South 2011] and ‘calibrate’ [Graffelman 2006].

- For the languages with comparable data, there seem to be a West to East increase in the transitivity ratio (the correlation between longitude (as pointed on the map) and the ratio of transitives is statistically significant, Spearman's rank correlation $\rho = 0,57$, $p < 0,02$).
 - It is probable that the languages of Eastern Europe (Slavonic, Finnic, Baltic) constitute an unusual zone of low transitivity, cf. [Say 138] and Map 2 with the languages of Europe in the Appendix.
- Languages can be compared in terms of sets of predicates that are treated transitively or intransitively, cf. Table 2 and [ibid.: 140].

Table 2. Transitive and intransitive predicates in Enets and Evenki

		Evenki	
		Transitive	Intransitive
Enets	Transitive	51	6
	Intransitive	5	30

- 11, i.e. 5 + 6, of 92 predicates are treated differently in the two languages: $11 / 92 \approx 0,12$.

Table 3. Differences between Enets and some languages of Eurasia in terms of individual predicate assignment to transitives or intransitives³

Language	Distance to Enets	Ratio of transitives	Language	Distance to Enets	Ratio of transitives
Evenki	0,12	0,59	Russian	0,19	0,41
Erzya	0,13	0,47	Buriat	0,19	0,51
Chukchi	0,15	0,59	Kalmyk	0,20	0,59
Komi-Permyak	0,15	0,46	Tuvan	0,21	0,47
Komi-Zyrian	0,15	0,45	Japanese	0,22	0,54
Bashkir	0,15	0,46	Hungarian	0,22	0,51
Nanai	0,15	0,58	IngrianFinnish	0,24	0,38
Azerbaijani	0,18	0,48	Estonian	0,30	0,34

- Predicates that are transitive in Enets and often intransitive in other languages:
 - 'fear': *piis* 'be_afraid(ipfv)', cf. (2);
 - 'help': *perzi* 'help(pfv)', cf. (3);
 - 'shoot': *dʷɔza* 'shoot(pfv)';
 - 'be in need of' *magus* 'be in need of(ipfv)'.

(2) *modʷ-xoɔ, mana-Ø, tfike te-d piiʔ-εu*
 I-FOC say(pfv)-3SG.S this reindeer-OBL.SG.2SG be_afraid(ipfv)-1SG.SOsg
 'As for me, he said, I am afraid of this your reindeer'. [NSP910302_ENRU_143]

(3) *tfike entfeʔ fiʔ perzi-f*
 this person I.ACC help(pfv)-3SG.S.PST
 'This person helped me'. [II100713_PROZ_170]

³ Cf. distances between closely related languages: 0,03 between Komi-Permyak and Komi-Zyrian; 0,11 between Nanai and Evenki.

- A predicate which is usually transitive and intransitive in Enets is *kɔma* ‘want’, cf. (4).

(4) *entfeʔ mɔna-d, mɔna-d kɔma-ʔ niuʔ*
 person egg-DAT.SG egg-DAT.SG want(ipfv)-CONN NEG-3SG.S.CONT
 ‘A man wants an egg, after all’. [VNB961119_PRIM_080]

- According to [Nikolaeva 2014], verbs ‘help’ and ‘shoot up’ are transitive in Tundra Nenets as well, [ibid.: 230, 232], whereas the verb ‘be afraid’ takes the Stimulus in Ablative [ibid.: 192].

6. Two cases of variation

- For the cases of variation considered below the main goal was to find out whether the type of verb is associated with the variation in participant expression.

6.1. Reciprocal and other predicates: expression of Companion participant

- In Enets, there are at least two ways of expressing Companion participant: Locative case and dedicated postposition *nɔʔ* ‘with’, cf. (5)–(6).

(5) *ɔnej baza-an εse-xon-eniʔ tɔlʔkɔ*
 Enets language-PROL.SG father-LOC.SG-OBL.SG.1SG only
modʔnaʔ dʔɔri-mubi-aʔ
 we talk(ipfv)-HAB-1PL.S/SOsg
 ‘We spoke Enets only with my father’. [AP_NNB970724_INT1_AP_034]

(6) *εε-da nɔʔ pe-xon dʔɔrida-raxa-bi-xiʔ ani*
 mother-OBL.SG.3SG with outdoors-LOC.SG talk(ipfv)-SUPP-PRF-3DU.S and
 ‘It seems like they speak with her mother outdoors’. [VNB960309_SVA_148]

- For personal pronouns, the two constructions are (almost) not opposed:

(7) *modʔ teza iblʔejgu-ɔn nɔnid dʔɔri-ma-d kɔma-zʔ*
 I now small-PROL.SG you(sg).LOC talk(ipfv)-NMLZ1-DAT.SG want(ipfv)-1SG.S
 ‘I want to talk to you a little now’. [NK080403_SK_001]

- Text frequencies of the two means of Companion encoding for the three reciprocal verbs included in the questionnaire (personal pronouns are excluded):

Table 4. Reciprocal predicates of the questionnaire and Companion encoding in the glossed texts

Verb	Locative case	Postposition <i>nɔʔ</i> ‘with’	Ratio of postposition
<i>tarur</i> ‘fight(ipfv)’	1	0	-----
<i>kauzur</i> ‘abuse(ipfv)’	1	1	-----
<i>dʔɔrir</i> ‘talk(ipfv)’	14	8	0,36

- Verbs attested with postposition *nɔʔ* ‘with’ more than 5 times and the number of occurrences with the Companion marked by the Locative case:

Table 4. Reciprocal predicates of the questionnaire and Companion encoding in the glossed texts

Verb	Locative case	Postposition <i>nɔʔ</i> ‘with’	Ratio of postposition
<i>dʲiri</i> ‘live(ipfv)’	10	14	0,58
<i>kanʲe</i> ‘leave(pfv)’	13	14	0,52
<i>dʲazu</i> ‘go(ipfv)’	1	11	0,92
<i>kaji</i> ‘stay behind(pfv)’	1	6	0,86

(8) *axa, modʲ be-j kasa-nʲʔ nɔʔ kanʲe-jʔ*
 yeah I keep_vigil(ipfv)-PTCP.ANT man-OBL.SG.1SG with leave(pfv)-1DU.S/SOsg
 ‘Yeah, we left with the mate we kept vigil with’. [LD100715_VOL_068]

(9) *modʲnaʔ ti-naʔ kutuj-xin kanʲe-ga-ʔ*
 we reindeer-PL.1PL some-LOC.PL leave(pfv)-DISC-3PL.S
tʃik kezər texin
 this wild_reindeer reindeer-LOC.PL
 ‘Our reindeer sometimes leave with these wild reindeer’. [LD100715_VOL_005]

- The data from texts suggest that the dedicated comitative postposition *nɔʔ* ‘with’ is more frequently used with verbs that are not reciprocal and do not subcategorize for a Companion participant, cf. [Kittilä et al. 2011: 10] on the predominance of case marking over adpositional marking for subcategorized participants related to frequency of occurrence and expectedness.

6.2. Motion verbs: variation between spatial cases and postpositions

- Spatial Landmarks in Enets can be encoded either with spatial cases or one of the corresponding postpositions, cf. (10)–(11):

(10) *tʃike-kuji pɛ, kamo ubud tɔda-bi-zʔ*
 this-POOR wood larch end-DAT.SG climb(pfv)-PRF-3SG.M
 ‘And the poor other one climbed onto the tree, onto the end of the larch’. [VNB950724_BRAT_093]

(11) *pɛ, pɛ ubu nʲiʔ tɔda-bi-zʔ, tekru-bi-zʔ*
 wood wood end on(dir) climb(pfv)-PRF-3SG.M hide(pfv)-PRF-3SG.M
 ‘He climbed on a tree and hid’. [NI080823_TOV1_012]

- Nouns referring to Landmarks differ greatly in their preferences towards case or postpositional marking, cf. 13 more or less typical Landmarks in Enets and their occurrence with the two types of means (for Goals only):

Table 5. Case/postpositional marking of some nouns referring to Landmarks

Noun	Case	Postposition	Ratio of case	Noun	Case	Postposition	Ratio of case
<i>mezu</i> ‘chum’	199	8	0,96	<i>salba</i> ‘ice’	2	1	
<i>d’ia</i> ‘place’	54	8	0,87	<i>baʔa</i> ‘bedding’	3	5	
<i>balko</i> ‘balok’	12	2	0,86	<i>kamoz</i> ‘house’	7	1	
<i>ubu</i> ‘end’	6	1	0,86	<i>d’oxa</i> ‘river’	2	2	
<i>d’ettfju</i> ‘Yenissey’	12	2	0,86	<i>ɔdu</i> ‘boat’	1	4	
<i>bago</i> ‘pit’	4	10	0,29	<i>lekeku</i> ‘crack’	1	1	
<i>kɔdo</i> ‘sledge’	1	14	0,07				

- Possible differences in verbs: preference towards case marking vs. postpositional marking: verbs that deviate from the noun’s typical way of marking, e.g., verbs that combine with *mezu* ‘chum’ marked by the postposition *miʔ* ‘into’.

Table 6. Verbs manifesting disposition to adpositional or case marking of Landmark

Verbs attested with postpositions with nouns favouring case marking	Verbs attested for both conditions (N of lexemes of cases with atypical use of adposition; case)	Verbs attested with cases with nouns favouring postpositional marking
<i>sumɔ</i> ‘fall down(pfv)’ : 2 <i>kaus</i> ‘fall down(pfv)’ : 1 <i>tʃu</i> ‘enter(pfv)’ : 3 <i>pɔkuru</i> ‘climb into(pfv)’ : 1 <i>tɔda</i> ‘climb(pfv)’ : 1 <i>tadi</i> ‘step on(pfv)’ : 1	<i>adu</i> ‘sit down(pfv)’ : 3; 1 <i>kaʔa</i> ‘come down(pfv)’ : 1; 1	<i>tous</i> ‘reach(pfv)’ : 5 <i>kan’ie</i> ‘leave(pfv)’ : 1

- Possible generalization: Verbs which semantically specify a certain manner or path of motion tend to be used with Landmarks marked with postpositions. Generic verbs of motion tend to be used with Landmarks marked by the Dative.
- For two most frequent nouns there is quantitative evidence in favour of this hypothesis.

Table 7. Differences between individual verbs for Landmarks *mezu* ‘chum’ and *d’ia* ‘place’⁴

Verb	<i>mezu</i> ‘chum’		<i>d’ia</i> ‘place’	
	Case	Postposition	Case	Postposition
<i>kan’ie</i> ‘leave(pfv)’	68	0	12	0
<i>to</i> ‘come(pfv)’	49	0	9	0
<i>tous</i> ‘reach(pfv)’	44	0	8	0
<i>tʃu</i> ‘enter(pfv)’	20	3	-----	-----
<i>adu</i> ‘sit down(pfv)’	2	3	-----	-----
<i>sumɔ</i> ‘fall down(pfv)’	-----	-----	0	3

7. Conclusions

- If compared on the basis of the questionnaire, among the languages of Eurasia Enets has comparatively high ratio of transitives, and in this respect it goes in line with the general increase of the transitivity ratio from the Eastern Europe eastwards.
- There is some evidence that both the variation between Locative and postposition *noʔ* ‘with’ that are used to encode Companion participants and more cross-linguistically widespread

⁴ Differences between all the pairs of verbs from the lower and from the upper corresponding parts of Table 7 are statistically significant (two-sided Fisher’s exact, $p < 0,05$ in all cases).

