# Non-syntactic restrictions on incorporation in Chukchi

Alexey Vinyar, Ekaterina Gerasimenko (HSE) alexvinyar@yandex.ru, katgerasimenko@gmail.com

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# Incorporation in Chukchi: well-known, well-studied. Or not?

- Incorporation is highly productive [Skorik 1948, Dunn 1999].
- Only Noun Incorporation of core arguments is thoroughly studied [Spencer 1995], [Polinskaja, Nedjalkov 1987], [Kozinsky et al. 1988] and [Nedjalkov 1976], [Polinsky 1990]
- Most theoretical approaches to Incorporation are dealing only with DO or S incorporation [Rosen 1989]
- Some of them offer purely syntactic explanations [Baker 1996], [Muro 2009]

Are other types of incorporation really 'arbitrary'? Can any rules be found and what is the nature of these rules?

# Our study

Based on 2016's HSE and MSU fieldwork in Chukotka. All the data presented here is ours (except elsewhere stated). The work is dealing with:

- > Incorporation of verb (participle) into noun
- ➤ Of oblique noun (Allative/Ablative) into verb
- ➤ Of verb (converb head) into verb

# Verb-Noun incorporation

# Participle in Chukchi

 No distinction in form between resultative and non-resultative interpretations:

```
anan Ø-47u-ni-n peqentata-47a-n ninqej-Ø he.INS 2/3.S/A-see-3SG.A.3.O-3SG.O fall-ATR-NOM.SG boy-NOM.SG He saw a boy that was falling. / He saw a boy that had fell.
```

Distinction between S-oriented and P-oriented participles:

```
Ø-47u-ni-ne-t tajka-jo-t jara-t
2/3.S/A-see-3SG.A.3.O-3SG.O-PL make-PTCP.PASS-NOM.PL house-NOM.PL
He saw the houses that had been built.
```

### Verb-noun incorporation

Participle is the analytic equivalent of verb-noun incorporation.

ta-piri-γ?e-n 1SG.S/A-take-TH-3SG.O

ta-piri-y?e-n 1SG.S/A-take-TH-3SG.O

I took a burst ball.

patkanta-17a-n

burst-ATR-NOM.SG

patkanta-qepa4-Ø

burst-ball-NOM.SG

*qepə∮-Ø* ball-NOM.SG

# Verb-noun incorporation

Participle is the analytic equivalent of verb-noun incorporation. But sometimes the meaning of the compound is different.

Ø-?ejŋew-ni-n kətɣəntə-ɨ?ə-n ŋinqej-Ø 2/3.S/A-call-3SG.A.3.O-3SG.O run-ATR-NOM.SG boy-NOM.SG He called the **running** boy.

Ø-?ejŋew-ni-n katyanta-ŋenqaj-Ø 2/3.S/A-call-3SG.A.3.O-3SG.O run-boy-NOM.SG He called the constantly running boy.

### Restrictions

There are several cases (found so far) where incorporation is not allowed:

*Ø-?ejŋew-ni-n* 2/3.S/A-call-3SG.A.3.O-3SG.O

*jeta-¶?a-n* come-ATR-NOM.SG

*ninqej-Ø* boy-NOM.SG

\* Ø-?ejŋew-ni-n 2/3.S/A-call-3SG.A.3.O-3SG.O

*jet-ŋinqej-∅* come-boy-NOM.SG

He called the boy who had come.

### Restrictions

There are several cases (found so far) where incorporation is not allowed:

```
Ø-?ejŋew-ni-n
2/3.S/A-call-3SG.A.3.O-3SG.O

ekwetə-4?ə-n

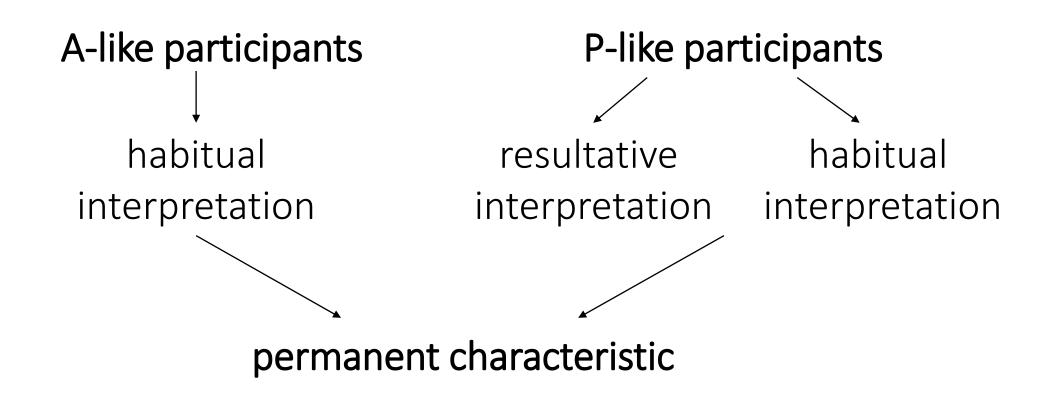
at4əɣə-n.

go.away-ATR-NOM.SG father-NOM.SG
```

```
*Ø-?ejŋew-ni-n ekwet-ətɨaɣə-n.
2/3.S/A-call-3SG.A.3.O-3SG.O go.away-father-NOM.SG
```

He called the leaving father.

# Verb-noun incorporation



# A-like participants

#### Habitual interpretation with permanent characteristic:

```
Ø-?ejŋew-ni-ne-t tip?ejŋe-ŋewəsqet-ti 2/3.S/A-call-3SG.A.3.O-3SG.O-PL sing-woman-NOM.PL
```

He called the **constantly singing** women.

# A-like participants

### Durative interpretation $\rightarrow$ incorporation is not allowed:

```
*Ø-?ejŋew-ni-n ekwet-ətɨaɣə-n.
2/3.S/A-call-3SG.A.3.O-3SG.O go.away-father-NOM.SG
```

He called the leaving father.

# Resultative interpretation without permanent characteristic $\rightarrow$ incorporation is not allowed:

```
* Ø-?ejŋew-ni-n jet-ŋinqej-Ø
2/3.S/A-call-3SG.A.3.O-3SG.O come-boy-NOM.SG
```

He called the boy who had come.

# P-like participants

#### Habitual interpretation:

```
enmen emte=wa\{ajn\pa-n j\pato-ne-n or\capawa\{?\pa-n.}\}

carry=knife-NOM:SG draw-3SG.S:30-3SG.O sledge-NOM:SG
```

Then he drew his big shoulder-belt knife, which was on the sledge.

[Muravyova et al. 2001 ms.]

# P-like participants

#### Resultative interpretation $\rightarrow$ permanent characteristic:

```
ta-piri-y?e-n semat-kojŋa-n
1SG.S/A-take-TH-3SG.O break-cup-NOM.SG
```

I took the broken cup.

```
paŋʔewat-ʔorawetɬʔa-nØ-ra-ytə-yʔ-ebecome.tired-man-NOM.SG2/3.S/A-house-GO.TO-TH-2/3SG.S
```

An exhausted man came home.

# P-like participants

Resultative interpretation with permanent characteristic?

```
Ø-resqik-w?-i
2/3.S/A-enter-TH-2/3SG.S

nəfat-jara-k
catch.fire-house-LOC
```

He entered the burning house.

Resultative interpretation without permanent characteristic  $\rightarrow$  incorporation is not allowed

```
*anan \not O-\not Pu-ni-n peqentat-nengaj-\not O he.INS 2/3.S/A-see-3SG.A.3.O-3SG.O fall-boy-NOM.SG
```

He saw a boy that had fell.

### Verb-Noun incorporation conclusion

Two sentences which are the same syntactically but differ semantically:

Ø-?ejŋew-ni-ne-t

2/3.S/ A-call-3SG.A.3.O-3SG.O-PL

\* Ø-?ejnew-ni-ne-t

2/3.S/A-call-3SG.A.3.O-3SG.O-PL

tip?ejŋe-{?-et ŋewəsqet-ti

sing-ATR-NOM.PL woman-NOM.PL

tip?ejne-newəsqet-ti

sing-woman-NOM.PL

He called the singing women.

Ø-?ejŋew-ni-ne-t

2/3.S/ A-call-3SG.A.3.O-3SG.O-PL

Ø-?ejnew-ni-ne-t

2/3.S/A-call-3SG.A.3.O-3SG.O-PL

tip?ejŋe-{?-et newəsget-ti

sing-ATR-NOM.PL

woman-NOM.PL

tip?ejne-newəsqet-ti

sing-woman-NOM.PL

He called the constantly singing women (=singers)

# Verb-Verb incorporation

Manner [Talmy 2000] in Chukchi seems to be lexicalized in verbal satellites which can be omitted or incorporated [Vinyar 2016].

(1) The Path is lexicalized in the verb, Manner can be omitted or incorporated

```
yałya-t Ø-ekweta-rkat
bird-NOM.PL 2/3.S/A-go.away-IPFV.PL
```

```
yafya-t Ø-rin-ekwet-a-rkat
bird-NOM.PL 2/3.S/A-fly-go.away-IPFV.PL
```

The birds are going to fly away/are fly away.

Path is lexicalized in main verb stem (1, 2a). 'Manner verbs' themselves don't lexicalize the path of motion (2b).

(2) Manner is lexicalized in deverbal satellite, 'Manner verb' don't denote the Path

```
(a) ninqej-Ø jara-ytə Ø-ekwet-y?e kətyəntat-a kaletkora-jpə boy-NOM.SG house-ALL 2/3.S/A-go.away-2/3.SG.S run-INS school-ABL
```

(b) <sup>?</sup>ninqej-Ø jara-ɣtə Ø-kətɣəntə-ɣ?e kałetkora-jpə boy-NOM.SG house-ALL 2/3.S/A-run-2/3.SG.S school-ABL

The boy ran away from the school heading to home.

Verbs are divided according to what they denote in aorist form. Some of them denote arrival to the Goal (Group A).

#### Group A:

```
(3) pkir 'arrive'

atlaya-n Ø-pkir-y?i waam-eta vezdehod-a

father-NOM.SG 2/3.S/A-arrive-2/3.SG.S river-ALL all.terrain.vehicle-INS

Father arrived to the river by the all train vehicle.
```

```
(4) pelqantet 'come back'

t-pelqantet-y?ak \\ jara-k tə-kametwa-rkən

1SG.S/A-come.back-1SG.S house-LOC 1SG.S/A-eat-IPFV

I came back home, now I'm having a meal here.
```

Others – leaving the Source (Group B).

#### Group B:

(5) ekwet 'go away'

atfay-nnafwaf-epaØ-ekwet-y?iramaj-etafather-NOM.SGherd-ABL2/3.S/A-go.away-2/3.SG.Ssettlement-ALL

Father went away from the settlement heading to the herd.

(6) \$\figsir \text{go to'}\$

miysir-eta \quad \text{\phi} -\fiaq\text{\part} -\gamma ?i

work-ALL \quad 2/3.S/A-go.to-2/3.SG.S

He went to the work.

Surprisingly, this division affects the possibility of nouns denoting path participants to be incorporated.

### Incorporation in 'arrival to the Goal' verbs (group A)

Verbs denoting 'arrival' incorporate only the Source participant.

(7) *pkir* 'arrive' Incorporates the Source participant (a) but not the Goal participant (b)

(a) ninqej-Ø Ø-jara-pker-y?e kałetkora-ytə boy-NOM.SG 2/3.S/A-house-arrive-2/3.SG.S school-ALL

The boy came to school from home.

(b)\*ninqej-Ø Ø-jara-pker-y?e kałetkora-jpə boy-NOM.SG 2/3.S/A-house-arrive-2/3.SG.S school-ABL

The boy came home from school.

### Incorporation in 'arrival to the Goal' verbs (group A)

(8) *pelqantet* 'come back' incorporates only the Source participant

Ø-ramaj-pałqəntat-y?e

2/3.S/A-settlement-come.back-2/3.SG.S

He came back from the settlement. / # He came back to the settlement.

### Incorporation in 'leaving the Source' (Group B)

Only Goal participants can be incorporated (not depending on the presence of Source participant).

```
(9) ekwet 'go away', Goal incorporation ninqej-Ø Ø-kaletkora-akwat-y?e jara-jpə boy-NOM.SG 2/3.S/A-school-go.away-2/3SG.S house-ABL The boy went away from home heading to school.
```

(10) ekwet 'go away', Source incorporation impossible

```
*ninqej-Ø Ø-kaletkora-akwat-y?e jara-ytə boy-NOM.SG 2/3.S/A-school-go.away-2/3SG.S house-ALL The boy went home from school.
```

### Incorporation in 'leaving the Source' verbs (Group B)

Moreover, some lexical affixes meaning 'leaving the source' behave exactly in the same way.

(11) Lexical affix 'go and do smth with X' incorporates the Goal

Ø-kopra-nta-y?e

2/3.S/A-net-GO.DO-2/3.SG.S

He went for the nets.

(12) Lexical affix 'go to X' incorporates the Goal

Ø-kopra-ytə-y?e

2/3.S/A-net-GO.TO-2/3.SG.S

He went to the nets.

# Verb-Verb compounds

Not all verbs denoting independent situation can be incorporated as in (13). Compound heads can be only motion verbs denoting Path. The lexical restriction on incorporated verbs is more unusual: only verbs denoting traditional actions associated with reindeers can be incorporated (compare (13) to (14)).

(13) Incorporation of verb, independent or Manner action interpretation tə-re-rif-ekwet-y?e-k ery-atə-k

1SG.S/A-FUT-run.in.reindeer.race-go.away-TH-1SG.S light-VB-LOC

Tomorrow I will go to the reindeer race/Tomorrow I will set off racing.

(14) Incorporation of verb, only Manner interpretation

tə-ra-raswəŋ-akwat-yʔa

1Sg.S/A-FUT-run.in.race-go.away-TH

I will set off running in the race/\*I will go to running competition.

However, verbal compounds are derived by the same principles as incorporation of Ablatives and Allatives.

Verbs which incorporate the Goal (*ekwet* 'go.away', *lqat* 'go to' and *-yt* 'GO.TO') incorporate the verbs denoting Goal of motion (analytic equivalent – construction with purposive converb in (15b)):

(15) *fqat* 'go to' incorporates the Goal of motion but not the action anterior to motion.

```
(a) tə-riu-qət-y?e kətyənt-a
1SG.S/A-be.on.night.watch.in.herd-go.to-TH run-INS
```

(b) tə-qat-y?e kətyənt-a em-re-riu-ŋ-e 1SG.S/A-go.to-TH run-INS REST-DES-be.on.night.watch.in.herd-DES-INS

I ran to night watch in the herd.

Lexical affix yt 'GO.TO' behaves with verbs in the same way as with nouns:

(16) Lexical affix attaches to the Goal of motion

alesa-Ø\\ Ø-ra-re\fa-\gammat-\gamma?

Alesha-NOM.SG 2/3.A/S-FUT-run.in.reindeer.race-GO.TO-2/3.SG.S

Alesha, will you go to reindeer race?

Verbs denoting 'arrival to Goal' incorporate converb heads in constructions denoting 'do smth than arrive' (which is quite similar to 'arrive from somewhere'):

```
(17) pkir 'arrive' can incorporate only anterior action, not subsequent (can be
seen by converb analytic equivalents)
ətləyə-n Ø-riu-pkir-y?i
                                                         amnon-yəpə
father-NOM.SG 2/3.S/A-be.on.night.watch.in.herd-arrive-2/3SgS
                                                         tundra-ABL
ətləyə-n Ø-pkir-y?i
                          amŋon-ɣəpə riu-k
father-NOM.SG 2/3.S/A-arrive-2/3SgS tundra-ABL be.on.night.watch.in.herd-LOC
/*em-re-riu-ŋ-e
/ REST-DES-be.on.night.watch.in.herd-DES-INS
Father came from night watch in herd from tundra.
```

/ \*Father came to night watch in tundra.

As we have seen, converb stems (anterior action converb and purposive converb) and oblique noun stems (Ablative and Allative participants) have same restrictions on their incorporation: verbs of 'leaving' incorporate only 'Goals' and verbs of 'arriving' incorporate only 'Sources'.

# Conclusion

### Conclusion

- Possibility of incorporation can be dependent on aspectual characteristics of the situation (Verb to Noun incorporation)
- Can be dependent on the verb's semantics (Oblique noun to Verb and Verb to Verb incorporation)
- Exactly same (morphosyntactically) constructions can be or can be not transformed to constructions with incorporation (Verb to Noun incorporation)
- Completely different (morphosyntactically) constructions allow or disallow incorporation due to the same principles (Allative/Ablative incorporation and Converb head incorporation)

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Thank you for your attention!

