Separating pronunciation and interpretation: Negation in Finnish yes-no questions

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1 Introduction

In this talk, we will look at some data from Finnish yes-no questions (YNQs) that can be accounted for if we assume that positive and negative YNQs show all four logically possible combinations of [±pronounced] and [±interpreted] negation. The main arguments come from object case-marking and licensing of polarity items (PIs), and the answer pattern is also accounted for.

1.1 Object case-marking in Finnish

Kiparsky (1998), following Leino (1991): partitive (PAR) is a semantically conditioned structural case in Finnish, appearing on the objects of unbounded VPs:

(1) Accusative (ACC) is assigned to objects of bounded VPs
Partitive (PAR) is assigned to objects of unbounded VPs

Finnish linguists have described PAR as having two functions:

- **aspectual**: assigned to objects of VPs that denote an unbounded VP
- **NP-related**. assigned to quantitatively indeterminate NPs (indefinite bare plurals, mass nouns)

In terms of boundedness, there are three classes of Vs:

- Vs interpreted as either unbounded or bounded: assign PAR when unbounded, ACC when bounded

(2) a. Ammu-i-n karhu-a
shoot-past.1sg bear-PAR
'I shot at a/the bear'

b. Ammu-i-n karhu-n
shoot-past.1sg bear-ACC
'I shot a/the bear'

With PAR on the object, we do not know for sure what happened to the bear, but it is conversationally implicated that the shooter missed.
With ACC on the object, we know the shooter did not miss.

- Vs interpreted as unbounded: assign PAR

(3) a. Rakasta-n sinu-a
love-1sg you-PAR
'I love you'

b. * Rakasta-n sinu-t
love-1sg you-ACC
'I love you'

ACC is possible if the verb is coerced into a resultative one: *Rakastin häne-t kuoliaaksi* 'I loved him/her to death'.

- Vs interpreted as bounded: assign ACC

(4) a. Löys-i-n kissa-n
find-past.1sg cat-ACC
'I found a/the cat'

b. * Löys-i-n kissa-a
find-past.1sg cat-PAR
'I found a/the cat'

This is agrammatical with aspectual PAR, but there is a gory NP-related PAR reading on which the sentence is grammatical (implying that the person found parts of the cat somewhere).

THE NP-RELATED FUNCTION OF PAR:

- with intrinsically bounded verbs like *saada* 'get', the object gets
  - PAR when it is **quantitatively indeterminate** (i.e. a indefinite bare plural or a mass noun)
  - ACC otherwise

(5) a. Saa-n poro-a
get-1sg reindeer-PAR
'I will get (some) reindeer'

b. Saa-n poro-n
get-1sg reindeer-ACC
'I will get a reindeer'

- With intrinsically unbounded verbs, all objects are assigned PAR, and the sentence is ambiguous between a definite and an indefinite interpretation of the object

(6) a. Etsi-n poro-a
seek-1sg reindeer-PAR
'I am looking for a/the/some reindeer'

b. * Etsi-n poro-n
seek-1sg reindeer-ACC
'I am looking for a/the reindeer'

Again, coercing a determined resultative meaning makes ACC grammatical: *Etsin poro-n käsiini* 'I will find that reindeer'.

IT IS NOT RESULTATIVITY BUT BOUNDEDNESS THAT DETERMINES OBJECT CASE-MARKING, as is shown by Kiparsky (1998: 4):

- some verbs, like *omistaa* 'own' and *nähdä* 'see', are bounded but irresultative, and assign case like bounded resultative verbs

(7) a. Nä-i-n poro-n
see-past.1sg reindeer-ACC
'I saw a/the reindeer'

b. * Nä-i-n poro-a
see-past.1sg reindeer-PAR
'I saw a/the reindeer'

An NP-related PAR is possible: *Näin pöydällä poro-a*, 'I saw reindeer on the table'.

- other verbs, like *rankaista* 'punish', are resultative, but assign case like unbounded verbs

(8) a. Rankais-i-n poika-a
punish-past.1sg boy-PAR
'I punished a/the boy'

b. * Rankais-i-n poja-n
punish-past.1sg boy-ACC
'I punished a/the boy'

FOR A PREDICATE TO BE UNBOUNDED IT MUST BE GRADABLE:

- being gradable means that being modifiable by degree adverbs referring to the extent of a single eventuality (Kiparsky 1998, 4)

(9) Unbounded verbal predicates
a. I looked for the key a lot

b. The customer touched the vase a bit

- bounded predicates (both resultative and irresultative) are normally never gradable

(10) Bounded verbal predicates
  a. # I found the key a lot
  b. # I got this present less than Alice did
  c. # Mary owned the book very much

- the gradability diagnostic also works for NPs: quantitatively indeterminate NPs are gradable, and thus unbounded (Kiparsky 1998, 5).

(11) a. Unbounded NP predicates: a lot of bears, a lot of coffee
  b. Bounded NP predicates: #a lot of the bear, #a lot of a bear

FOR A VP TO BE UNBOUNDED, it must have

- either an unbounded head (V)
- or an unbounded argument (Kiparsky 1998: 18)

From now on, PAR objects are taken to be quantitatively determinate unless indicated otherwise.

(12) shows

- PAR due to the unboundedness of to the verbal predicate: (a)
- PAR due to the unboundedness due of to the nominal argument: (c)
- ACC due to the boundedness of both the head and the inner argument: (d)
- ACC due to the coerced bounded reading of the unbounded V: (b)

(12) a. He vihas-i-vat$_{(-B)}$ pomme-j-a$_{(+B)}$
they-NOM hate-past.3pl bomb-pl.PAR
'They hated the bombs'

b. He vihas-i-vat$_{(+B)}$ pomm-i-t$_{(+B)}$ palas-i-ksi
they-NOM hate-past.3pl bomb-pl.ACC piece-pl.TRA
'They hated the bombs to pieces'

c. He pudott-i-vat$_{(+B)}$ pomme-j-a$_{(-B)}$
they-NOM drop-past.3pl bomb-pl.PAR
'They dropped bombs'

d. He pudott-i-vat$_{(+B)}$ pomm-i-t$_{(+B)}$
they-NOM drop-past.3pl bomb-pl.ACC
'They dropped the bombs'

THE VPS OF NEGATIVE DECLARATIVE SENTENCES ARE UNBOUNDED due to the unboundedness of negative sentences (Heinämäki 1994)

- Therefore, an object that would otherwise find itself in a bounded VP with ACC is in fact assigned aspectual PAR when negation is present

(13) a. Sinä ost-i-t$_{(+B)}$ kissa-n$_{(+B)}$
you-NOM buy-past.2sg cat-ACC
'You bought a/the cat'

b. Sinä e-t osta-nut$_{(-B)}$ kissa-a$_{(+B)}$
you-NOM neg-2sg buy-pastprt cat-PAR
'You didn't buy a/the cat'

1.2 *Negation in Finnish*

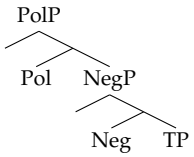
- Finnish negation is expressed using a negative auxiliary
- the auxiliary agrees with the subject in person and number, but carries no tense marking

(14)

	sg	pl
1^{st}	e-n	e-mme
2^{st}	e-t	e-tte
3^{rd}	e-i	ei-vät

- The presence of ϕ-marking but no tense lead to the suggestion that it base-generates in NegP, which is above tense but below whichever position it moves to for ϕ-marking (FinP for Holmberg et al. 1993, PolP for Holmberg 2003)

(15)



- Object case-marking tells us that the position where negation is interpreted must be low enough to make the VP unbounded

Adapting from Holmberg 2003 and 2013:

(16) a. Minä osta-isi-n kissa-n
I-NOM buy-COND.1sg cat-ACC
'I would buy a/the cat'

b. [$_{PolP}$ minä [$_{Pol'}$ osta-isi-n [$_{TP}$ <minä> [$_{T'}$ osta-isi- [$_{VP}$ <minä> <osta-> kissa-n]]]]]

(17) a. Minä e-n osta-isi kissa-a
I-NOM neg-1sg buy-COND cat-PAR
'I wouldn't buy a cat'

b. [$_{PolP}$ minä [$_{Pol'}$ e-n [$_{NegP}$ [$_{Neg'}$ e- [$_{TP}$ <minä> [$_{T'}$ osta-isi [$_{VP}$ <minä> <osta-> kissa-a]]]]]]]

1.3 *The polar focus particle -kAAn*

The polar focus particles -kin and -kAAn are

- additive ('also', 'too', 'either')
- and quite often also scalar ('even')
- can occur on virtually any constituent (or subconstituent) of the sentence (Holmberg 2014 for -kin)

Karttunen and Karttunen (1975) offer an analysis of the syntax and semantics of these particles using a Montagovian framework, and classify the meaning brought in by the particles as a conventional implicature (Grice 1975)

(18) a. Liisa ost-i kissa-n-kin
Liisa-NOM buy-past.3sg cat-ACC-kin
'Liisa bought a/the cat too'

i. Truth-conditional content: Liisa bought a/the cat

ii. Conventional implicature: There is something else Liisa bought

b. Liisa e-i osta-nut kissa-a-kaan
Liisa-NOM neg-3sg buy-pastprt cat-PAR-kAAn
'Liisa didn't buy the cat either'

i. Truth-conditional content: Liisa did not buy a/the cat

ii. Conventional implicature: There is something else she did not buy

- -kin and -kAAn are usually discussed as a pair
- it is not so clear that they can be analysed as a positive polarity particle (PPI) and a negative polarity particle (NPI).
  - (19c) and (19d) argue for an analysis of -kAAn as an NPI
  - the PPI status of -kin is put to question in light of grammatical negative declaratives such as (19a)

(19) a. Liisa e-i osta-nut kissa-a-kin
Liisa-NOM neg-3sg buy-pastprt cat-PAR-kin
'Liisa didn't also buy a/the cat'
i. Truth-conditional content: Liisa did not buy a/the cat
ii. Conventional implicature: There is something else Liisa bought

b. * Liisa e-i osta-nut kissa-n-kin
Liisa-NOM neg-3sg buy-pastprt cat-ACC-kin

c. * Liisa ost-i kissa-n-kaan
Liisa-NOM buy-past.3sg cat-ACC-kAAn

d. * Liisa ost-i kissa-a-kaan
Liisa-NOM buy-past.3sg. cat-PAR-kAAn

Syntactically, it seems that the analysis that Holmberg (2014) gives of -kin can be safely extrapolated to cover for -kAAn too:

- -kin and -kAAn to be clitics that may merge above any level of a KP (KasePhrase) as long as they c-command a focused element
- the focus particle has a [uFoc] feature that agrees with an [iFoc] feature carried by some element in its c-command domain
- at least that focused element must then move to [Spec, FocP] to act as a host for the clitic (pied-piping being a grammatical possibility)

(20) [$_{PolP}$ L [$_{Pol'}$ ost-i [$_{TP}$ <L> [$_{T'}$ <ost-i-> [$_{VP}$ <L> [$_{V'}$ <osta-> [$_{FocP}$ kissa-n [$_{Foc'}$ -kin [$_{KP}$ <kissa-n>]]]]]]]]]

(21) [$_{PolP}$ L [$_{Pol'}$ e-i [$_{NegP}$ [$_{Neg'}$ <e-> [$_{TP}$ <L> [$_{T'}$ osta-nut [$_{VP}$ <L> [$_{V'}$ <osta-> [$_{FocP}$ kissa-a [$_{Foc'}$ -kaan [$_{KP}$ <kissa-a>]]]]]]]]]

(22) [$_{PolP}$ L [$_{Pol'}$ e-i [$_{NegP}$ [$_{Neg'}$ <e-> [$_{TP}$ <L> [$_{T'}$ osta-nut [$_{VP}$ <L> [$_{V'}$ <osta-> [$_{FocP}$ kissa-a [$_{Foc'}$ -kin [$_{KP}$ <kissa-a>]]]]]]]]]

As for the NPI properties of -kAAn:

- -kAAn is not generally licensed in nonveridical contexts (Giannakidou 2002)

(23) (Non)veridicality for propositional operators:
a. A propositional operator f is veridical iff $f(p)$ entails p: otherwise f is nonveridical
b. A nonveridical operator f is antiveridial iff $f(p)$ entails $\neg p$

- the class of nonveridical operators includes modal verbs, intensional operators (such as conditionals, imperative mood...) and question operators
- (24) shows that except for questions, -kAAn is ungrammatical in nonveridical contexts

(24) a. * Liisa saa puhu-a kissa-lle-kaan
Liisa-NOM may-3sg talk-INF cat-ALL-kAAn

b. * Jos Liisa puhu-u kissa-lle-kaan, ...
If Liisa-NOM talk-3sg cat-ALL-kAAn

c. * Puhu kissa-lle-kaan!
talk-IMP cat-ALL-kAAn

d. Puhuu-ko Liisa kissa-lle-kaan?
talk-3sg.kO Liisa-NOM cat-ALL-kAAn?
'Does Liisa talk to the cat either?'

i. Truth-conditional content: Does Liisa talk to the cat?

ii. Conventional implicature: There is something else Liisa does not talk to

1.4 The syntax of Finnish YNQs

Holmberg (2003, 2013):

- YNQs involve a Polarity projection, PolP: T/I-to-C is actually movement from PolP to CP, Pol-to-C.
- a semantically motivated syntactic analysis of YNQs: as in wh-questions, there is a variable bound by the question operator, the value of which is asked for
- Holmberg argues that positive and negative declaratives have a valued Pol head ([aff] and [neg], respectively), while in YNQs, the value of Pol is left open or unvalued ([uPol])

Pulling together Holmberg 2003, 2013 and 2014 for neutral (non-clefted) YNQs in Finnish:

- the question particle -kO, with an unvalued Focus feature and a valued WH feature, is merged as a Foc head, attracting a [iFoc] element to its spec
- the valued WH feature is probed by the question operator, and the sentence is interpreted as a question
- it is always the highest **visible** head of the IP (i.e. the head in Pol') that moves to FocP: when the question is negative, it is the negative auxiliary that is fronted.

(25) [Q [$_{FocP}$ V+[uPol] [$_{Foc'}$ -kO [$_{PolP}$ subj [$_{Pol'}$ <V>+[uPol] [$_{TP}$ <subj> [$_{T'}$ <V> [$_{VP}$ <subj> <V> obj]]]]]]]

(26) [Q [$_{FocP}$ neg+[uPol] [$_{Foc'}$ -kO [$_{PolP}$ subj [$_{Pol'}$ <neg>+[uPol] [$_{NegP}$ [$_{Neg'}$ <neg> [$_{TP}$ <subj> [$_{T'}$ V [$_{VP}$ <subj> <V> obj]]]]]]]]]

1.5 YNQs and Ladd's ambiguity

Ladd (1981): negative YNQs with preposed *n't* are ambiguous between

- a reading where negation scopes inside the IP, licensing NPIs
  - 'inner negation'
  - a negative answer bias: speaker has an initial belief that p, but has encountered evidence against this, and is doublechecking $\neg p$

    (27) Didn't Liisa buy a cat, either?

- a reading where negation scopes outside of the IP, making the sentence incompatible with NPIs
  - 'outer negation'
  - a positive answer bias: speaker has an initial belief that p, and is doublechecking p

    (28) Didn't Liisa buy a cat, too?

2 *The data*

2.1 *Object case alternation and -kAAn in negative YNQs*

Starting with negative YNQs with a bounded predicate:

- PAR case-marking on the object is possible, as expected: in that case, only -kAAn can attach to the object
  - an NP with NP-related PAR can take -kin: *Etkö sinä ostanut poroakin?* 'Didn't you buy some reindeer too?'
- ACC objects are grammatical as well, but -kAAn is not grammatical with ACC

(29) a. E-t-kö sinä osta-nut kissa-a?
neg-2sg.kO you-NOM buy-pastprt cat-PAR
'Didn't you buy a/the cat?'

b. E-t-kö sinä osta-nut kissa-a-kaan?
neg-2sg.kO you-NOM buy-pastprt cat-PAR-kaan
'Didn't you buy a/the cat either?'

c. * E-t-kö sinä osta-nut kissa-a-kin?
neg-2sg.kO you-NOM buy-pastprt cat-PAR-kin

(30) a. E-t-kö sinä osta-nut kissa-n?
neg-2sg.kO you-NOM buy-pastprt cat-ACC
'Didn't you buy a/the cat?'

b. E-t-kö sinä ostanut kissa-n-kin?
neg-2sg.kO you-NOM buy-pastprt cat-ACC-kin
'Didn't you buy a/the cat too?'

c. * E-t-kö sinä ostanut kissa-n-kaan?
neg-2sg.kO you-NOM buy-pastprt cat-ACC.kaan

Ladd's ambiguity is apparent from the object case-marking and the choice of -kin/-kAAn: ACC-kin leads to a positive bias, whereas PAR-kAAn leads to a negative bias.

(31) a. Etkö sinä ostanut kissa-n-kin? positive answer bias

b. Etkö sinä ostanut kissa-a-kaan? negative answer bias

2.2 *Object case alternation and -kAAn in positive YNQs*

Positive YNQs show the same pattern as negative YNQs:

(32) a. Ost-i-t-ko sinä kissa-a?
buy-past.2sg.kO you-NOM cat-PAR
'Did you buy a/the cat?'

b. Ost-i-t-ko sinä kissa-a-kaan?
buy-past.2sg.kO you-NOM cat-PAR-kaan
'Did you buy a/the cat either?'

c. * Ost-i-t-ko sinä kissa-a-kin?
buy-past.2sg.kO you-NOM cat-PAR-kin

Same remark as before: this sentence is ungrammatical with an aspectual PAR. A more plausible NP-related PAR could be grammatical, however: *Ostitko sinä poroakin?* 'Did you buy some reindeer too?'

(33) a. Ost-i-t-ko sinä kissa-n?
buy-past.2sg.kO you-NOM cat-ACC
'Did you buy a/the cat?'

b. Ost-i-t-ko sinä kissa-n-kin?
buy-past.2sg.kO you-NOM cat-ACC-kin
'Did you buy a/the cat too?'

c. * Ost-i-t-ko sinä kissa-n-kaan?
buy-past.2sg.kO you-NOM cat-ACC.kaan

Interestingly, one can also detect Ladd's ambiguity in positive YNQs:

- the addition of -kin and -kAAn makes the biases easily detectable
  - PAR-kAAn goes with a negative bias
  - ACC-kin goes with a positive bias
- with the right intonation, they can be argued to be surface even without the particles

(34) a. Ostitko sinä kissa-n-kin? positive answer bias
b. Ostitko sinä kissa-a-kaan? negative answer bias

2.3 *Answering Finnish YNQs*

- Finnish YNQs are most naturally answered with a finite verb
- Holmberg (2013): whichever expression is used as an answer particle is
  - merged to FocP
  - assigns a value to the unvalued Pol variable of the IP that the answer inherits from the question
  - identity-based ellipsis of the IP (where the value of Pol does not matter for ellipsis)

(35) Did Liisa buy a cat?
[Q [$_{FocP}$ did+[uPol] [$_{Foc'}$ [$_{PolP}$ Liisa [$_{Pol'}$ <did>+[uPol] [$_{TP}$ <Liisa> [$_{T'}$ <buy> [$_{VP}$ <Liisa> <buy> a cat]]]]]]]]
a. Yes
[$_{FocP}$ yes+[aff] [$_{Foc'}$ [$_{PolP}$ Liisa [$_{Pol'}$ <did>+[aff] [$_{TP}$ <Liisa> [$_{T'}$ <buy> [$_{VP}$ <Liisa> <buy> a cat]]]]]]]]
b. No
[$_{FocP}$ no+[neg] [$_{Foc'}$ [$_{PolP}$ Liisa [$_{Pol'}$ <didn't>+[neg] [$_{NegP}$ [$_{Neg'}$ <neg> [$_{TP}$ <Liisa> [$_{T'}$ <buy> [$_{VP}$ <Liisa> <buy> a cat]]]]]]]]

- Holmberg 2013 is built to account for English answers to positive and negative questions
- negation can be interpreted in three different positions:

(36) a. IP-external: 'yes' affirms the positive alternative
b. IP-internal but sentential scope: #'yes', but 'yes, subject V' affirms the positive alternative
c. vP-internal: 'yes' affirms the negative alternative

- in Finnish, negation must always be pronounced IP-externally in negative YNQs
  - sometimes it seems to be interpreted in a position that is not too high for it to reach down and assign PAR to the object
  - sometimes it seems to be interpreted in a position that is too high for that

Farkas and Bruce (2009) and Roelofsen and Farkas (2015):

- describe answers in terms of their absolute and relative polarity
  - absolute polarity is determined by the polarity of the answer (positive vs. negative)
  - relative polarity is determined by the agreement between the polarity of the answer and the polarity of the proposition that the question puts on the table (notion developed by Farkas and Bruce 2009)

- a conversational move puts a proposition on the table: the goal of a conversation is to have a clean table

(37) a. If the absolute polarity of the answer corresponds to the absolute polarity of the proposition on the table, the answer is a **confirming** one

b. If the absolute polarity of the answer is the opposite of the absolute polarity of the proposition on the table, the answer is a **reversing** one

Finnish YNQs: when the absolute polarity of the answer is positive, the relative polarity of the answer is

- confirming with ACC-kin
  - the absolute polarity of the proposition on the table: positive
- reversing with PAR-kaan
  - the absolute polarity of the proposition on the table: negative

(38) a. Ost-i-t-ko sinä kissa-a-kaan?
buy-past.2sg.kO you-NOM cat-PAR-kAAn
'Did you buy a/the cat-kAAn?'

b. i. Ost-i-n
buy-past.1sg
'Yes' (= I bought a cat) reversing

ii. # Kyllä
yes
'Yes' (= I bought a cat)

iii. E-n
neg-1sg
'No' (= I did not buy a cat) confirming

(39) a. Ost-i-t-ko sinä kissa-n-kin?
buy-past.2sg.kO you-NOM cat-ACC-kin
'Did you buy a/the cat-kin?'

b. i. Ost-i-n
buy-past.1sg
'Yes' (= I bought a cat) confirming

ii. Kyllä
yes
'Yes' (= I bought a cat)

iii. E-n
neg-1sg
'No' (= I did not buy a cat) reversing

(40) a. E-t-kö sinä osta-nut kissa-a-kaan?
neg-2sg.kO you-NOM buy-pastprt cat-PAR-kAAn
'Didn't you buy a/the cat-kaan?'

b. i. Ost-i-n
buy-past.1sg
'Yes' (= I bought a cat) reversing

ii. # Kyllä
yes
'Yes' (= I bought a cat)

iii. E-n
neg-1sg
'No' (= I did not buy a cat) confirming

(41) a. E-t-kö sinä osta-nut kissa-n-kin?
neg-2sg.kO you-NOM buy-pastprt cat-ACC-kin
'Didn't you buy a/the cat-kin?'

b. i. Ost-i-n
buy-past.1sg
'Yes' (= I bought a cat) confirming

ii. Kyllä
yes
'Yes' (= I bought a cat)

iii. E-n
neg-1sg
'No' (= I did not buy a cat) reversing

3 *Previous work*

3.1 *Kaiser 2002, 2004*

The observation that an object case alternation between ACC and PAR occurs in YNQs with bounded predicates is not new. Kaiser (2002):

- with a bounded factive verb *huomata* 'notice', the object is in ACC when the sentence is a positive declarative, but in either ACC or PAR when the sentence is a positive YNQ
- object case alternation contexts and NPI licensing contexts overlap
  - the 'optional' PAR is NPI-like
    - optional PAR and NPIs are both licensed when the presupposition of the factive verb is only locally projected (it does not reach the speaker's beliefs, but is either attributed to the embedded subject or taken to contribute to the asserted content under an operator: Beaver 2001)
    - both optional PAR and some NPIs produce a negative bias in questions

Kaiser (2002: 200) argues that total or local projection of the factive verb's presupposition shows on the object in YNQs:

- default total projection goes together with ACC
  - in (42a), the speaker thinks that the man is present, and asks whether the person noticed him
- local projection under Q goes together with PAR
  - in (42b), no belief is attributed to the speaker with respect to the existence of the man

(42) a. Huomas-i-ko Pekka mie**he**-n?
notice-past.3sg.kO Pekka-NOM man-ACC
'Did Pekka notice a/the man?' Total projection: speaker believes that a/the man is present

b. Huomas-i-ko Pekka mie**s**-tä?
notice-past.3sg.kO Pekka-NOM man-PAR
'Did Pekka notice a/the man?' Local projection under Q: speaker has no belief about the presence of a/the man

- given that PAR requires local presupposition projection, it is ungrammatical in contexts where an additional, totally projected presupposition is present

  - clefted questions, YNQs with *vain* 'vain' (Kaiser 2002: 202-203)
  - wh-questions (Kaiser 2004)
- in our previous examples with the bounded predicate *ostaa* 'buy', it is not the case that case is determined by whether or not the speaker/asker has a belief about the existence of the object (in our case, a/the cat)
- Kaiser (2004) links the ACC-PAR alternation to the presence/absence of a focus/background partition
  - when the object has ACC, either the object or the polarity of the event is in focus
  - PAR is incompatible with any focus/background partition
  - the background information is taken to be presupposed

(43) a. Huomas-i-ko (vain) Pekka (vain) miehe-n / *mies-tä? PP: Pekka noticed someone
notice-past.3sg.kO only Pekka-NOM only man-ACC / man-PAR
'Did (only) Pekka notice (only) a/the man?'

b. Huomas-i-ko (*vain) Pekka (*vain) ketään?
notice-past.3sg.kO only Pekka-NOM only anyone-PAR
'Did (only) Pekka notice (only) anyone?'

(44) a. Liisa-n-ko / *Liisa-a-ko Pekka huomas-i? PP: Pekka noticed someone
Liisa-ACC-kO / Liisa-PAR-kO Pekka-NOM notice-past.3sg
'Was it Liisa that Pekka noticed?'

b. *Ketään-kö Pekka huomas-i?
anyone-PAR-kO Pekka-NOM notice-past.3sg
'Was it anyone that Pekka noticed?'

(45) Kuka huomas-i Liisa-n / *Liisa-a? PP: Someone noticed Liisa
who-NOM notice-past.3sg Liisa-ACC / Liisa-PAR?
'Who noticed Liisa?'

Kaiser (2002) argues that optional PAR induces a negative bias like some NPIs:

- she only provides data in order to support her claim that optional PAR is NPI-like
- the negative bias of PAR was already mentioned in Kiparsky (1998: 23), who says that a 'speaker [who] expects a negative answer [...] would be more likely to use [PAR] than [ACC]"with either factive or non-factive verbs:

(46) a. On-ko sinu-lla kynä?
be-pres.3sg.kO you-ADE pen-NOM
'Do you have a pen?'

b. On-ko sinu-lla kynä-ä?
be-pres.3sg.kO you-ADE pen-PAR
'Do you have a pen?'

Is PAR an NPI?

- PAR can occur in unbounded, non-negated VPs
- NPIs cannot occur in unbounded, non-negated VPs

(47) a. Rakast-i-n kissa-a
love-past.3sg cat-PAR
'I loved a/the cat'

b. * Rakast-i-n kissa-a-kaan
love-past.3sg cat-PAR-kAAn
'I loved a/the cat-kaan'

c. * Rakast-i-n koskaan
love-past.3sg ever
'I ever loved'

d. * Rakast-i-n ketään
love-past.3sg anyone-PAR
'I love anyone'

- PAR cannot occur in the same non-veridical contexts than NPIs

(48) a. Jos kukaan tietä-ä mi-stä sa-isi-n ...
if anyone-NOM know-pres.3sg where-ELA get-COND.1sg
'If anyone knows where I could get...'

b. * Jos löydä-t kissa-a, kerro minu-lle
if find-pres.2sg cat-PAR tell-IMP I-ALL
'If you find the cat, tell me'

3.2 *Romero and Han 2004*

Romero and Han 2004 set out to explain Ladd's ambiguity in English YNQs with preposed negation by appealing to the epistemic VERUM operator (Höhle 1992):

- preposed negation contributes VERUM to the LF of the sentence
- the meaning of VERUM: 'it is sure that it should be added to the common ground that...'
- VERUM can be in either scope configuration with preposed negation
  - when VERUM scopes under negation, NPIs are not licensed and the interpretation is positively biased
  - when VERUM scopes over negation, NPIs are licensed and we get a negatively biased question
  - in both cases, the speaker's original belief is *p*:
    - with a positively biased question, the speaker asks for any possible doubts about *p* (which the speaker might be assumed to assume not to exist)
    - with a negatively biased question, the speaker asks for conclusive evidence for *not-p* (the truth of which would be contrary to his or her initial beliefs)

(49) Romero and Han 2004: 635-636

a. Isn't Jane coming either?
   i. [$_{CP}$ Q VERUM [not [$_{IP}$ Jane is coming] either]]
   ii. VERUM > negation

b. Isn't Jane coming too?
   i. [$_{CP}$ Q not [VERUM [$_{IP}$ Jane is coming] either]]
   ii. negation > VERUM

- for Finnish, an analysis in terms of VERUM would require explaining why VERUM intervenes in object case assignment
  - potentially, this would follow from it being interpreted too high (for PAR-marking purposes)
  - ACC-kin should line with (49b), where negation scopes over VERUM
  - PAR-kAAn should line with (49a), where VERUM scopes over negation.

- the VERUM approach does not directly explain why a bare *kyllä* 'yes' answer to a negative question with VERUM scoping over negation is not felicitous:

(50) a. E-t-kö sinä osta-nut kissa-a-kaan?
neg-2sg.kO you-NOM buy-pastprt cat-PAR-kAAn
'Didn't you buy a/the cat either?'

b. [$_{CP}$ Q VERUM [not [$_{IP}$ you bought a/the cat] either]]

  - (50) should be construed as asking whether it is for sure that we should add to the common ground that the addressed person did not buy a cat either: there is no straightforward reason why this questions could not be answered with a bare 'yes'

- the VERUM approach fails to account for the parallel between object case-marking and licensing of -kAAn across absolute polarity
  - it is not explained why biases similar to the ones in negative YNQs arise in positive YNQs
  - the pairing between positive bias, ACC and no licensing of NPIs on the one hand, and negative bias, PAR and licensing of NPIs is left unexplained

3.3 *Reconstruction*

It is uncontroversial that

- the Finnish negative auxiliary must merge between TP and FinP/PolP where it takes on ϕ-marking
- it moves up to the CP in YNQs

A possible analysis that suggests itself in light of these facts is that while negation merges low and moves high to be pronounced, it might be interpreted in either

- its base-generation position (leading to PAR-marking on the object, and licensing NPIs)
- or high in FocP (leading to ACC-marking on the object, and ungrammaticality of NPIs)
  - this would essentially amount to saying that negation can reconstruct: it can be interpreted lower than where it is pronounced

(51) a. E-t-kö sinä osta-nut kissa-a-kaan?
neg-2sg.kO you-NOM buy-pastprt cat-PAR-kAAn
'Didn't you buy a/the cat either?'

b. [Q [$_{FocP}$ neg$_{[+pr]}$ [$_{Foc'}$ [$_{PolP}$ [$_{Pol'}$ <neg> [$_{NegP}$ [$_{Neg'}$ <neg>$_{[+int]}$ [$_{TP}$ ... [$_{VP}$ ... obj-PAR-kAAn]]]]]]]]]

(52) a. E-t-kö sinä osta-nut kissa-n-kin?
neg-2sg.kO you-NOM buy-pastprt cat-ACC-kin
'Didn't you buy a/the cat too?'

b. [Q [$_{FocP}$ neg$_{[+pr,+int]}$ [$_{Foc'}$ [$_{PolP}$ [$_{Pol'}$ <neg> [$_{NegP}$ [$_{Neg'}$ <neg> [$_{TP}$ ... [$_{VP}$ ... obj-ACC-kin]]]]]]]]]

- this analysis faces same problem that Romero and Han's VERUM approach: the parallel between positive and negative YNQs is not accounted for

4 *Proposal*

4.1 *[±pronounced] and [±interpreted] negation*

To summarise the across-polarity parallels in YNQs that were discussed above:

(53) a. ACC on object, *-kaan, confirming positive reply, positive answer bias
b. PAR on object, -kaan, reversing positive reply, negative answer bias

One way to account for the data is to assume that negation may be [±pronounced] and [±interpreted]

(54)

[pronunciation]	[interpretation]	absolute polarity	tell-tale signs	remark
+	+	negative	PAR on object, ✓NPIs	
+	−	negative	ACC on object, ∗NPIs	expletive negation
−	+	positive	PAR on object, ✓NPIs	covert negation
−	−	positive	ACC on object, ∗NPIs	

- whenever negation is interpreted, regardless of whether it is pronounced or not, the object will receive PAR and NPIs will be grammatical
- whenever negation is not interpreted, regardless of whether it is pronounced or not, he object will receive ACC and NPIs will be ungrammatical
- in other words
  - in absolutely negative YNQs with ACC-kin, we have expletive negation
  - in absolutely positive YNQs with PAR-kAAn, we have covert negation
- (54) is suitable for describing what happens in YNQs with a bounded predicate in terms of object case assignment and NPI licensing
- it might require rethinking Holmberg's (2013) analysis of YNQs as having an unvalued [uPol]
  - if the value of the Pol head is [neg] if there is a NegP with a [+interpreted] negation below it, and [aff]/[pos] or [u] otherwise, we see why
    - ∗ the positive reply *ostin* is confirming whenever negation is not interpreted
    - ∗ the positive reply *ostin* is reversing when negation is interpreted
  - whenever the answer is reversing, it's polarity value does not agree with the polarity value of the question

(55) a. [Q [$_{FocP}$ [$_{Foc'}$ e-t-kö$_{[+pr]}$ [$_{PolP}$ subj [$_{Pol'}$ <e-t>$_{[neg]}$ [$_{NegP}$ [$_{Neg'}$ <e->$_{[+int]}$ [$_{TP}$ ... V obj-PAR-kaan]]]]]]]]
   i. *Ostin*$_{[pos]}$ 'Yes': reversing
   ii. *En*$_{[neg]}$ 'No': confirming
b. [Q [$_{FocP}$ [$_{Foc'}$ e-t-kö$_{[+pr]}$ [$_{PolP}$ subj [$_{Pol'}$ <e-t> [$_{NegP}$ [$_{Neg'}$ <e->$_{[-int]}$ [$_{TP}$ ... V obj-ACC-kin]]]]]]]]
   i. *Ostin*$_{[pos]}$ 'Yes': confirming
   ii. *En*$_{[neg]}$ 'No': reversing
c. [Q [$_{FocP}$ [$_{Foc'}$ V-t-ko [$_{PolP}$ subj [$_{Pol'}$ <V-t>$_{[neg]}$ [$_{NegP}$ [$_{Neg'}$ <e->$_{[+int]}$ [$_{TP}$ ... <V> obj-PAR-kaan]]]]]]]]
   i. *Ostin*$_{[pos]}$ 'Yes': reversing
   ii. *En*$_{[neg]}$ 'No': confirming
d. [Q [$_{FocP}$ [$_{Foc'}$ V-t-ko [$_{PolP}$ subj [$_{Pol'}$ <V-t> [$_{TP}$ ... <V> obj-ACC-kin]]]]]]
   i. *Ostin*$_{[pos]}$ 'Yes': confirming
   ii. *En*$_{[neg]}$ 'No': reversing

- in (55c), V must skip over the unpronounced Neg head on its way to PolP
  - it might not have been what Holmberg (2003, 2013) had on his mind when proposing that the highest *visible* head in IP must move to PolP, but evidently, only a pronounced element can host the ϕ-markers and the clitic -kO, and therefore the first *pronounced* head must be the one that moves
  - although at first sight the movement seems to disobey the Head Movement Constraint (Travis 1984), it could be that the silent Neg head allows for movement through it, or its silent form moves with V to PolP
  - another way to escape the HMC would be to assume that interpreted negation is an operator in Spec,NegP, and the negative auxiliary only appears when negation is pronounced
  - I leave this question for further work
- could Pol still be unvalued in some cases?
  - without NPIs or appropriate intonation, the bias is less strongly felt

(56) Ost-i-t-ko sinä kissa-a?
buy-past.2sg.kO you-NOM cat-PAR
'Did you buy a/the cat?
[Q [$_{FocP}$ [$_{Foc'}$ V-t-ko [$_{PolP}$ subj [$_{Pol'}$ <V->$_{[uPol]}$ [$_{TP}$ ... <V> obj-PAR]]]]]]

a. Ost-i-n
buy-past.1sg
'I did'
[$_{FocP}$ [$_{Foc'}$ ost-i-n$_{[pos]}$ [$_{PolP}$ subj [$_{Pol'}$ <V-t>$_{[pos]}$ [$_{TP}$ ... <V> obj-ACC]]]]]

b. E-n
neg-1sg
'I didn't'
[$_{FocP}$ [$_{Foc'}$ e-n$_{[neg]}$ [$_{PolP}$ subj [$_{Pol'}$ <e-n>$_{[neg]}$ [$_{NegP}$ [$_{Neg'}$ <e->$_{[+int]}$ [$_{TP}$ <V> obj-PAR]]]]]

- (56b) leaves open the question of whether the negative answer *en* can indirectly tell us that Neg must contain a [+interpreted] negation, as Pol is then valued [neg]

- PAR without -kAAn and without a [+interpreted] negation in the structure of (56) seems to reraise one of the questions that Kaiser (2002, 2004) wanted to solve: why can object case alternate between ACC and PAR if there is no cover negation involved?
  - Kaiser argues for the following correlation:
    - ACC $\leftrightarrow$ total projection (existence of NP presupposed)
    - PAR $\leftrightarrow$ local projection (no presupposition regarding the existence of NP)
  - another way to put this would be to appeal to another NP-related function for PAR:
    - PAR also assigned to **referentially indeterminate** (indefinite) NPs?
    - this way, the PAR object can be presupposed to exist without it being singled out or identified
    - in positive YNQs, PAR could be aspectual (due to covert negation) or due to referential or to quantitative indeterminacy
    - this would lead to a wrong prediction, however: *Huomenna ostan kissa-a*, 'Tomorrow I will buy an undeterminate cat', is ungrammatical, so an NP-related, indefinite/referentially indeterminate PAR is out in declaratives
    - much more work is needed to see if there is PAR could be described as having an anti-determinate NP-related function, or if ACC should be described as having an aspectual and an NP-related (determinate) function just like PAR

(57) a. Ost-i-t-ko poro-a?
buy-past.2sg.kO reindeer-PAR
'Did you buy a/the/some reindeer?'
i. quantitatively indeterminate object
ii. referentially indeterminate object
iii. referentially determinate object (negative bias)

b. Ost-i-t-ko poro-a-kin?
buy-past.2sg.kO reindeer-PAR-kin
'Did you buy some reindeer too?'
i. quantitatively indeterminate object

c. Ost-i-t-ko poro-a-kaan?
buy-past.2sg.kO reindeer-PAR-kAAn
'Did you even not buy a/the/some reindeer?
i. quantitatively indeterminate object (negative bias)
ii. referentially indeterminate object (negative bias)
iii. referentially determinate object (negative bias)

5 *Conclusion*

- Finnish object case-marking depends on the boundedness of the VP
  - bounded VPs have ACC objects
  - unbounded VPs have PAR objects
  - negation renders the VP unbounded, forcing PAR marking even on the object of an otherwise bounded VP
- the additive/scalar focus particle -kAAn is an NPI
- in Finnish YNQs, both positive and negative,
  - object case alternates between ACC and PAR, and the licensing of -kAAn covaries with the case
    - -kAAn is ungrammatical with ACC, but grammatical with PAR
- previous work has established that the contexts that license this object case alternation are contexts that license NPIs
  - this lead to the conclusion that PAR is somehow NPI-like (Kaiser 2002, 2004)
  - however, PAR is licensed in contexts that no NPI seems to be licensed in, namely, in unbounded VPs
    - PAR is not an NPI
    - the contexts that it shares with NPIs arguably contain an [+interpreted, −pronounced] negation
- the data is accounted for by assuming that negation can be [±pronounced] and [±interpreted]
  - when negation is [+interpreted], it unbounds the VP, assigning PAR to the object, and licenses NPIs
  - when negation is [−interpreted], the object carries its usual case and NPIs are not licensed
- the analysis allows accounting for both absolutely positive and negative YNQs: other analyses would have to explain why the case and NPI-licensing covary across absolute polarity
- to be continued:
  - negative exclamatives: [+pronounced, −interpreted negation]

(58) E-i-kö ole-kin ihana!
neg-3sg.kO be-3sg.kin lovely
'Isn't it lovely!'

– negative rhetorical questions: [−pronounced, +interpreted negation]

(59) Mitä sinä-kään sii-tä tiedä-t?
what you-NOM.kAAn that-ELA know-pres.2sg
'What do you know about that?'

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