Negation and object case-marking in Finnish polar interrogatives

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1 Puzzle: what's negation got to do with it?

– The data we will look at: interaction of optional/alternating partitive case and KIN 'also, even'/'neither, not even' in polar interrogatives
– The immediate question we will ask: Why is this partitive marking incompatible with *-kin* (a PF realisation of KIN)?
– The more fundamental question we will ask: What is the status of this partitive? Is it a partitive of unboundedness? Is it a partitive of negation? Is it a negative polarity item (if yes, what licenses it?)?

– Nb. the verb used in (1-4), *korjata* 'to fix', has ACC objects in positive declaratives
– Nb. Structure of examples (1-4), where each example shows the data for one context:
  ◇ (a) = PAR
  ◇ (b) = ACC
  ◇ (c) = PAR.*kin*
  ◇ (d) = ACC.*kin*
  ◇ (e) = PAR.*kAAn*
  ◇ (f) = ACC.*kAAn*

(1) PAR / ACC objects and KIN in negative declaratives

a. Joni ei korjannut pyörää
Joni.NOM NEG.3SG fix.PPART bike.PAR
'Joni did not fix a/the bike'

b. * Joni ei korjannut pyörän
Joni.NOM NEG.3SG fix.PPART bike.ACC

c. Joni ei korjannut [pyörää]$_F$kin
Joni.NOM NEG.3SG fix.PPART bike.PAR.*kin*
'Joni did not fix a/the [bike]$_F$ too'

d. * Joni ei korjannut [pyörän]$_F$kin
Joni.NOM NEG.3SG fix.PPART bike.ACC.*kin*

e. Joni ei korjannut [pyörää]$_F$kään
Joni.NOM NEG.3SG fix.PPART bike.PAR.*kAAn*
'Joni did not (even) fix a/the [bike]$_F$ (either)'

f. * Joni ei korjannut [pyörän]$_F$kään
Joni.NOM NEG.3SG fix.PPART bike.ACC.*kAAn*

(2) PAR / ACC objects and KIN in declaratives with *tuskin* 'unlikely'

a. Joni tuskin korjasi pyörää
Joni.NOM unlikely fix.PAST.3SG bike.PAR
'It's unlikely that Joni fixed a/the bike'

b. Joni tuskin korjasi pyörän
Joni.NOM unlikely fix.PAST.3SG bike.ACC
'It's unlikely that Joni fixed a/the bike'

c. Joni tuskin korjasi [pyörää]$_F$kin
Joni.NOM unlikely fix.PAST.3SG bike.PAR.*kin*
'It's unlikely that Joni fixed the [bike]$_F$ too'

d. ? Joni tuskin korjasi [pyörän]$_F$kin
Joni.NOM unlikely fix.PAST.3SG bike.ACC.*kin*
'It's not likely that Joni fixed the [bike]$_F$ too'

e. Joni tuskin korjasi [pyörää]$_F$kään
Joni.NOM unlikely fix.PAST.3SG bike.PAR.*kAAn*
'It's not likely that Joni (even) fixed the [bike]$_F$ (either)'

f. * Joni tuskin korjasi [pyörän]$_F$kään
Joni.NOM unlikely fix.PAST.3SG bike.ACC.*kin*

(3) PAR / ACC objects and KIN in positive polar interrogatives

a. Korjasiko Joni pyörää?
fix.PAST.3SG.Q Joni.NOM bike.PAR
'Did Joni fix a/the bike?'

b. Korjasiko Joni pyörän?
fix.PAST.3SG.Q Joni.NOM bike.ACC
'Did Joni fix a/the bike?'

c. * Korjasiko Joni [pyörää]$_F$kin ?
fix.PAST.3SG.Q Joni.NOM bike.PAR.*kin*

d. Korjasiko Joni [pyörän]$_F$kin?
fix.PAST.3SG.Q Joni.NOM bike.ACC.*kin*
'Did Joni (even) fix a/the [bike]$_F$ (too)?'

e. Korjasiko Joni [pyörää]$_F$kään?
fix.PAST.3SG.Q Joni.NOM bike.PAR.*kAAn*
'Did Joni (even) fix a/the [bike]$_F$ (either)?'

f. * Korjasiko Joni [pyörän]$_F$kään?
fix.PAST.3SG.Q Joni.NOM bike.ACC.*kAAn*

(4) PAR / ACC objects and KIN in negative polar interrogatives

a. Eikö Joni korjannut pyörää?
NEG.3SG Joni.NOM fix.PPART bike.PAR
'Did Joni not fix a/the bike?'

b. Eikö Joni korjannut pyörän?
NEG.3SG Joni.NOM fix.PPART bike.ACC
'Didn't Joni fix a/the bike?'

c. * Eikö Joni korjannut [pyörää]$_F$kin ?
NEG.3SG Joni.NOM fix.PPART bike.PAR.*kin*
'Did Joni not fix a/the [bike]$_F$ too?'

d. Eikö Joni korjannut [pyörän]$_F$kin?
NEG.3SG Joni.NOM fix.PPART bike.ACC.*kin*
'Didn't Joni (even) fix a/the [bike]$_F$ (too)?'

e. Eikö Joni korjannut [pyörää]$_F$kään?
NEG.3SG Joni.NOM fix.PPART bike.PAR.*kAAn*
'Did Joni (even) not fix a/the [bike]$_F$ (either)?'

f. * Eikö Joni korjannut [pyörän]$_F$kään?
NEG.3SG Joni.NOM fix.PPART bike.ACC.*kAAn*

	NEG decl.	***tuskin***	**PQ (POS)**	**PQ (NEG)**
PAR	*kin*: ✓$_{too}$ *kAAn*: ✓$_{either,even}$	*kin*: ✓$_{too}$ *kAAn*: ✓$_{either,even}$	*kin*: $*$ *kAAn*: ✓$_{either,even}$	*kin*: $*$ *kAAn*: ✓$_{either,even}$
ACC	*kin*: $*$ *kAAn*: $*$	*kin*: ?$_{too}$ *kAAn*: $*$	*kin*: ✓$_{too,even}$ *kAAn*: $*$	*kin*: ✓$_{too,even}$ *kAAn*: $*$

Table 1. Summary of data with F-marking on direct object only

– Observations about the contexts (not shown in Table 1):
  ◇ O1: ACC is banned from negative declaratives (Finnish partitive of negation) (*1b)
  ◇ O2: *tuskin* and polar interrogatives are case alternation contexts (2a-b, 3a-b, 4a-b)

– Observations about ACC:
  ◇ O3: ACC.*kAAn* is bad in all contexts (*1f, *2f, *3f, *4f)
  ◇ O4: ACC.*kin* bad in negative declaratives (*1d), possibly acceptable on a *too*-reading with *tuskin* (?2d), completely fine in polar interrogatives with both *too*- and *even*-readings (3d, 4d)

– Observations about PAR:
  ◇ O5: PAR.*kAAn* is OK in all contexts (1e, 2e, 3e, 4e)
  ◇ O6: PAR.*kin* is completely fine on a *too*-reading in negative declaratives (1c) and with *tuskin* (2c), and bad in polar interrogatives irrespective of polarity (3c, 4c)

– Question for this time (cf. first line of the table):
  ◇ Why is PAR.*kin* bad in polar interrogatives? Which analysis of this kind of PAR explains this effect the best?

Proposal:

– KIN is a phasal agreement marker that signals (i) the presence of a focus sensitive operator at the closest phase edge and (ii) instructs the semantics to apply the operator on the available focus alternatives
– The operators that KIN may agree with have distinct scopes and enter in the following scope sequence with negation: SCAL > (NEG) > ADD
– the PF form of KIN tells us whether negation has interfered with ADD/SCAL: the intervening NEG always interferes with SCAL (*-kAAn* at PF), while NEG can but must not interfere with ADD (resulting in *-kAAn* and *-kin* respectively)
– ALT-PAR is a negative polarity item (NPI) that requires licensing; this licensing is only possible over ADD_{neg}
  ◇ In *ALT-PAR.*kin*, the PF form signals focus evaluation in the lower phase using ADD and not ADD_{neg}, and therefore the licensing of ALT-PAR fails

2 Background

2.1 Usual object case-marking

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

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

– Objects of negative declaratives are (always) in PAR (partitive of negation)
– Heinämäki 1984: negative declaratives are unbounded descriptions of events
  ◇ We will refer to the partitive of negation as NEG-PAR

2.2 Unusual object case-marking

– In certain contexts, object case may alternate seemingly optionally between ACC and PAR, even if in positive declaratives only ACC is allowed

– We will call this kind of partitive ALT-PAR (alternating partitive)

(6) Object case alternation with *ostaa* 'to buy'

a. Joni osti pyörän
Joni.NOM buy.PAST.3SG bike.ACC
'Joni bought a/the bike'

b. * Joni osti pyörää
Joni.NOM buy.PAST.3SG bike.PAR
(Only available readings: progressive or coerced 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?'

– ALT-PAR and Finnish NPIs are very similar (Kaiser 2002, 2003)
  ◇ ALT-PAR and NPIs are **grammatical** in polar interrogatives, and with many negative-natured expressions such as *tuskin* 'unlikely, barely', *harva* 'few'
  ◇ ALT-PAR and NPIs are **ungrammatical** in information-seeking *wh*-interrogatives, polar interrogatives with *only*, and clefted questions
  ◇ ALT-PAR and NPIs lead to **a negative bias** in questions (Kiparsky 1998, a.o.)

(7) 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?'

2.3 Additive particle/suffix KIN

– We will use KIN to refer to both PF realisations of the suffix (*-kin* and *-kAAn*)
– KIN brings with it *existential/additive* (ADD) and *scalar* (SCAL) non-truth-conditional meaning components (conventional implicatures or presuppositions: Horn 1969, Karttunen & Karttunen 1976, Karttunen & Peters 1979, König 1991, a.o.)
– They 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

(8) The meaning components of KIN given an F-marked prejacent p, its focus alternatives F-ALT$_p$, and a likelihood relation $<_{prob}$,

a. $\boxed{\text{ADD}}$ $\exists q\ [q \in \text{F-ALT}_p \wedge q \neq p] \wedge [q = 1]$

b. $\boxed{\text{SCAL}}$ $\forall q\ [q \in \text{F-ALT}_p \wedge q \neq p] \rightarrow [p <_p q]$

– Karttunen & Karttunen (1976), working in a Montagovian setting, argue that the suffix is syntacategorematic, and appears at PF as the result of the application of KIN- and KAAN-rules

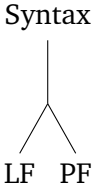
- ◇ Two arguments: a *focus* (the category that ends up carrying the suffix) and a *scope* (a property-denoting open formula containing an unbound subscripted pronoun such as *se*$_0$ 'it')
- ◇ The rule replaces the highest pronoun in the scope with the focus, suffixes it with *-kin* or *-kAAn*, and deletes all other subscripts on the remaining pronouns and replaces them with *hän* '(s)he' if the focus entity is a human
- ◇ The form alternation between *-kin* and *-kAAn* is explained by requiring the KAAN-rule to apply to a negative scope argument, while the KIN-rule must apply a positive argument
  - ∗ That negation may be applied the KIN-rule accounts for cases like (1c), where the assertion is negative, but the ADD component says that Joni fixed something else than a bike

3 Assumptions

3.1 Possible types of PAR

– PAR is due to unboundedness or negation, or it is an NPI

3.2 T-model of grammar



– Syntax pushes structures to the conceptual-intentional module through the interface of *logical form* and to the sensory-motor module through the interface of *phonological form*

– This pushing may happen at specific points (*phases*) in the syntactic derivation (Uriagereka 1999; Chomsky 2000, 2001)

– Syntax encodes F(ocus)-marking (which is on the element carrying main prosodic prominence at PF, or on a larger projected domain) (Jackendoff 1972)

3.3 Relative scopes

– Following Crnič 2011, Erlewine & Kotek 2016:

(9) Relative scopes of SCAL, ADD, and NEG:
SCAL > (NEG) > ADD

(10) Example of non-additive *even* in Dharamsala Tibetan (*-ye/-yang*) from Erlewine & Kotek 2016 (14)

a. Context: Tenzen has done many things to advance her career.
Tenzen even married the [president]$_F$ ⇒ SCAL
Tenzen-ki sinzi-nyamto-ye/yang changsa gyap-pare
Tenzen.ERG president.with.EVEN marriage LV.EVID

b. Context: Tenzen has done many things to advance her career.
Tenzen married even the [president]$_F$ ⇒ ADD, SCAL
Tenzen-ki sinzi-ye/yang-nyamto changsa gyap-pare
Tenzen.ERG president.EVEN.with marriage LV.EVID

– Erlewine & Kotek 2016 propose that the two components of *even* are used in Dharamsala Tibetan to construct *wh*-NPIs: ADD is used to build an indefinite out of a *wh*, and its association with SCAL creates an NPI (Lee & Horn 1994, Lahiri 1998), which must be licensed by something below SCAL (e.g. NEG)
– SCAL must scope over the NPI-licensor for the licensing to go through

– There might be an ADD reading in (10a) due to focus projection (Selkirk 1996, Schwarzschild 1999) ("Tenzen did something else")
– I have quite clear data from Finnish demonstrating the separation of KIN into SCAL and ADD (Lohiniva in prep.), but there is no space for that here

3.4 KIN as a phasal agreement marker (Lohiniva in prep.)

– There are two options for accounting for the idea that *even*-type expressions are pronounced lower than where they are interpreted: LF-movement or agreement
  ◇ In the spirit of Lee 2004, I propose that KIN itself is not a focus-sensitive operator, but rather signals the presence of one at the phase edge
  ◇ KIN is inserted as a marker of syntactic agreement (i) on an F-marked element, (ii) inside the projection containing the F-marked category in a position that c-commands the F-marked category (needed for complex DPs, see Holmberg 2014), **or** (iii) in a position that c-commands the F-marked category but is not in the F-marked constituent or the F-phase)
  ◇ The presence of KIN at PF tells us that at LF, focus evaluation has taken place, using the focus alternatives that are available at that point (in that phase) (Lohiniva in prep.)

– Wild guess: CP and vP (more work needed! e.g. types of the phasal nodes, types of the operators)
– In (11), x and y represent potentially distinct focus associates or *-kin/-kAAn* carriers, and ADD and SCAL are at phase edges

(11) SCAL, NEG, ADD and phases:
$[_{phase}$ SCAL > (NEG) > y > $[_{phase}$ ADD > x]]

3.5 The *-kin/-kAAn* alternation (Lohiniva in prep.)

– It is well-known that *even* in downward-entailing contexts has its scalar inference "flipped" ($<_{prob} \Rightarrow >_{prob}$)
– This could be explained using movement (*even* takes wider scope than suggested by its surface position: Karttunen & Peters 1979; Wilkinson 1996; Guerzoni 2004), or different, polarity-sensitive lexical entries for *even* (opposite scales used: Rooth 1985; von Stechow 1991; Rullmann 1997)
– I propose that the PF form of the suffix signals whether or not negative interference with the ADD or SCAL meaning component has taken place
– Given the scope sequence SCAL > NEG > ADD:
  ◇ NEG intervenes in the agreement relation between SCAL and KIN: therefore, it *always* interferes with SCAL $\Rightarrow$ *-kAAn*
  ◇ NEG does not intervene in the agreement relation between ADD and KIN: therefore, it *may* interfere with ADD, but must not $\Rightarrow$ *-kAAn* **or** *-kin*

(12) The meaning components signalled by *-kAAn*
  a. $\boxed{\text{ADD}_{neg}}$ $\exists q\ [q \in \text{F-ALT}_p \wedge q \neq p] \wedge [q =$ 0]
  b. $\boxed{\text{SCAL}_{neg}}$ $\forall q\ [q \in \text{F-ALT}_p \wedge q \neq p] \rightarrow [p >_{prob} q]$

– That NEG may or may not interfere with ADD explains the cases where ADD-KIN agreement results in the form *-kin* although negation is present in the prejacent (cf. (1c))

4 Proposal

4.1 Q1: Why is PAR.*kin* bad in polar interrogatives (PQs)?

(13) Repeated from (3c) and (4c)
  a. * Korjasiko Joni [pyörää]$_F$kin?
  fix.PAST.3SG.Q Joni.NOM bike.PAR.*kin*
  b. * Eikö Joni korjannut [pyörää]$_F$kin?
  NEG.3SG Joni.NOM fix.PPART bike.ACC.*kin*
  'Did Joni not fix a/the [bike]$_F$ too?'

Hypothesis 1: PQs are unbounding contexts, and that is why we can get PAR

– H1 is not very useful: unboundedness-related PAR is fully compatible with KIN

Hypothesis 2: ALT-PAR is in fact NEG-PAR, and it appears due to a covert NEG

– H2 leaves unexplained why PAR.*kin* is possible in negative declaratives

(14) Repeated from (1c)

a. Joni ei korjannut [pyörää]$_F$kin
Joni.NOM NEG.3SG fix.PPART bike.PAR.*kin*
'Joni did not fix the [bike]$_F$ too'

Hypothesis 3: ALT-PAR is an NPI, and it is licensed by a covert NEG

– H3 would predict across-the-board ungrammaticality if in the scope sequence, the licensor NEG can never be under ADD even though it is required to for the purposes of NPI-licensing
– "No licensing of NPIs across ADD": NEG > ADD > *NPI
– Possibly an intervention effect (Beck 2006)?

Hypothesis 4: ALT-PAR is an NPI, and it is licensed by Q

– "No licensing of NPIs across ADD": Q > ADD > *NPI
– So basically, H3 = H4

Problem: PAR.*kAAn* is fully acceptable while requiring licensing of NPI across ADD

(15) Repeated from (3e) and (4e)

a. Korjasiko Joni [pyörää]$_F$kään?
fix.PAST.3SG.Q Joni.NOM bike.PAR.*kAAn*
'Did Joni (even) fix a/the [bike]$_F$ (either)?'

b. Eikö Joni korjannut [pyörää]$_F$kään?
NEG.3SG Joni.NOM fix.PPART bike.PAR.*kAAn*
'Did Joni (even) not fix a/the [bike]$_F$ (either)?'

Refinement: "No licensing of NPIs across ADD if NEG does not interfere with it"
NEG > ADD > *NPI
NEG > ADD_{neg} > NPI

– Supports H3 over H4, at least if our assumptions hold: the interference of (covert) NEG determines the form of the suffix, while Q is irrelevant for the choice of PF form
– Therefore, PAR.*kin* in PQs is out because licensing ALT-PAR across ADD requires negative interference, but the suffix tells us that interference did not take place

Problem: There are ways to make PAR.*kin* more or even fully acceptable in PQs

(16) Improvement of acceptability when the finite V is F-marked

a. * Korjasiko Joni [pyörää]$_F$kin?
fix.PAST.3SG.Q Joni.NOM bike.PAR.KIN
Intended: 'Did Joni also fix a/the [bike]$_F$?'

b. Mutta [korjasi]$_F$ko Joni [pyörää]$_F$kin (vai ei)?
but fix.PAST.3SG.Q Joni.NOM bike.PAR.KIN or NEG.3SG
'But [did]$_F$ Joni also fix a/the [bike]$_F$ (or not)?'

c. *$^?$ Mutta korjasiko [Joni]$_F$ [pyörää]$_F$kin?
but fix.PAST.3SG.Q Joni.NOM bike.PAR.KIN
Intended: 'But did [Joni]$_F$ also fix a/the [bike]$_F$?'

(17) Acceptable ALT-PAR.*kin* in PQs with an NPI

a. Korjasiko kukaan [pyörää]$_F$kin?
fix.PAST.3SG.Q anyone bike.PAR.KIN
'Did anyone also fix a [bike]$_F$?'

b. Korjattiinko missään [pyörää]$_F$kin?
fix.PASS.PAST.Q anywhere bike.PAR.KIN
'Was any place such that a [bike]$_F$ was also fixed there?'

– Accounting for this data is hard: one possibility is that there is a secondary licensing/rescuing mechanism for ALT-PAR, which is somehow available in (16b) due to the F-marking on the verb, and perhaps the "or not" -tag
  ◇ If H3/4 is justified, then at the lower phase edge in (16b), ALT-PAR is not yet licensed, while the relevant *too*-reading is computed
  ◇ Somehow, the licensing of ALT-PAR could be suspended, but it would end up being licensed later on in the derivation
– The same mechanism, or a different one, might account for the acceptability of (17)
– The role of Q?
– I have to leave these issues open for now

5 Conclusion

5.1 General

- In the spirit of Kaiser 2002, 2003, I propose that ALT-PAR is an NPI and requires licensing by a (covert or overt) NEG
- This licensing fails if ADD intervenes between the licensor and the licensee
- However, if the licensor also interferes with ADD, the licensing goes through
- The disruptive effect of ADD could possibly be thought of as an intervention effect (Beck 2006), but the details were not worked out here
- The conclusion is inconclusive in the sense that the assumptions have to be solidified

5.2 Overt, covert, expletive negation in PQs

- Sometimes there is no NEG involved at all: ACC-marking on the object, no *-kAAn*
  - ◇ Some positive PQs do not have negation: ACC-marking, no *-kAAn*
- We have argued that ALT-PAR in positive PQs is licensed by a covert NEG
  - ◇ Some positive PQs have **covert** negation: ALT-PAR-marking, no *-kin*
- There are cases where overt NEG does not trigger ACC-marking on the object, and *-kAAn* cannot appear on it either
  - ◇ Some negative PQs have **expletive** negation: ACC-marking, no *-kAAn*
- When overt NEG and PAR-marking co-occur in PQs, *-kin*-marking is not acceptable when only the object is F-marked: this is counterevidence for a NEG-PAR analysis
  - ◇ Some negative PQs have **overt** negation: ALT-PAR-marking, no *-kin* marking

5.3 Pending

- Why is PAR.*kin* ok with *tuskin* 'unlikely' but not in polar interrogatives, although both are case alternation contexts?
- Why does additional F-marking or the *or not* -tag make PAR.*kin* more acceptable? How can NPIs like *kukaan* 'anyone' help in licensing PAR.*kin*?

5.4 Thank you!

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