Partitive case and association with additives (in Finnish)

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1 Introduction

1.1 In this talk

This talk is about the interaction of object case and the additive/scalar clitic KIN 'also, even'/'neither, not even' in six negative polarity item licensing contexts in Finnish:

- in negative declaratives (NEG/N),
- in (positive) polar interrogatives (Q),
- with tuskin 'hardly' (HARDLY/H),
- with harva 'few (people)' (FEW/F),
- in ennen kuin 'before' clauses (BEFORE/B), and
- in the antecedent of a conditional (IF/I)

I collected acceptability judgments in order to find at least preliminary answers to the following research questions:

- Q1: Do NPI-licensing contexts in general license object case alternation between accusative and partitive?
- Q2: Does the presence of –kin have an effect on acceptability with a given casemarking?

1.2 Roadmap

This talk is organized as follows:

- Section 2: Usual object case-marking in Finnish
- Section 3: Object case alternation
- Section 4: Additive suffix KIN
- Section 5: Acceptability judgment questionnaire
- Section 6: Results
- Section 7: Discussion
- Section 8: Conclusion

2 Usual object case-marking in Finnish

Finnish direct objects, when not marked with an inherent case, bear either accusative (ACC) or partitive (PAR): the choice between the two has been argued to be semantically conditioned by the *(un)boundedness* of the VP (Leino, 1991 [1982]; Heinämäki, 1984; Kiparsky, 1998).

- (1) General rule for object case-marking in Finnish
 - i. If the VP is bounded, the object bears accusative (ACC)
 - ii. If the VP is unbounded, the object bears partitive (PAR)

For Kiparsky, the (un)boundedness of the VP can be due to the properties of either the verb or the object. Kiparsky proposes the unboundedness of a VP can be detected with the gradability test: unbounded VPs are gradable and accept adverbs of degree referring to the extent of the eventuality, such as *kauan* 'for a long time'. Bounded VPs are not gradable, and do not accept such adverbs.

- (2) Gradability test for boundedness (cf. p. 4 in Kiparsky, 1998)
 - a. Etsin avainta kauan look.for.pres.1sg key.par for.a.long.time 'I looked for the key for a long time'
 - b. Löysin avaimen #kauan find.PAST.1SG key.ACC for.a.long.time 'I found the key for a long time'

2.1 The aspectual function of PAR (ASP-PAR)

When the unboundedness of the VP predicate is due to the properties of the verbal head, PAR has an *aspectual function*.¹

- (3) Aspectual PAR (Kiparsky, 1998, p. 15)
 - a. With most atelic verbs: rakastaa 'to love', paeta 'to flee', koskettaa 'to touch'
 - i. Joni rakastaa jalkapalloa / *jalkapallon Joni.NOM love.PRES.3SG football.PAR football.ACC 'Joni loves football'
 - ii. Joni pakenee sadetta / *sateen Joni.NOM flee.PRES.3SG rain.PAR rain.ACC 'Joni is fleeing the rain'
 - iii. Joni koskettaa pöytää / *pöydän Joni.NOM touch.PRES.3SG table.PAR table.ACC 'Joni is touching the table'

¹ Aspectual PAR is often correlated with irresultativity, although this is not necessary: there are resultative verbs that have PAR objects because the predicate is unbounded, such as *rankaista* 'to punish', and there are irresultative verbs that have ACC objects because the predicate is bounded, such as *omistaa* 'to own'.

- b. With verbs of creation and destruction when they are interpreted as unbounded: *syödä* 'to eat', *leikata* 'to cut'; or verbs that denote events whose progress is mapped out into the parts of the object: *lukea* 'to read', *sekoittaa* 'to mix'
 - i. Joni söi perunaa / perunan
 Joni.NOM eat.PAST.3SG potato.PAR potato.ACC
 Joni ate (some of) a potato/Joni was eating a potato' or Joni ate a potato (a whole one)'
 - ii. Joni luki kirjaa / kirjan Joni.NOM read.PAST.3SG book.PAR book.ACC 'Joni read (some of) a book/Joni was reading a potato' or 'Joni read a book (a whole one)'

As the translations in (3) show, the aspectual function of PAR can be either lexical or grammatical. Huumo (2013) further distinguishes between three different aspectual functions of PAR: progressive (the event is ongoing), cessative (the event ceases without reaching its endpoint), irresultative (the event reaches an endpoint but no substantial change happens).

Objects of negative declaratives are always in PAR independently of the properties of the verb (partitive of negation, ASP-PAR). Heinämäki (1984) proposes that negative declaratives are unbounded descriptions of events, and hence assimilates partitive of negation to the aspectual function of the partitive.

Heinämäki also notes that no explicit negative morpheme must be present for the partitive of negation to be able to occur: a negative inference due to a negative-natured expression such as *tuskin* 'hardly', *harva* 'few', *turha* 'needless' or *vaikea* 'difficult' is enough (Hakulinen and Karlsson, 1979).

2.2 The NP-related function of PAR (NP-PAR)

When the unboundedness of the VP predicate is due to the properties of the object, PAR has an *NP-related function*. In this function, PAR signals that the object is *quantitatively indeterminate*: it is a mass noun or a bare plural.

- (4) NP-related PAR (Kiparsky, 1998, p. 3): best seen with telic verbs that usually have ACC objects
 - a. Löysin perunaa maton alta find.PRES.1SG potato.PAR carpet.GEN under.ALL'I found (some) potato under the rug'
 - b. Löysin perunoita joka paikasta find.PRES.1SG potato.PL.PAR every place.ILL 'I found potatoes everywhere'

3 Object case alternation

In certain contexts, object case may alternate seemingly optionally between ACC and PAR, even if in positive declaratives only ACC is allowed: this type of PAR will be called the alternating partitive (ALT-PAR).

- (5) Object case alternation with telic *ostaa* 'to buy' in a polar interrogative
 - a. Joni osti pyörän Joni.NOM buy.PAST.3SG bike.ACCJoni bought a/the bike'
 - b. * Joni osti pyörää
 Joni.NOM buy.PAST.3SG bike.PAR
 (Agrammatical if the reading is not progressive, or the object a mass noun)
 - c. Ostiko Joni pyörän? buy.PAST.3SG.Q Joni.NOM bike.ACC 'Did Joni buy a/the bike?'
 - d. Ostiko Joni pyörää?buy.PAST.3SG.Q Joni.NOM bike.PAR'Did Joni buy a/the bike?'

Kaiser (2002, 2003) notes that the contexts where Finnish allows case alternation often correspond to those that license negative polarity items (NPIs):

- ALT-PAR and NPIs are **grammatical** in polar interrogatives and with *tuskin*
- ALT-PAR and NPIs are ungrammatical in information-seeking wh-interrogatives, polar interrogatives with only, and clefted questions
 - (6) Interrogative contexts where ALT-PAR and NPIs are unavailable
 - a. Kuka osti {pyörän / *pyörää / *mitään}? who.NOM buy.PAST.3SG bike.ACC bike.PAR anything 'Who bought a/the bike?' or 'Who bought anything?'
 - b. {Pyöränkö / *pyörääkö} {Joni / *kukaan} osti?
 bike.ACC.Q bike.PAR.Q Joni.NOM anyone buy.PAST.3SG
 'Was it a/the bike that Joni bought?' or 'Was it a/the bike that anyone bought?'
 - c. Ostiko Joni vain {pyörän / *pyörää / *mitään}? buy.PAST.3SG.Q Joni.NOM only bike.ACC bike.PAR anything 'Did Joni only buy a/the bike?' or 'Did Joni only buy anything?'

The negative expressions that allow for case alternation according to Hakulinen and Karlsson (1979) and Heinämäki (1984, 1994) also admit of NPI objects. As mentioned in Section 2.1, this partitive is assumed to be a NEG-PAR in Hakulinen and Karlsson 1979 and Heinämäki 1984.

- (7) Negative expressions, PAR and NPIs
 - a. Joni tuskin ostaa {autoa / mitään} Joni.NOM hardly buy.PRES.3SG car.PAR anything 'It's unlikely that Joni will buy a car' or 'It's unlikely that Joni will buy anything'
 - b. Harva ostaa {autoa / mitään}
 few.NOM buy.PRES.3SG car.PAR anything
 'Few people buy a car' or 'Few people buy anything'
 - c. On turha ostaa {autoa / mitään} be.PRES.3SG needless buy.INF car.PAR anything 'It is needless to buy a car' or 'It is needless to buy anything'
 - d. On vaikea ostaa {autoa / mitään}
 be.PRES.3SG difficult buy.INF car.PAR anything
 'It is hard to buy a car' or 'It is hard to buy anything'

4 Additive suffix KIN

KIN² is a focus-sensitive additive and/or scalar clitic. It brings with it an *additive* (ADD) and/or a *scalar* (SCAL) non-truth-conditional meaning component (conventional implicature or presupposition: Horn 1969; Karttunen and Karttunen 1976; Karttunen and Peters 1979; König 1991, a.o.). On its standard use, it can be translated to the English *too/either* and *even*, as below.

- (8) An illustration of the additive and scalar meaning components of KIN
 - a. [Joni]_Fkin lähti
 Joni.NOM.KIN leave.PAST.3SG
 '[Joni]_F left, too' or 'Even [Joni]_F left'
 - b. [Joni]_Fkaan ei lähtenyt
 Joni.NOM.KAAN NEG.3SG leave.PASTPRT
 '[Joni]_F did not leave, either' or 'Even [Joni]_F did not leave'

Focus-sensitive additives and scalars are generally assumed to be operators that take propositional scope and quantify over focus alternatives (Rooth, 1985, 1992). Informally, focus alternatives are built from a sentence that contains syntactic F(ocus)-marking by replacing the F-marked category with another category of the same semantic type. This set is then restricted contextually in order to avoid overgeneration.

In general, ADD is assumed to contribute an inference according to which there is some focus alternative q distinct from the prejacent p (the sentence without the particle) such that q is true. The contribution of SCAL is to say that the prejacent p is less likely than all other focus alternatives q.

² The small capitals KIN refers to both PF realisations of the suffix, -kin and -kAAn.

³ In (9), the presupposition/non-truth-conditional contribution of the operator is indicated between two dots, and the assertive, truth-conditional contribution, which is unaffected by the operator, is at the end of the entry.

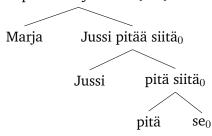
- (9) The definitions of ADD and SCAL given an F-marked prejacent p, a set C of its focus alternatives q, and a likelihood relation $<_{prob}$:
 - a. $[ADD_C]^g$: $\lambda w \lambda p. \exists q \in C[q \neq p \land q(w)].p(w)$
 - b. $[SCAL_C]^g$: $\lambda w \lambda p. \forall q \in C[q \neq p \rightarrow p(w) <_{prob} q(w)].p(w)$

Karttunen and Karttunen (1976), working in a Montagovian framework, propose that KIN is syncategorematic, and appears as the result of the application of syntactic Kin- and Kaan-rules: in current terms, KIN is not in itself an operator.

The syntactic rules work in almost identical fashion:

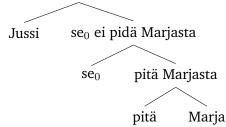
- They require two arguments: a *focus* (the category that ends up carrying the suffix) and a *scope* (a property-denoting open formula containing an unbound subscripted pronoun such as *se*₀ 'it')
- They replace the highest pronoun in the scope with the focus, suffix it with -kin or -kAAn, and delete all other subscripts on the remaining pronouns and replace them with hän '(s)he' if the focus entity is a human
- They place a requirement on the polarity of the scope argument: the Kin-rule may only apply to a positive scope, while the Kaan-rule must apply to a negative scope
- (10) Karttunen and Karttunen 1976: (24)
 - a. Jussi pitää [Marjasta] $_{\rm F}$ kin Jussi.NOM like.PRES.3SG Marja.ELA.KIN 'Jussi likes [Marja] $_{\rm F}$ too'
 - b.

Jussi pitää Marjastakin (Kin)



- (11) a. $[Jussi]_F$ kaan ei pidä Marjasta Jussi.NOM.KAAN NEG.3SG like.PRES Marja.ELA ' $[Jussi]_F$ doesn't like Marja either'
 - b.

Jussikaan ei pidä Marjasta (Kaan)



4. ADDITIVE SUFFIX KIN

Karttunen and Karttunen propose that both syntactic rules are paired with the same interpretational rule which states that the focus argument is not the only one that instantiates the scope property. They allow the negation-introducing rule to apply after the Kin-rule, accounting for the grammaticality and interpretation of sentences such as (12b):

- (12) a. Joni ei puhunut [Marille] $_F$ kaan Joni.NOM NEG.3SG speak.PASTPRT Mari.ALL.KAAN 'Joni did not speak to [Mari] $_F$ either' (= there is someone else he did not speak to)
 - b. Joni ei puhunut [Marille]_Fkin
 Joni.NOM NEG.3SG speak.PASTPRT Mari.ALL.KIN
 'Joni did not speak to [Mari]_F too' (= there is someone else he spoke to)

It should be noted that while in English, the additive *too* or the scalar *even* cannot associate with F-marked NPIs, Finnish routinely shows traces of KIN in its NPI-morphology.

- (13) Association with an NPI
 - a. # I did not talk to [anybody]_F either
 - b. # I did not even talk to [anybody]_F
- (14) Some Finnish wh+KIN NPIs
 - a. ku-kaan who.KAAN 'anybody'
 - b. mi-kään what.KAAN 'anything'
 - c. kenelle-kään who.ALL.KAAN 'to anybody'
 - d. milloin-kaan when.KAAN 'ever'

Summary:

- Finnish object case-marking is normally conditioned by the unboundedness of the VP;
- Finnish has a partitive of negation (NEG-PAR);
- In some NPI-licensing contexts, object case alternation is allowed;
- KIN is an additive/scalar focus-sensitive clitic;
- Additive/scalar focus particles do not normally associate with NPIs

5 Acceptability judgment questionnaire

5.1 Research questions

To repeat, the research questions that I hope to provide preliminary answers for are:

- Q1: Do NPI-licensing contexts in general license object case alternation between accusative and partitive?
- Q2: Does the presence of –kin have an effect on acceptability with a given casemarking?

5.2 Methodology

In order to answer the research questions, I collected acceptability judgments from 12 native speakers of Finnish. All participants except two are originally from Oulu or the Oulu region, and between 25-55 years old.

Each participant rated 24 test sentences on Likert scale from 1 (completely unacceptable) to 7 (completely acceptable). The test items were preceded by a context-setting sentence. The participants received explicit instructions in the beginning to specifically concentrate on object case-marking and the presence of the particle. They were moreover encouraged to compare the sentences inside groupings that were based on the context-variable (see below), and note down any comments they had.

Each of the 24 test items was a unique combination of three variables:

- context (6 levels: NEG, Q, HARDLY, FEW, BEFORE, IF)
- case (2 levels: ACC, PAR)
- presence of -kin (2 levels: present, absent)

NEG, Q, HARDLY and FEW are known NPI-licensing contexts, of which Q, HARDLY and FEW are argued to be case alternation contexts. BEFORE- and IF-contexts were added, as they admit NPIS in Finnish.

The lexical material was kept constant inside each context type. The chosen verb normally takes ACC-objects in positive declaratives, and the objects were singular count nouns, so as to exclude an NP-related reading of PAR. In the context of the preceding context-setting sentence, a progressive reading is disfavoured.

The items were (by context):

(15) Test items (N=24)

a. Jenna kaatoi jo pihaltaan kuusen. Ei
Jenna.NOM fell.PAST.3SG already yard.ABL.PX/3SG spruce.ACC NEG.3SG
hän {mäntyä / mäntyäkin / männyn /
she.NOM pine.tree.PAR pine.tree.PAR.KIN pine.tree.ACC
männynkin} kaada
pine.tree.ACC.KIN fell.PRES
'Jenna already felled a spruce on her yard. She won't fell a pine tree (too)'

5. ACCEPTABILITY JUDGMENT QUESTIONNAIRE

- b. Villen vanhemmat ostivat hänelle asunnon.
 Ville.GEN parents.NOM buy.PAST.3PL he.ALL apartment.ACC
 Ostavatkohan he hänelle {autoa / autoakin / auton / buy.PRES.3PL.Q.HAN they.NOM he.ALL car.PAR car.PAR.KIN car.ACC autonkin}?
 car.ACC.KIN
 'Ville's parents bought him an apartment. I wonder if they will buy him a car (too)?'
- c. Markku suoritti ylioppilaskirjoituksissa lvhven Markku.NOM do.PAST.3SG matriculation.examination.PL.INE short.ACC matematiikan, joten hän tuskin suoritti {fvsiikkaa / he.NOM hardly do.PAST.3SG physics.PAR maths.ACC fysiikkaakin / fysiikan / fysiikankin} physics.PAR.KIN physics.ACC physics.ACC.KIN 'In his matriculation examination, Markku did the exam for the short program of mathematics, so it is unlikely that he did the physics exam (too)'
- d. Moni istuttaa pihalleen marjapensaan. Harva many.Nom plant.PRES.3SG yard.ALL.PX/3SG berry.bush.ACC few.Nom istuttaa {hedelmäpuuta / hedelmäpuutakin / hedelmäpuun / plant.PRES.3SG fruit.tree.PAR fruit.tree.PAR.KIN fruit.tree.ACC hedelmäpuunkin} fruit.tree.ACC.KIN
 'Many plant a berry bush on their yard. Few plant a fruit tree (too)'
- e. Eduskunta hyväksyi ehdotuksen ministerin parliament.NOM accept.PAST.3SG minister.GEN proposition.ACC lainmuutoksen valmistelusta. Jonkun täytyy puuttua law.change.GEN preparation.ELA somebody.GEN must.PRES.3SG intervene.INF asiaan ennen kuin he hyväksyvät itse {lainmuutosta / affair.ILL before than they.NOM accept.PRES.3PL self law.change.PAR lainmuutostakin / lainmuutoksen / lainmuutoksenkin} law.change.PAR.KIN law.change.ACC law.change.ACC.KIN 'The parliament accepted the minister's proposition for preparing an amendment to the law. Somebody must intervene before they accept the amendment itself (too)'
- f. Maija mainitsi Soinin. Heljällä menee jo Maija.NOM mention.PAST.3SG already Soini.ACC Heljä.ADE go.PRES.3SG varmasti hermot jos Maija mainitsee {Hakkaraista surely nerves.NOM if Maija.NOM mention.PRES.3SG Hakkarainen.PAR / Hakkaraisen / Hakkaraisenkin} Hakkaraistakin Hakkarainen.PAR.KIN Hakkarainen.ACC Hakkarainen.ACC.KIN 'Maija already mentioned Soini. Heljä will surely lose her temper if Heljä mentions Hakkarainen (too)'

5.3 Predictions

A few predictions based on previous literature:

- In NEG-contexts, PAR and PAR.kin should be acceptable, while both ACC- and ACC.kin-conditions should be unacceptable (partitive of negation)
- In Q-, HARDLY-, and FEW-contexts, both ACC and PAR should be acceptable (case alternation contexts)
- In BEFORE- and IF-contexts, at least ACC and ACC.kin should be acceptable

The most interesting predictions are based on Kaiser 2002, 2003, who proposes that ALT-PAR has an NPI-like behaviour, and the observation that additives/scalars cannot associate with F-marked NPIs:

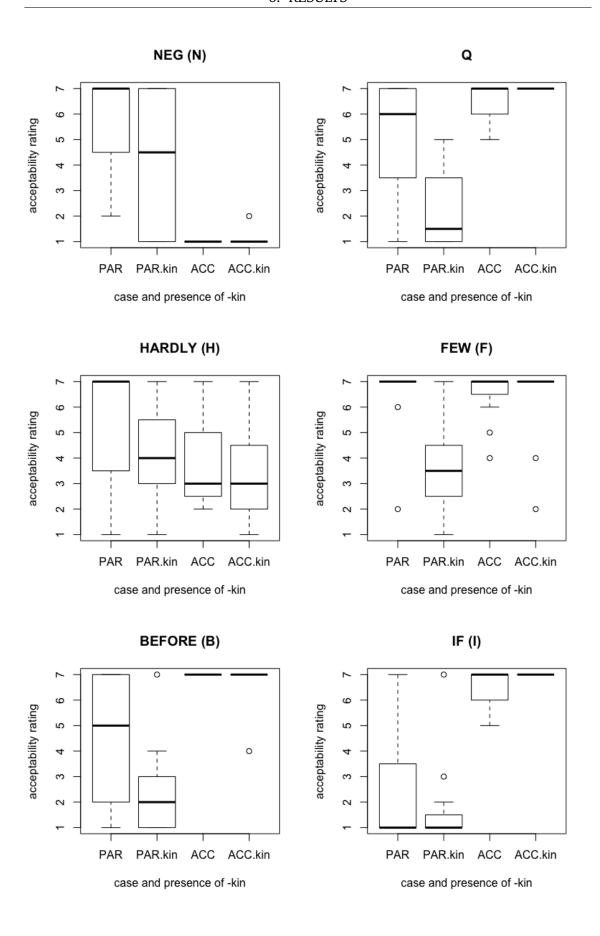
- If PAR is an instance of NEG-PAR/ASP-PAR, an object carrying it should be able to associate with -kin, producing an acceptable result (cf. Karttunen and Karttunen 1976)
- If PAR is an instance of ALT-PAR (an NPI-like element), an object carrying it should not be able to associate with -kin, producing an unacceptable result

6 Results

The results of the acceptability questionnaire are first shown per context (for 24 * 12 = 288 datapoints). The statistical analyses were done using a two-tailed Wilcoxon signed rank test, significance level 0.05.

Note that the Wilcoxon signed rank test compares the sums of the signed differences between value pairs in two dependent samples. Under the null hypothesis, these sums are expected to be symmetrically situated around 0. If one of the sums is zero, this means that all non-tied pairs in the sample differ in the same direction. A significant difference can therefore be found even when half of the sample agrees: if the other half disagrees in the same direction (even to a small extent), the result will be significant (as 0 is always at least as small as the critical value for W).

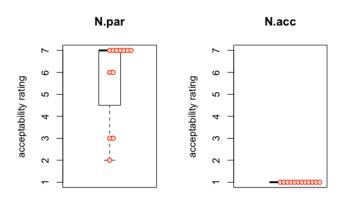
As the Wilcoxon was always ran so that the values that make up the boxplot on the right were deduced from the values of the boxplot on the left, the sum of positive ranks indicates by how much the boxplot on the left won over the boxplot on the right, while the sum of the negative ranks indicates by how much the boxplot on the right won over the boxplot on the left.



6.1 Q1: Do NPI-licensing contexts license case alternation?

Pairwise comparison of ACC-PAR in each context, without –*kin*.

- As expected, negative declaratives are not a case alternation context: all 12 participants rated N.acc as 1
- Polar interrogatives, which are argued to license case alternation, do not get systematically good ratings with PAR, although most of the ratings are high: no participant ranks Q.par higher than Q.acc
- In HARDLY-contexts (tuskin), PAR is most often rated as highly acceptable, while ACCobjects tend to get lower scores. In some sense, HARDLY-contexts seem to favour PARobjects, just like NEG. The differences in ratings go in both directions, however
- In FEW-contexts (harva), both PAR and ACC seem to lead to high acceptability, with some outliers getting low scores. FEW-contexts therefore seem to allow case alternation, as has been argued before
- BEFORE-contexts (ennen kuin) show consistently high acceptability ratings for ACCobjects, but a much more spread distribution of ratings for PAR. This seems to indicate
 that for some participants, BEFORE is a case alternation context, while for others, it
 is not. The sum of positive ranks reveals that no participant rated B.par higher than
 B.acc
- Finally, IF-contexts (*jos*) show high acceptability ratings for ACC, and most of the participants rated PAR-objects very low. That some participants rated PAR-objects as highly acceptable indicates again that for some speakers, IF is a case alternation context. However, even those participants did not rate I.acc as lower than I.par, as shown by the sum of positive ranks



W-value: 0
Mean Difference: 4.75
Sum of pos. ranks: 78
Sum of neg. ranks: 0
Z-value: -3.0594
Mean (W): 39
Standard Deviation (W): 13.7

Standard Deviation (W): 12.75

Sample Size (N): 12

The Z-value is -3.0594. The p-value is 0.00222. The result is significant at p \leq 0.05. The W-value is 0. The critical value of W for N=12 at p \leq 0.05 is 13. Therefore, the result is significant at p \leq 0.05.

Fig. 1. Significant difference between NEG.par and NEG.acc

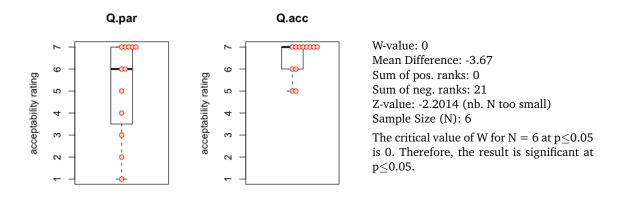


Fig. 2. Significant difference between Q.par and Q.acc

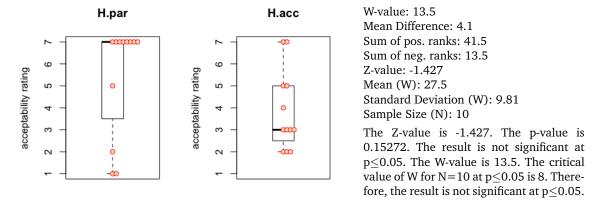


Fig. 3. Non-significant difference between HARDLY.par and HARDLY.acc

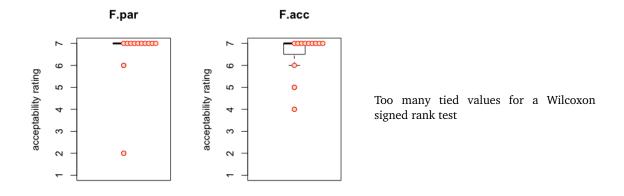


Fig. 4. Non-significant difference between FEW.par and FEW.acc

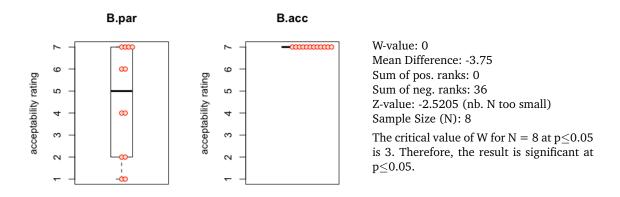


Fig. 5. Significant difference between BEFORE.par and BEFORE.acc

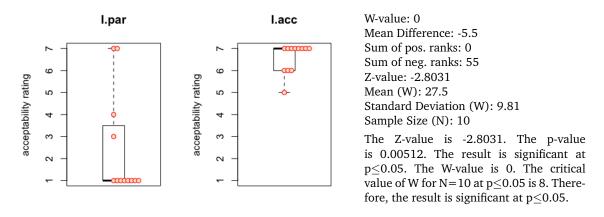


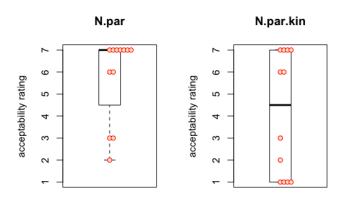
Fig. 6. Significant difference between IF.par and IF.acc

6.2 Q2: Does the presence of *-kin* have an effect on acceptability with a given case-marking?

As none of the differences ACC-ACC. kin inside contexts are significant, I will only look at pairwise comparisons of PAR-PAR. kin in each context.

- In negative declaratives, adding -kin creates dispersion, but the difference is not statistically significant. As the median shows, the ratings are divided in two: one group accepts -kin, and the other does not. The sums show that the tendency is to rate N.par higher than N.par.kin
- In polar interrogatives, most participants give very low ratings when –*kin* is present: no participant ranks Q.par lower than Q.par.kin
- In HARDLY-contexts, the presence of -kin again lowers the median and creates more variability, but there is no statistically significant difference between the two types of PAR-objects: there are difference in both directions, as the sums show

- In FEW-contexts, the presence of -kin leads to lower scores and more variability. However, the difference between the two types of PAR-objects is not significant, and the overwhelming majority ranks F.par higher than F.par.kin
- BEFORE-contexts show a clear drop of the median for -kin-marked PAR-objects, with a significant difference between the two types: B.par is almost always ranked higher than B.par.kin
- In IF-contexts, PAR-objects mostly get very low ratings, independently of the presence of -kin, although there are some exceptions



W-value: 6 Mean Difference: 4.12 Sum of pos. ranks: 30 Sum of neg. ranks: 6

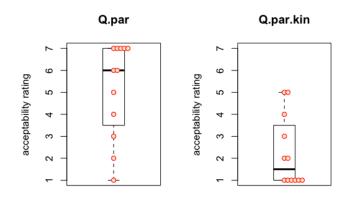
Z-value: -1.6803 (nb. N too small)

Sample Size (N): 8

The critical value of W for N=8 at $p \le 0.05$ is 3. Therefore, the result is not significant

at $p \le 0.05$.

Fig. 7. Non-significant difference between NEG.par and NEG.par.kin



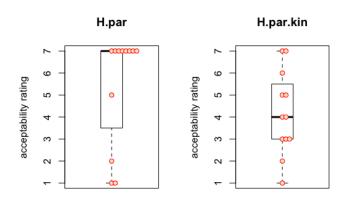
W-value: 0 Mean Difference: 5 Sum of pos. ranks: 55 Sum of neg. ranks: 0 Z-value: -2.8031 Mean (W): 27.5

Standard Deviation (W): 9.81

Sample Size (N): 10

The Z-value is -2.8031. The p-value is 0.00512. The result is significant at $p \le 0.05$. The W-value is 0. The critical value of W for N=10 at $p \le 0.05$ is 8. Therefore, the result is significant at p \leq 0.05.

Fig. 8. Significant difference between Q.par and Q.par.kin



W-value: 17.5

Mean Difference: -1.73 Sum of pos. ranks: 48.5 Sum of neg. ranks: 17.5 Z-value: -1.3781

Mean (W): 33

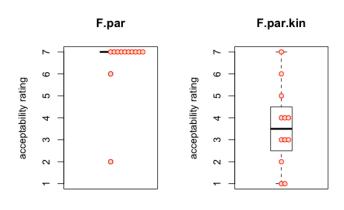
Standard Deviation (W): 11.25

Sample Size (N): 11

The Z-value is -1.3781. The p-value is 0.16758. The result is not significant at $p \le 0.05$. The W-value is 17.5. The critical value of W for N=11 at p \leq 0.05 is 10. Therefore, the result is not significant at

 $p \le 0.05$.

Fig. 9. Non-significant difference between HARDLY.par and HARDLY.par.kin



W-value: 2

Mean Difference: 3.82 Sum of pos. ranks: 64 Sum of neg. ranks: 2 Z-value: -2.7562 Mean (W): 33

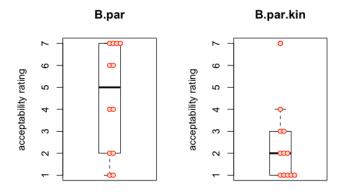
Standard Deviation (W): 11.25

Sample Size (N): 11

The Z-value is -2.7562. The p-value is 0.00578. The result is significant at p<0.05. The W-value is 2. The critical value of W for N=11 at p<0.05 is 10. Therefore, the result is significant at

p < 0.05.

Fig. 10. Significant difference between FEW.par and FEW.par.kin



W-value: 5

Mean Difference: 1.8 Sum of pos. ranks: 50 Sum of neg. ranks: 5 Z-value: -2.2934 Mean (W): 27.5

Standard Deviation (W): 9.81

Sample Size (N): 10

The Z-value is -2.2934. The p-value is 0.02202. The result is significant at p≤0.05. The W-value is 5. The critical value of W for N=10 at $p \le 0.05$ is 8. Therefore, the result is significant at $p \le 0.05$.

Fig. 11. Significant difference between BEFORE.par and BEFORE.par.kin

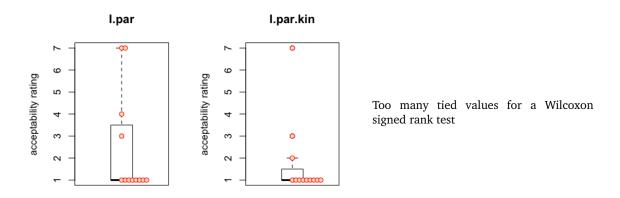


Fig. 12. Non-significant difference between IF.par and IF.par..kin

7 Discussion

7.1 Q1: Do NPI-licensing contexts license case alternation?

Based on the results of the acceptability judgment questionnaire, it seems that there are four profiles with respect to object case alternation:

- No alternation:
 - ♦ PAR is much better than ACC: NEG (MDs 7 vs. 1), HARDLY (MDs 7 vs. 3)
 - ♦ ACC is much better than PAR: IF (MDs 7 vs. 1)
- Alternation:
 - ♦ PAR and ACC are equally good: FEW (MDs 7 vs. 7)
 - ♦ PAR leads to dispersion and has a slightly lower median than ACC: Q (MDs 6 vs. 7), BEFORE (MDs 5 vs. 7)

The statistical analyses show a significant difference between the two bare object cases only in NEG, Q, BEFORE and IF, while the difference in FEW and HARDLY does not reach significance. However, as was discussed in Section 6, this lack of significance should be interpreted as a lack of disagreement in the direction of the difference.

It is interesting to note that these profiles do not directly match with the "negative strength" of these contexts as NPI-licensors (Van der Wouden, 1994, 1997; Zwarts, 1996; Giannakidou, 1998): from the strongest to the weakest properties that seem to matter for NPI-licensing, NEG is anti-morphic, BEFORE is anti-additive, FEW and HARDLY are downwardentailing, and Q and IF are (although this is debated) non-veridical. If Q and IF are of the same class, why does Q allow case alternation, while IF seems not to?

7.2 Q2: Does the presence of *-kin* have an effect on acceptability with a given case-marking?

Based on the results of the questionnaire, it seems that whenever –*kin* is present, it mainly has a negative effect on the rating when the object is in PAR. Only in the HARDLY-context

were there a significant amount of participants that rated H.par.kin higher than H.par. For NEG, it is rather surprising that N.par.kin also received ratings around 0: as the context-setting sentence satisfied the presupposition of -kin, the test item was predicted to give rise to high ratings. Perhaps this is a sign of poor test item design: indeed, even N.par gets ratings as low as 2, although this case marking is the only available option.

If the PAR of case alternation contexts is an NPI (*pace*, more or less, Kaiser 2002, 2003), it makes sense that the ratings for items with *-kin* are worse. This seems to be the case for Q, FEW, and BEFORE. However, the case of HARDLY and NEG is trickier. Compared to FEW (with which it belongs to the same class of NPI-licensors), HARDLY has a much harder time with ACC-objects: however, F.par.kin and H.par.kin are not very different. In terms of PAR-objects, then, HARDLY seems to behave like a mixture of Q and FEW, but for ACC-objects, it behaves more like NEG.

8 Conclusion

In this talk, we saw that in Finnish,

- ALT-PAR with a telic verb is allowed in the following NPI-licensing contexts: Q, FEW,
 BEFORE, out of which BEFORE has not, to my knowledge, been previously discussed as a case alternation context
- As expected, NEG does not allow ACC-objects, and HARDLY has a tendency to disprefer them as well
- IF-contexts allow PAR for only a small part of the speakers
- The presence of -kin has a general worsening effect in the ratings of PAR-object-containing items

Further research:

- The sample was small, and some items that were expected to have ceiling ratings did not: much work should be done to make sure that the differences were not due to other properties than object case and presence of *-kin*
- A corpus study, at least for case alternation contexts (might be harder for the effect of -kin)
- Answers to questions:
 - ♦ Why are additives incompatible with NPIs/ALT-PAR?
 - What is the status of the PAR in HARDLY? Why is ACC so strongly dispreferred in this context?
 - ♦ What is the link between the hierarchy of NPI-licensing contexts and the acceptability of ALT-PAR?





Bibliography

- Giannakidou, Anastasia. 1998. *Polarity sensitivity as (non)veridical dependency*. Amsterdam-Philadelphia: John Benjamins.
- Hakulinen, Auli, and Fred Karlsson. 1979. *Nykysuomen lauseoppia*. Suomalaisen kirjallisuuden seuran toimituksia 350. Jyväskylä: Gummerus.
- Heinämäki, Orvokki. 1984. Aspect in Finnish. In *Aspect bound: A voayge into the realm of Germanic, Slavonic and Finno-Ugrian aspectology*, ed. Casper de Groot and Hannu Tommola, 153–178. Walter de Gruyter.
- Heinämäki, Orvokki. 1994. Aspect as boundedness in finnish. In *Tense, aspect and action. empirical and theoretical contributions to language typology*, ed. Carl Bache, Hans Basbøll, and Carl-Erik Lindberg, 207–233. Walter de Gruyter.
- Horn, Laurence. 1969. A presuppositional analysis of 'only' and 'even'. In *Papers from the fifth regional meeting of the Chicago Linguistics Society (CLS 5)*, ed. Robert I. Binnick, 97–108. Chicago.
- Huumo, Tuomas. 2013. On the many faces of incompleteness: Hide-and-seek with the Finnish partitive. *Folia Linguistica* 47:1–23.
- Kaiser, Elsi. 2002. Case alternation and NPIs in questions in finnish. In *WCCFL 21: Proceedings of the 21st West Coast Conference on Formal Linguistics*, ed. Line Mikkelsen and Christopher Potts, 101–114. Somerville, MA: Cascadilla Press.
- Kaiser, Elsi. 2003. A question of case. Nordlyd 31:694-707.
- Karttunen, Frances, and Lauri Karttunen. 1976. The clitic -kin/-kAAn in Finnish. *Texas Linguistic Forum* 5:89–118.
- Karttunen, Lauri, and Stanley Peters. 1979. Conventional implicature. In *Syntax and semantics, volume 11: Presupposition*, ed. Choon-Kyu Oh and David A. Dinneen, 1–56. Academic Press.
- Kiparsky, Paul. 1998. Partitive case and aspect. In *The projection of arguments: Lexical and compositional factors*, ed. Miriam Butt and Wilhelm Geuder, 265–307. Stanford: CSLI Publications.
- König, Ekkehard. 1991. The meaning of focus particles. London: Routledge.
- Krifka, Manfred. 1992. Thematic relations as links between nominal reference and temporal constitution. In *Lexical matters*, ed. Ivan Sag and Anna Szabolcsi. Stanford: CSLI Publications.
- Leino, Pentti. 1991 [1982]. Lauseet ja tilanteet. Helsinki: Suomalaisen Kirjallisuuden Seura.
- Rooth, Mats. 1985. Association with focus. Doctoral Dissertation, University of Massachusetts Amherst.
- Rooth, Mats. 1992. A theory of focus interpretation. *Natural language semantics* 1:75–116. Van der Wouden, Ton. 1994. Negative contexts. Doctoral Dissertation, University of Groningen.

BIBLIOGRAPHY

Van der Wouden, Ton. 1997. *Negative contexts: Collocation, polarity, and multiple negation*. Routledge Studies in German Linguistics. London: Routledge.

Zwarts, Frans. 1996. A hierarchy of negative expressions. In *Negation: A notion in focus*, ed. Heinrich Wansing. Walter de Gruyter.