Circumventing Shortest with the Additive –kin in Finnish Binary Wh-questions

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1. Introduction

In binary wh-questions, the relative order of the wh-phrases in surface syntax is regulated by Shortest (Richards, 1997), which can be reduced to two principles. The first principle, Shortest Attract, states that when the establishment of Agree leads to movement, it is always the nearest goal that moves to the attractor. In wh-questions, the visible effects of Shortest Attract correspond to Superiority effects (Chomsky, 1973), which are illustrated with a pair of English examples in (1).

(1) a. Who, *i* sees what?
   b. *What, i* does who see *tj*?

The second principle states that all subsequent movement to the attractor – be it overt or covert – must be as short as possible (Shortest Move). The effects of Shortest Move have been argued to be visible in multiple-wh-fronting languages such as Bulgarian (Rudin, 1988; Richards, 1997), where wh-phrases that move after the first-moved wh-phrase ‘tuck in’ under the first-moved wh-phrase (2).

(2) a. Koj, *koj* t, vižda t?
   who what sees ‘Who sees what?’
   b. *Kakvo, koj* t, vižda t?
   what who sees

In this paper, we discuss binary wh-questions in Finnish. In Finnish, binary wh-questions come in two morphosyntactically distinct types: either the wh-phrase that stays in situ in surface syntax is bare, or it carries the additive clitic –kin (Huhmarniemi & Vainikka, 2011). We show that only the former type complies with Shortest, and offer an intervention-based analysis of this difference.

This paper is structured as follows. In section 2, we begin by presenting the general syntactic and semantic properties of the two types of binary wh-questions in Finnish, and outline Huhmarniemi & Vainikka’s (2011) analysis. We then discuss some commonalities and differences between the two types, partly arguing against Huhmarniemi & Vainikka. In section 3, we present an analysis of Finnish wh-questions couched within the Q-particle approach (Hagstrom, 1998; Cable, 2010; Kotek, 2014), and put forth an intervention-based analysis of the non-applicability of Shortest with the wh-kin type, as well as a topicality-based analysis of the high landing position of wh-kin-phrases. Section 4 concludes.

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2. The syntax and semantics of binary wh-questions in Finnish

2.1. Two ways to form binary wh-questions

Finnish, like English and unlike Bulgarian, requires the overt movement of exactly one wh-phrase to the CP in information-seeking wh-questions (Vainikka, 1989; Vilkuna, 1995; Huhmarniemi, 2012). Typically, the landing position of this movement is assumed to be the specifier of a focus projection, FocP, which also houses fronted, contrastively focused constituents (Vilkuna, 1995). Thus, in binary wh-questions, one wh-phrase fronts to the left periphery, while the other stays in situ in surface syntax.

The particularity of Finnish is that the non-fronted wh-phrase may appear either bare, as in (3a), or carrying the additive clitic –kin, as in (3b) (Huhmarniemi & Vainikka, 2011). In this paper, we distinguish the two types of binary wh-questions based on this morphosyntactic criterion, and refer to the first as the bare type, and the second as the wh-kin type.

(3) a. Kuka kenelle?  
who-NOM spoke who-ALL

‘Who spoke to whom?’

b. Kuka kenellekin?  
who-NOM spoke who-ALL.ADD

‘Who spoke to whom?’

Huhmarniemi & Vainikka (2011) propose that the two types of binary wh-questions differ in the level of ‘syntactic activity’ that the non-fronted wh-phrase shows: while bare wh- phrases are ‘active’, wh-kin phrases are ‘inactive’. In essence, the proposal is that –kin (or some functional projection associated with it) deletes the focus feature that is relevant for wh-movement on its host wh-phrase, and that the wh-kin phrase stays in situ both in surface syntax and at LF. Indeed, the central observation about wh-kin phrases is that they are simply unable to undergo overt wh-movement – meaning that they cannot Agree with Foc◦ – as the single-wh question in (4b) shows.

(4) a. Kenelle Mari puhui t?  
who-ALL Mari-NOM spoke

‘Who did Mari speak to?’

b. *Kenellekin Mari puhui t?  
who-ALL.ADD Mari-NOM spoke

In this paper, we adopt Huhmarniemi & Vainikka’s general idea of ‘inactivity’, but implement it differently, using intervention in the sense of featural Relativised Minimality (see section 3; Rizzi, 1990, 2010; Starke, 2001). Moreover, we argue against Huhmarniemi & Vainikka’s claim that wh-kin phrases remain in situ at LF. This argument is based on data from island-sensitivity (section 2.2.1) and the determination of ‘sorting keys’ (section 2.3.2).

The rest of this section is dedicated to a discussion of the commonalities and differences between the two types of binary wh-questions.

2.2. Commonalities

2.2.1. Island sensitivity

The first commonality between bare and wh-kin binary wh-questions comes from their island-sensitivity. Here we disagree with Huhmarniemi & Vainikka (2011), who argue that only the bare type is island-sensitive, and therefore only the bare type involves covert movement of the non-fronted wh-phrase. The authors restrict their attention to temporal –essA adjuncts (Huhmarniemi, 2009, 2012), the islandhood of which is established in (5) (Huhmarniemi & Vainikka, 2011):
(5) a. Pekka kompastui [auttaessaan Merjaa]
Pekka-NOM fell helping-ESSA Merjaa-PAR
‘Pekka fell while helping Merja’

b. * Keti, Pekka kompastui [auttaessaan $t_i$]?
who-PAR Pekka-NOM fell helping-ESSA
Int. ‘Who did Pekka fell while helping?’

The relevant data for the two types of wh-questions is shown in (6). Huhmarniemi & Vainikka argue that the relative markedness of the bare-type (6a) when compared to the wh-kin-type (6b) shows that bare wh-phrases, but not wh-kin phrases, move covertly; therefore, only the bare type shows island-sensitivity.

(6) a. ?? Kuka kompastui [auttaessaan ketä]?
who-NOM fell helping-ESSA who-PAR
‘Who fell while helping whom?’

b. Kuka kompastui [auttaessaan ketäkin]?
who-NOM fell helping-ESSA who-PAR.ADD
‘Who fell while helping whom?’

There is reason to doubt that the two types show differential island-sensitivity, however. To see this, consider first the baselines for relative clause islands (7) and complex NP islands (8).

(7) a. Joni söi hedelmän [jonka Mari osti rautatieasemalta]
Joni-NOM ate fruit-ACC that-ACC Mari-NOM bought train.station-ABL
‘Joni ate the fruit that Mari bought at the train station’

b. * Mistä, Joni söi hedelmän [jonka Mari osti $t_i$]?
where-ELA Joni-NOM ate fruit-ACC that-ACC Mari-NOM bought
Int. ‘Where did Joni eat the fruit that Mari bought?’

(8) a. Joni muisti vääteen [että Mari kävi Helsingissä]
Joni-NOM remembered claim-ACC that Mari-NOM visited Helsinki-INE
‘Joni remembered the claim that Mari visited Helsinki’

b. * Missä Joni muisti vääteen, [että Mari kävi missä]($t_i$)j?
where-INE Joni-NOM remembered claim-ACC that Mari-NOM visited
Int. ‘Where did Joni remember the claim that Mari visited?’

As (9) shows, neither the bare nor the wh-kin type allows the non-fronted wh-phrase to be located within a relative clause island (9a) or a complex NP island (9b).

(9) a. * Kuka $t_i$ söi hedelmän [jonka Mari osti mistä(kin)]?
who-NOM ate fruit-ACC that-ACC Mari-NOM bought where-ELA.(ADD)
Int. ‘Who ate the fruit that Mari bought where?’

b. * Kuka $t_i$ muisti vääteenj, [että Mari kävi missä(kin)]?
who-NOM remembered claim-ACC that Mari-NOM visited where-INE.(ADD)
Int. ‘Who remembered the claim that Mari visited where?’

We take the data from relative clause and complex NP islands to indicate that both ways of forming binary wh-questions involve covert movement of the non-fronted wh-phrase. The main difference in island effects is therefore not between the two types of binary wh-questions, but between temporal adjunct islands on the one hand, and relative clause and complex NP islands on the other; for some reason that we do not speculate about here, only the latter show real island effects. In other words, we consider that the relative clause and complex NP islands show the island-sensitivity of binary wh-questions more reliably than temporal adjuncts.\(^1\)

\(^1\) Saara Huhmarniemi (p.c.; see Huhmarniemi, 2012) notes that bare wh-phrases must move to the edge of the
2.2.2. Answer profiles

The second commonality between the bare and \textit{wh-kin} types of binary \textit{wh}-questions concerns the availability of pair-list (PL) answers. Here we again disagree with Huhmarniemi \& Vainikka (2011), who argue that the \textit{wh-kin} type only allows PL answers, while the bare type only allows single-pair (SP) answers. We argue that both types in fact allow PL answers; however, we agree that the \textit{wh-kin} type does not allow SP answers. The relevant answer profiles are shown in (10) and (11).

\begin{enumerate}
\item[(10)] a. Kuka\(_i\) \(t_i\) puhui kenelle? \hfill \text{[bare]}
who-NOM spoke who-ALL
‘Who spoke to whom?’

b. Mari puhui Jonille \hfill \text{[SP answer]}
Mari-NOM spoke Joni-ALL
‘Mari spoke to Joni’

c. Mari puhui Jonille, ja Mika (puhui) Ainolle \hfill \text{[PL answer]}
Mari-NOM spoke Joni-ALL and Mika-NOM spoke Aino-ALL
‘Mari spoke to Joni, and Mika (spoke) to Aino’
\end{enumerate}

\begin{enumerate}
\item[(11)] a. Kuka\(_i\) \(t_i\) puhui kenelle\textit{kin}? \hfill \text{[wh-kin]}
who-NOM spoke who-ALL.ADD
‘Who spoke to whom?’

b. #Mari puhui Jonille \hfill \text{[SP answer]}
Mari-NOM spoke Joni-ALL
‘Mari spoke to Joni’

c. Mari puhui Jonille, ja Mika (puhui) Ainolle \hfill \text{[PL answer]}
Mari-NOM spoke Joni-ALL and Mika-NOM spoke Aino-ALL
‘Mari spoke to Joni, and Mika (spoke) to Aino’
\end{enumerate}

The availability of a PL reading for a given question can be tested by embedding it under a ‘list-verb’, which selects a \textit{wh}-question complement that has more than one answer (Schwarz, 1995; Kitagawa et al., 2004). The example\(^2\) in (12) shows that both types of binary \textit{wh}-questions may be embedded under a list-verb in Finnish, which means that a PL reading is available with two singular \textit{wh}-phrases even in the absence of \textit{–kin}. However, there is a slight preference for \textit{wh-kin} in (12), perhaps because a PL reading is the only available reading for this type, and the context of (12) supports a PL reading. (That only the bare type allows SP answers is not discussed again in the next subsection.)

\begin{enumerate}
\item[(12)] Noh, lopulta proffa sai jaettua opiskelijat ryhmiin ja luetteli,
well finally professor-NOM managed divide students-ACC groups-ILL and listed
kuka tenttisi missä(\textit{kin})
who-NOM take.exam-COND where-INE.(ADD)
‘Well, finally, the professor managed to divide the students into groups and listed who would take the exam where’
\end{enumerate}

\footnotesize
\text{temporal adjunct whenever the whole adjunct undergoes \textit{wh}-movement, as shown in (i), and they also prefer to do so when the whole adjunct does not move, which explains the markedness of (6a). \textit{Wh-kin} phrases sometimes undergo optional scrambling to the same position, but are never required to.}

\begin{enumerate}
\item[(i)] a. [Ketä, \textit{auttaessaan} \(t_i\), Pekka kompastui \(t_j\)? \hfill \text{[Attested example with \textit{–kin} from https://sitahyvaelamaa.wordpress.com/tag/opiskeluhajoilu/]}
who-PAR helping-\textit{essa} Pekka-NOM fell
Lit. ‘While helping whom did Pekka fell?’

b. *[\textit{Auttaessaan} ketä], Pekka kompastui \(t_j\)? \hfill \text{[Attested example with \textit{–kin} from https://sitahyvaelamaa.wordpress.com/tag/opiskeluhajoilu/]}
helping-\textit{essa} who-PAR Pekka-NOM fell
\end{enumerate}
2.3. Differences

2.3.1. Shortest Attract

The clearest syntactic difference between the two types of binary *wh*-questions is that while the bare type does not allow the extraction and movement of a hierarchically lower *wh*-phrase over a higher one, the *wh-kin* type does. This means that only the former shows Superiority effects (Huhmarniemi & Vainikka, 2011), and is thus subject to Shortest Attract. The relevant data is shown in (13).

(13) a. *Kenelle*$_i$ kuka puhui $t_i$? [bare]
   who-ALL who-NOM spoke
   Int. ‘Who spoke to whom?’

   b. Kenelle$_i$ kuka*kin* puhui $t_i$? [wh-kin]
   who-ALL who-NOM.ADD spoke
   ‘Who spoke to whom?’

2.3.2. Shortest Move and sorting keys

As mentioned at the beginning of this section, Huhmarniemi & Vainikka (2011) argue that *wh-kin* phrases are syntactically inactive, and remain in situ at LF. In subsection 2.2.1, we showed that island-sensitivity data in fact indicates that both bare and –kin-carrying *wh* phrases do move at LF. In this section, we provide another argument for the covert movement of *wh-kin* phrases, and show that the positions targeted by the LF-movement of bare *wh*-phrases and *wh-kin* phrases differ: the former land below the fronted *wh*-phrase (in accordance with Shortest Move), while the latter land above it.

The relevant diagnostic for the relative order of the *wh*-phrases at LF comes from determining which of the two *wh*-phrases functions as the ‘sorting key’ in the answer. In binary *wh*-questions requiring a PL answer, the *wh*-phrase that is hierarchically highest at LF must be exhaustively and pointwise-uniquely mapped to the lower *wh*-phrase (Dayal, 1996, 2002). In English, the surface order of the *wh*-phrases corresponds to their order at LF: the leftmost *wh*-phrase is also the highest one. Thus, PL-answering a question such as (14) requires mapping each student (exhaustivity) to exactly one cake (uniqueness). These requirements are often modelled as presuppositions of the question (see e.g. Kotek, 2014).

(14) Which student baked which cake?

One strategy that is sometimes used to determine which *wh*-phrase acts as the sorting key involves numerically modified *wh*-phrases. In (15a), each of the three linguists (higher *wh*) may be mapped to a unique philosopher (lower *wh*). One philosopher is left over, but it does not matter: there is no requirement that the lower *wh*-phrase be ‘used up’ exhaustively. In the numerally-reversed (15b), however, there are not enough philosophers for the linguists to marry, and the question is marked.

(15) a. Which of the three linguists married which of the four philosophers?

b. #Which of the three linguists married which of the four philosophers?

Curiously, it has been proposed that in Finnish *wh-kin* binary questions, it is the non-fronted *wh-kin* phrase that is the sorting key (Hakulinen et al., 2004: §755). In fact, it has even been proposed that *wh-kin* phrases should be analysed not as *wh*-phrases, but as distributive universal quantifiers taking scope over the fronted *wh*-phrase (*ibid*.). Although we do not endorse the universal quantifier analysis, we do endorse the claim that *wh-kin* phrases move above fronted *wh*-phrases, and thus function as sorting keys. As expected, with the Finnish equivalents of (15) shown in (16), the judgments are reversed:

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3 The sorting key is D-linked, which ensures that we are able to evaluate whether exhaustive mapping has taken place. Note that this type of D-linkedness does not require a lexical restriction on the *wh*-phrase.

4 At least not under the assumption of monogamy.

5 One reason to not do so is that universal quantifiers and *wh-kin* phrases are not semantically equivalent in questions: functional answers are available to questions with universal quantifiers (Chierchia, 1991, 1993), but not to *wh-kin* type binary *wh*-questions, as (ii) shows.
(16) a. #Kuka kolmesta kielitieteilijästä nai kenetkin neljästä filosofista?
   who-NOM three-ELA linguist-ELA married who-ACC.ADD four-ELA philosopher-ELA
   ‘Which of the three linguists married which of the four philosophers?’

   b. Kuka neljästä kielitieteilijästä nai kenetkin kolmesta filosofista?
   who-NOM four-ELA linguist-ELA married who-ACC.ADD three-ELA philosopher-ELA
   ‘Which of the four linguists married which of the three philosophers?’

To determine the sorting key for the bare type, we embed the question under a list-verb to force a PL reading, as in (17). The judgments indicate that the leftmost wh-phrase is highest at LF.

(17) a. Mari luetteli kuka kolmesta kielitieteilijästä oli nainut kenet neljästä
   Mari listed who-NOM three-ELA linguist-ELA had married who-ACC four-ELA
   philosofista
   philosopher-ELA
   ‘Mari listed which of the three linguists had married which of the four philosophers’

   b. #Mari luetteli kuka neljästä kielitieteilijästä oli nainut kenet kolmesta
   Mari listed who-NOM four-ELA linguist-ELA had married who-ACC.ADD three-ELA
   philosofista
   philosopher-ELA
   ‘Mari listed which of the four linguists had married which of the three philosophers’

In sum, the data indicates that wh-kin phrases move covertly above the fronted wh-phrase at LF, while bare wh-phrases tuck in. The latter case is in compliance with Shortest Move, while the former is not. Huhmarniemi & Vainikka’s (2011) claim that wh-kin phrases stay in situ in both surface syntax and at LF is therefore further weakened, although the data do show that wh-kin phrases are ‘inactive’ for purposes of wh-movement, and therefore exempt from Shortest Move.

2.4. Summary

The data presented in this section indicates that Finnish bare binary wh-questions behave much in the same way as English binary wh-questions do.6 Crucially, they are subject to both Shortest Attract and to Shortest Move, as we showed. The wh-kin type, however, seems to be subject to neither of these principles: bare wh-phrases may wh-front over higher wh-kin phrases (no Shortest Attract), and wh-kin phrases move covertly above fronted wh-phrases to function as the sorting key (no Shortest Move).

In the course of this section, we have shown that the proposal of Huhmarniemi & Vainikka (2011) is partially correct. It seems clear that wh-kin phrases are somehow ‘inactive’ and therefore do not compete with other wh-phrases for overt movement to the CP. This explains the first observation, i.e. the lack of Shortest Attract/Superiority effects: if wh-kin phrases are not ‘visible’ goals for Foc6, they will simply not be subject to Shortest Attract – nor to Shortest Move, which then frees them from the requirement to tuck in under the fronted wh-phrase, and partly explains the observation concerning the identity of the sorting key in binary wh-kin questions.

However, this section also shows that contra Huhmarniemi & Vainikka (2011), both types of binary wh-questions show island-sensitivity, which indicates covert movement of the visibly in situ wh-phrase in both types of questions. For the wh-kin type, this conclusion is supported by the sorting key

(ii) a. Kenelle Mari lähetti jokaisen kirjan? – Omistajalleen
   who-ALL Mari-NOM sent each-ACC book-ACC owner-ALL.PX/3
   ‘Who did Mari send each book to? – Its owner’

   b. Kenelle Mari lähetti minkäkin kirjan? – #Omistajalleen
   who-ALL Mari-NOM sent which-ACC.ADD book-ACC owner-ALL.PX/3
   ‘Who did Mari send which book to? – #Its owner’

6 One difference that we mention in footnote 3 and again in section 3.2.1 is that the presence of a lexical restriction is not enough to override Shortest Attract in Finnish, whereas it is in English (Pesetsky, 1987).
data. Therefore, the proposal put forth by Huhmarniemi & Vainikka – namely, that wh-kin phrases are interpreted in situ (via long-distance binding) – is likely to be incorrect.

Thus, the question remains: why can wh-kin phrases not undergo wh-movement, i.e. why are they disregarded by the interrogative probe, Foc\(^{\circ}\)? Huhmarniemi & Vainikka (2011) propose that this is because the additive clitic –kin deletes the focus feature on its host wh-phrase, making the wh-phrase invisible for probing by Foc\(^{\circ}\). If the relevant feature for wh-movement is indeed a focus feature, this explanation goes through. In the next section, we consider a different possibility – namely, that wh-movement is driven by a \([Q]\)-feature – and propose an analysis that relies on syntactic feature-based intervention in the sense of featural Relativised Minimality (fRM; Rizzi, 1990, 2010; Starke, 2001). At the end of the section, we propose a syntactic explanation for why the wh-kin phrase moves above the fronted wh-phrase at LF, and thus becomes the sorting key of the question.

3. An intervention approach to binary wh-kin questions

3.1. Featural Relativised Minimality

Shortest Attract can be construed as locality principle, but it is not the only one of its kind. Our analysis of wh-kin questions relies on featural Relativised Minimality (fRM: Rizzi, 1990, 2010; Starke, 2001). Like other locality principles, fRM imposes constraints on syntactic relationships. The particularity of fRM is that it operates on types or classes of features instead of singular features: it states that a probe-goal relationship between two entities \(a\) and \(b\) carrying the same type of feature is not well-formed if (i) there is an intervening entity \(c\) carrying the same type of feature as \(a\) and \(b\), and (ii) \(a\) asymmetrically c-commands \(c\), and \(c\) asymmetrically c-commands \(b\). The relevant configuration is shown in (18), where \([\alpha]\) represents a feature type or class.

\[
\begin{array}{c}
{a[\alpha]} \ldots {c[\alpha]} \ldots {b[\alpha]} \\
\end{array}
\]

Anticipating our analysis of wh-kin questions, note now that interrogative features and focus features are grouped together under the same ‘quantificational’ type (Rizzi, 2010).

3.2. fRM-intervention and the internal syntax of wh-kin phrases

Our proposal for the syntax of Finnish wh-questions in general, and wh-kin questions in particular, is couched within the Q(uestion)-particle approach to interrogative syntax and semantics (Hagstrom, 1998; Cable, 2010; Kotek, 2014). This approach is a natural choice given that Finnish has an overt Q-particle, –KO (Holmberg, 2014). –kO always appears in polar interrogatives, and may also attach to wh-phrases (especially when accompanied by another second-position clitic, –hAn (Hakulinen, 1976)\(^8\)).

On the Q-particle approach, wh-movement is driven by the deletion of an uninterpretable \([uQ]\)-feature on a left-peripheral head. This contrasts with Huhmarniemi & Vainikka’s (2011) analysis, where the relevant feature is a focus feature. Despite this difference, we assume that the relevant head for wh-movement is still Foc\(^{\circ}\) in Finnish (perhaps due to feature inheritance from Force\(^{\circ}\); Brattico et al., 2013).

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\(^7\) The conclusion that wh-kin phrases move covertly is also supported by focus intervention data, as (iii) shows. With the bare type (example not shown), the result is slightly marked. We leave the discussion of this point for future research, and refer the reader to Beck, 2006 and Kotek, 2014 for a detailed discussion of focus intervention.

(iii) Minkä asiakirjoien vain uskottiin\(\_F\) löytvän mistäkin kassakaapista?
which-PL.ACC document-PL.ACC only believed-PASS find-PRESPART which-ELA.ADD safe-SG.ELA
‘Which documents were only believed\(\_F\) to be found in which safe?’

\(^8\) The meaning of –hAn may be roughly glossed as ‘I wonder’ in information-seeking wh-questions such as (iv).

(iv) Missäkähän Mari on \(t_1\)?
where-INE.Q.HAN Mari is
‘Where is Mari (I wonder)?’
The feature that matches \([uQ]\) on \(\text{Foc}^\circ\), i.e. the interpretable \([iQ]\), is on the \(Q\)-particle. We assume that in Finnish, \(Q\) adjoins to a \(wh\)-KP (for \textit{KasePhrase}; this projection can be assumed to contain a DP).

Overt (and covert) \(wh\)-movement of the full \(wh\)-phrase signals that the \(Q\)-particle projects syntactically, and ‘pied-pipes’ the \(wh\)-KP when moving to the CP (Cable, 2010). The \(Q\)-based syntax for Finnish \(wh\)-movement is summarised in (19).

\[
\begin{align*}
FocP & \; [Q_P \; iQ] \; [KP \; K^{\circ} \; [DP \; D^{\circ} \; NP]] \\
& \; [TP \; ... \; t_i \; ...]
\end{align*}
\]

As we claim that \(wh\)-\textit{kin} phrases are indeed \(wh\)-phrases, and not universal quantifiers (see footnote 5), we assume that \(wh\)-\textit{kin} phrases also contain a \(Q\)-particle. The key to understanding binary \(wh\)-\textit{kin} questions then lies in understanding how the presence of \(-\textit{kin}\) comes to disallow Agree between \(\text{Foc}^\circ\) and the \(Q\)-particle associated with the \(wh\)-\textit{kin} phrase.

We propose that the additive clitic \(-\textit{kin}\) marks the presence of a functional head \(\text{ADD}^9\). \(\text{ADD}\) adjoins to \(QP\), and is therefore located in a position from where it asymmetrically c-commands \(Q\). We also assume that \(\text{ADD}\) carries \([uF]\), and must therefore Agree with \([iF]\) in its c-command domain (Holmberg, 2014).\(^{10}\) We let \([iF]\) be located on the \(wh\)-determiner \(D^{\circ}\). Thus, the (non-final) schematic syntactic structure of a \(wh\)-\textit{kin} phrase is as shown in (20); bare \(wh\)-phrases simply lack the outmost \(\text{ADD}\) layer.

\[
\begin{align*}
\text{ADD}_P \; \text{ADD}_{[uF]} & \; [Q_P \; iQ] \; [KP \; K^{\circ} \; [DP \; D^{\circ} \; iF \; NP]]
\end{align*}
\]

From the perspective of \(\text{fRM}\), the structure in (20) gets one thing right and one thing wrong. First, we do not want \(\text{Foc}^\circ\) to be able to Agree with \(Q\) within the \(wh\)-\textit{kin} phrase. This relationship is indeed ruled out by \(\text{fRM}\), given that there is an intervenor \(\text{ADD}\) between \(\text{Foc}^\circ\) and \(Q\) such that (i) the features \([uQ]\) on \(\text{Foc}^\circ\), \([uF]\) on \(\text{ADD}\), and \([iQ]\) on \(Q\) are of the same quantificational type, and (ii) \(\text{Foc}^\circ\) asymmetrically c-commands \(\text{ADD}\), and \(\text{ADD}\) asymmetrically c-commands \(Q\). Under our proposal, it is this \(\text{fRM}\)-effect that liberates \(wh\)-\textit{kin} phrases from both Shortest Attract and Shortest Move. The problem is that in the structure shown in (20), \(\text{fRM}\)-intervenes between \(\text{ADD}\) and \(D^{\circ}\). This second \(\text{fRM}\)-effect is unwanted on our account, as \(wh\)-\textit{kin} questions are syntactically wellformed (and therefore \([uF]\) must be deleted).

The solution we propose relies on an independently attested property of syntactic focus features: they may project (Selkirk, 1996; Schwarzschild, 1999). To break the \(\text{fRM}\)-configuration, \([iF]\) on \(D^{\circ}\) must only project up to KP; as \(Q\) and KP symmetrically c-command each other, KP\([iF]\) may Agree with \(\text{ADD}_{[uF]}\). Now the syntactic representation of a \(wh\)-\textit{kin} phrase is as shown in (21).

\[
\begin{align*}
\text{ADD}_P \; \text{ADD}_{[uF]} & \; [Q_P \; iQ] \; [KP_{[iF]} \; K^{\circ} \; [DP_{[iF]} \; D^{\circ} \; iF \; NP]]
\end{align*}
\]

One issue of our proposal is that to ensure \(\text{fRM}\)-intervention between \(\text{Foc}^\circ\) and \(Q\), the uninterpretable focus feature on \(\text{ADD}\) must be present in the relevant syntactic sense: its deletion (following Agree with the projected \([iF]\)) cannot take place before the \([Q]\)-Agree-relationship between \(\text{Foc}^\circ\) and \(Q\) is attempted, or else there is no \(\text{fRM}\)-intervention, and our account of the unavailability of the \(wh\)-\textit{kin} phrase as a goal for \(\text{Foc}^\circ\) fails.

In sum, depending on which syntactic features one takes Finnish \(wh\)-movement to be based on, it is possible to devise different explanations as to why \(wh\)-\textit{kin} phrases are not visible for probing by \(\text{Foc}^\circ\), and are therefore not required to comply with Shortest. While the proposal put forth in this section has the advantage of being based on the general \(Q\)-approach to questions, it also has its issues.

\(^9\) When attached to non-\(wh\) KPs, the additive \(-\textit{kin}\) translates to ‘too’ or ‘also’. However, \(-\textit{kin}\) also has other uses in Finnish where it cannot be translated in this way; for example, \(-\textit{kin}\) is part of the morphological make-up of certain quantifiers, such as \textit{jokin} ‘something’. Due to reasons of space, we do not discuss the semantics of \(\text{ADD}\) here, but note that it is very likely that the use of \(-\textit{kin}\) in \(wh\)-\textit{kin} questions is closely related to its use quantifiers.

\(^{10}\) As additives are focus-sensitive expressions (König, 1991; Rooth, 1992), it is not controversial to associate them with a focus feature in syntax.
3.2.1. The high-targeting covert movement of the wh-kin phrase

The last question that we discuss concerns the landing position of the covertly moving wh-kin phrase. As the sorting key data shows, the covert movement of the wh-kin phrase targets a position above the fronted wh-phrase, i.e. above FocP. The question is, what is this higher position, and why does the wh-kin phrase move there?

We propose that the wh-kin phrase targets a high Topic phrase (TopP). There is independent evidence for the availability of such a position in Finnish (Kaiser, 2006). In sentences with preposed negation or another preposed polarity element, such as the emphatic kyllä ‘yes’, a discourse-old topic may occupy a position above FocP. In (22a), the subject occupies this high TopP, as shown by its position with respect to the contrastively focused indirect object in FocP (in capitals). As (22b) shows, the availability of this landing position for overt movement is dependent on the preposing of negation.

(22) a. En minä JONILLE puhunut, vaan...
   NEG.1SG I-NOM Joni-ALL spoke but
   ‘It was not JONI I spoke to, but...’

   *Minä JONILLE en puhunut, vaan...
   I-NOM Joni-ALL NEG.1SG spoke but
   Int. ‘It was not JONI I spoke to, but...’

In contrast to e.g. Italian (Rizzi, 1997), wh-phrases may never be preceded by any overt topicalised elements in Finnish. It is possible that this restriction – whatever its source – is also behind the covertness of the movement of the wh-kin phrase. At this point, we do not discuss this issue further, and propose simply that the TopP-targeting covert movement of the wh-kin phrase is driven by an uninterpretable topic feature [uTop] on ADD. Assuming that Agree works downwards, this feature may only be deleted once the wh-kin phrase has moved to a position from which it c-commands Top◦ [iTop].

(23) Internal syntax of a wh-kin phrase (final)

\[ \text{ADD}_P \text{ADD}_{[uF,uTop]} \text{QP}\text{KP}_{[iF]} \text{DP}_{[iF]} \text{NP} \]

Another option is to attribute the topic feature to the wh-KP itself, in closer parallel to D-linking in languages such as English. However, in this case, the covert movement of wh-kin phrases to TopP is no longer closely tied to the presence of –kin. One could even imagine that bare, but D-linked wh-phrases (i.e. wh-phrases with a lexical restriction but no –kin) would be able to move to the high TopP. However, in Finnish, the presence or absence of a lexical restriction does not play a role in determining whether Shortest must be complied with: only wh-phrases carrying –kin are interpreted in TopP. Moreover, even D-linked wh-phrases that escape Shortest Attract in English are still interpreted in their surface order, in compliance with Shortest Move (Kotek, 2014). Therefore, we maintain that the covert movement of wh-kin phrases to a high TopP is indeed linked with a topic feature present on ADD.

4. Conclusion

In this paper, we discussed two types of binary wh-questions in Finnish, and showed that the type in which the visibly in situ wh-phrase carries the additive clitic –kin complies with neither Shortest Attract nor Shortest Move. Indeed, bare wh-phrases may Agree with Foc◦ and undergo wh-movement, while wh-kin phrases cannot: thus, the wh-kin type shows no Shortest Attract/Superiority effects. We proposed an intervention-based analysis of why this is the case. In addition to not being subject to Shortest Attract, we showed that binary wh-kin questions do not comply with Shortest Move; although island-sensitivity and sorting key data indicate that wh-kin phrases and bare wh-phrases both move covertly, wh-kin phrases are interpreted above fronted wh-phrases, while bare wh-phrases are interpreted below them. To explain

11 Associating a topic feature with additives is natural, given that additives often refer back to discourse-old information (Karttunen & Peters, 1979). Moreover, the topic feature also brings wh-kin phrases closer to contrastive topics, which function a lot like sorting keys (Büring, 1997).
this pattern, we proposed that the operator associated with the appearance of –kin carries a topic feature, and this feature drives the covert movement of the wh-kin phrase to a high TopP above FocP.

References

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