

The relativizer *ku(n)* in spoken Finnish: patterns of usage and path of development

Marja-Liisa HELASVUO and Ritva LAURY¹

University of Turku

University of Helsinki

1. Introduction

Spoken Finnish has four relativizers, *joka*, *mikä*, *kuka*, and *ku(n)*². The first two, *joka* and *mikä*, appear also in the written language, while *kuka* and *kun* are largely confined to spoken language, and are even in the spoken language less frequently used than the other two relativizers. The purpose of this article is to describe the usage patterns of the relativizer *kun* and its possible paths of grammaticalization in spoken Finnish.

The article contributes to a larger project that concerns the use of relative clauses in everyday Finnish conversation (see Helasvuo & Laury 2008, 2009, 2010; Laury & Helasvuo 2008a, b, 2015; Helasvuo 2009; Laury 2010). For those studies, we compiled a corpus of approximately 11 hours of face-to-face conversations and telephone calls from the Conversation Analysis archives housed at the University of Helsinki and Spoken Language archives housed at the University of Turku. In those data, the use pattern of *kun* contrasts with the other relative pronouns in such a way that the head nouns of *kun* typically refer to concrete objects, while *joka* typically functions as a relativizer on head nouns that have human referents, and *mikä* on non-human head nouns (for similar findings based on data from newspapers, see Pääkkönen 1988: 26). In contrast to both *joka* and *mikä*, the referents of the heads of *kun* tend not to be specific; rather, they represented a class or a kind. *Kun* thus appears to serve in the negotiation of class membership rather than e.g. in specifying reference. Helasvuo & Laury (2009) found that the main clauses of *joka*- and *mikä*-relative clauses favored existential, habitive or other presentational clauses. The main clauses of *kun*-relative clauses were also frequently presentational, but even more

¹ The names of the authors are given in alphabetical order. Authorship is shared equally.

² In our data, *kun* occurs in its full form, with the final nasal, and also in the form *ku*. In what follows, when discussing the form in general, we will use the full form, but in the discussion of specific tokens, we will use the actual form.

frequently, there was no main clause, and the head of the *kun*-relative was a free NP. For *joka*, the main clauses were found to be formulaic. For *kun*, this does not seem to be the case. Since our earlier data contained relatively few uses of *kun*, we have collected an additional database of *kun*-relatives in order to be able to make more definite conclusions on how it is used and how it compares to the other relativizers.

In what follows, we will first introduce our data, and then we will discuss the typical characteristics of *kun*, comparing it to the other Finnish relativizers. We will then consider two paths of grammaticalization of *kun*. We will suggest that the relativizer *kun* is more likely to have grammaticalized from the comparator *kuin* ‘as’ rather than the adverbial conjunction *kun* ‘when, because’, contrary to what has been previously suggested (Herlin 1998).

2. Data

For our earlier studies, we developed a corpus of uses of all four Finnish relativizers. Our quantitative analyses for this study are based on two datasets. The first dataset on all four relativizers, *joka*, *mikä*, *kun* and *kuka*, is based on approximately 11 hours of conversation from archives at the Universities of Helsinki and Turku (these data are referred to as Helasvuo & Laury 2009 in Table 1). Since there were only 25 cases of *kun*-relatives in this dataset, we needed additional data on *kun*-relatives. We collected data from the Arkisyn corpus compiled at the University of Turku, based on data from the conversational archives at the universities of Helsinki and Turku (referred to as Arkisyn in Table 1). Table 1 shows the distribution of the different relativizers in the datasets. The datasets are partly overlapping, and the rightmost column (“Combined dataset for *kun*”) gives the amount of data for *kun* which the current data is based on.

	Data source		
	Helasvuo & Laury 2009	Arkisyn	Combined dataset for <i>kun</i>
Hours of data	10 hrs 51 m	29 hrs 30 m	
Relativizer			
<i>joka</i>	113	296	
<i>mikä</i>	198	608	
<i>kun</i>	25	59	67

<i>kuka</i>	6	27	
Total	342	990	67

Table 1. *The distribution of relativizers in the datasets* (Conversational data from Helasvuo & Laury 2009 and from Arkisynt).

In what follows, we will discuss the patterns of usage of *kun*-relatives in the combined dataset and contrast it with our data on the use of *joka*- and *mikä*-relative clauses in Helasvuo & Laury (2009).

3. *Kun* and the other Finnish relativizers

Kun is a multifunctional connector used for combining clauses. Herlin (1998) provides an in-depth discussion of the functions of *kun* as a temporal, causal and contrastive conjunction. *Kun* also functions as a connector in comparatives (Hakulinen et al. 2004, §1172). Herlin (1998: 19) makes a brief comment on the use of *kun* as a relativizer but does not discuss it any further, presumably since it does not come up or is at least very rare in her written data³. In Finnish dialects, *kun* is most widely used as a relativizer in the Southwestern dialects, whereas in other dialectal areas such use is more limited (Kärkkäinen 1986: 49). In the written standard, the use of *kun* as a relativizer is not recommended (see e.g. Kielitoimiston sanakirja 2006), and even in the colloquial language, it is not very common as a relativizer.

Perhaps reflecting the use of *kun* in spoken varieties of Finnish only, descriptions of Finnish relativizers (e.g. Hakulinen et al. 2004, §735, 736; Mielikäinen 1986) state that Finnish has only three relativizers, *joka*, *mikä* and *kuka*, and *kun* is mentioned as a side note (Hakulinen et al. 2004, §736; Mielikäinen 1986: 111); however, in our spoken data, *kun* is more frequent than *kuka*, while both are less frequent than *joka* and *mikä* (cf. Table 1).

Similar to *kun*, the other Finnish relativizers, *joka*, *mikä*, and *kuka*, are all used for other functions as well. *Joka* is used as an (indefinite) pronoun (*joka päivä* ‘each day’) and *mikä* (‘what’) and *kuka* (‘who’) as interrogatives. In this respect, the

³ It is striking that the one example of the use of *kun* as a relativizer in non-temporal context Herlin gives (1998: 19) comes from fiction.

multifunctionality of *kun* is typical of Finnish relativizers in general. However, in the case of *kun*, the relativizing function is clearly marginal and its use is limited to certain language varieties, whereas for *mikä* and even more so for *joka*, the relativizing function is one of their central functions.

Joka, *mikä* and *kuka* are inflected for case and to a certain extent, for number. Similar to other pronouns, they exhibit several peculiarities in their inflection – for example the *-ka*-ending is a clitic affix which appears in the nominative and the genitive but not in other inflected forms (e.g. *jo-n-ka* [jo-GEN-CLITIC] : *jo-ssa* [jo-INE] ‘in which’). Nevertheless, *joka* and *mikä* show a full inflectional paradigm in the so-called grammatical and local cases. In contrast, *kun* is invariant: it does not show any inflection. One could hypothesize that this grammatical fact sets constraints on its use in different syntactic functions. However, this does not appear to be the case, as we will show.

4. Contexts of use of *kun* as a relativizer

In this section, we will discuss the use of *kun* as a relativizer, comparing it to the other relative pronouns in our data. We will first discuss the types of main clauses *kun* and the other relativizers occur with. Then we will discuss the syntactic function of the head NP in the main clause, and the semantic class of the head NP, and finally, the syntactic function of the relativizer. We will show that the discourse profile of the *kun* relativizer is different from the profiles of the other relativizers.

4.1. Main clauses of *kun*-relatives

The most striking pattern regarding the main clause types has to do with the preponderance of existential, habitive and other presentational clause types in the data (see Table 2 below). For *joka* and *mikä*, the most common type of main clause is an existential, habitive (a subtype of existentials in Finnish; Hakulinen et al. 2004: 849), or other presentational clause. These are all included under “presentational” in Table 2 and make 28% of the data for *joka*- and *mikä*-relatives. The main clauses for *kun*-relatives were also commonly presentational (22%). Transitive clauses were also

common as main clauses *joka*- and *mikä*-relatives (23% and 24%, respectively) while intransitive main clauses were less frequent (7% and 10%). For *kun*-relatives, transitive and intransitive main clauses were approximately equally frequent (13% and 15%, respectively). For *kun*-relatives, another important tendency in our data was that for nearly one third of them (31%), the head nouns were free NPs (i.e., syntactically independent NPs not attached to any clause, Tao 1994, Helasvuo 2001; for the use of relative clauses with free NPs, see Laury & Helasvuo 2015). That is, *kun*-relatives appear to be more likely to occur with free NPs as their heads rather than NPs that had a syntactic role in another clause. See Table 2 below.

Relativizer	Helasvuo & Laury 2009				Combined data	
	<i>joka</i>		<i>mikä</i>		<i>kun</i>	
	N	%	N	%	N	N
<i>Main clause</i>						
transitive	26	23	44	22	9	13
intransitive	8	7	20	10	10	15
copular	18	16	37	19	12	18
presentational	32	28	56	28	15	22
causative of emotion	1	1	0		0	
main clause unclear	1	1	3	2	0	
<i>No main clause</i>						
free NP head	23	20	36	18	21	31
other	4	4	2	1	0	
Total	113	100	198	100	67	100

Table 2. Type of main clause for the Finnish relativizers.

In the data for *joka*-relatives, the existential, habitive and other presentational main clauses function to link or ground the head NP to some other, already given referent, either a participant in the conversation or some other referent which has already been mentioned (Fox & Thompson 1990; see also Laury & Helasvuo 2008b). In Helasvuo & Laury (2009) we showed that in *joka*-relatives, it is the relative clause, not the main clause, which contains the information the participants are attending to. Consider the following example (taken from Helasvuo & Laury 2009).

Example (1) D113

1 Sari *ei mut siel* *on hauska kiinalainen,*
 NEG but DEM.LOC-ADE be.3SG fun Chinese
 ‘No but there’s a fun Chinese (one)’

- 2 → *siel on yks myyjä*
DEM,LOC-ADE be.3SG one sales.person
'there's a sales person'
- 3 → *joka anta-a mu-lle aina ylimääräs-tä jälkiruoka-a?*
JOKA give-3SG 1SG-ALL always extra-PTV dessert-PTV
'who always gives me extra dessert.'
- 4 (): *he he*
- 5 Sari: *mun sisko loukkaantu mulle ku me tilattiin*
'my sister got mad at me when we ordered'
- 6 *jälkiruuaks .hhh semmosia jäätelöpalloja ja*
'for dessert these ice cream balls and'
- 7 *sitte banaanin (.) semmone (.) kuumennettu banaani*
'then a banana like a heated banana'
- 8 Satu: *joo (-) tiän.*
'Yeah I know.'
- 9 Sari: *[Terhi] sai vain yhren jäätelöpallon ja yhen*
'Terhi got only one ice cream ball and one'
- 10 *kuumanjutun pallon mä sain kolme*
'heated thing ball I got three'
- 11 *jäätelöpalloa ja kaks kuumennettua £banaania£*
'Balls of ice cream and two heated bananas.'

In this example, the head NP, *yks myyjä* 'a salesperson' (l. 2), is grounded by linking it with an existential construction to the already introduced *yks kiinalainen* 'a Chinese one', represented by the clause-initial *siel*. The point of the turn here has to do with the extra dessert, mentioned in the relative clause, and not the particular sales person, and this is the topic which is developed in the rest of Sari's turn. The complement of the existential (the E-NP) is not continued as a topic further in the conversation, as is typical of Finnish E-NPs in general (Helasvuo 1996, Huumo & Helasvuo 2015).

For the *kun*-relatives, the existential main clause presents a referent that is often non-specific and refers to a class or a kind, as in ex. 2. The relative clause then serves to negotiate class membership. Example 2 comes from a conversation where Jaana

has been telling about a meeting she has had with her relatives discussing the division of her mother's estate.

Example (2) SG355

- 1 Jaana: *no sitte ol-i semmos-i-a kristalle-j-a*
PTC then be-PST.3SG that.kind.of-PL-PTV crystal-PL-PTV
'well then there were a kind of crystals'
- 2 → *kato ku noi-s ampele-i-s roikku-u,*
see KUN DEM.PL-INE hanging.basket-PL-INE hang-PRS.3SG
'see that hang from those hanging baskets,'
- 3 (0.2)
- 4 Mirja: *n[i]*
'yeah'
- 5 Jaana: *[ku äiti oli jostai ostanu ja keränny niitä,*
'cause mom had bought them somewhere and collected them'
- 6 (→) *.hh no Liisa-lla on semmonen amppeli*
PTC L.-ADE be.3SG DEM-ADJ hanging basket
'well Liisa has that kind of hanging basket'
- 7 (→) *mi-stä puuttuu kai <neljä.>*
MIKÄ-ELA lack-PRS.3SG perhaps four
'which is missing four [crystals]'
- 8 (1.0)
- 9 Jaana: *ja niitä oli siinä parikymmentä, ja ne rupes niistäki sit et*
'and there were around twenty of those, and they started (to quarrel)
about those as well'
- 10 *kumpiki ne ois halunnu .hh mä s'no että*
'both would have wanted those. .hh I said that'
- 11 *@onhan niitä siinä että pistäkää ne pualiks,@*
'there are plenty of those that split them between the two of you'
- 12 (0.2)
- 13 Jaana: *nii se anto kuule neljä Liisan kättee ja tunki loput taskuunsa.*
'well he gave four [crystals] into Liisa's hand and stuffed the rest into
his own pocket.'

Before the extract Jaana has been telling about various items that the relatives have gone through. The existential clause in line 1 introduces yet another type of thing they have been going through, namely some pieces of crystal, and the *ku*-relative in line 2 serves to specify the kind of crystals she is talking about. Compare this to the *mi*-relative in lines 6–7: here Jaana is talking about a specific hanging basket that Liisa has and which is missing four pieces of crystal. Note that in this clause type as well, the most important information is in the relative clause; the main clause serves only to introduce the referent which the relative clause then serves to classify.

Another frequent type of main clause in the data are predicate nominal (copular) clauses. These clauses typically serve to predicate something on an already given referent, and the predicate nominal then serves as a head of the relative clause. The *joka*-relative clauses with PN heads in the data of Helasvuo & Laury (2009) typically served to amplify or even repeat information already given in the predicate nominal, which is typically already premodified and heavy. Example (3) illustrates this (taken from Helasvuo & Laury 2009).

Example (3) C158

- 1 Jukka: → *tämä on sano-isi-n ee semmonen (.) .h useimp-i-en o-*
 This be.3SG say-COND-1SG such.NOM most-PL-GEN
 ‘This is I would say like a most t-’
- 2 → *opettaja a-ainakin ää useimp-i-en (.) lyseo-i-tten*
 teacher at.least most-PL-GEN lyceum-PL-GEN
 ‘teacher a- at least most lyceums’
- 3 → *<opettajahuone-i-tten lehti*
 teacher-room-PL-GEN magazine.NOM
 ‘teachers’ lounge magazine’
- 4 → *joka tule-e> useimp-i-in koulu-i-hin.*
 JOKA come-3SG most-PL-ILL school-PL-ILL
 ‘that comes to most schools.’
- 5 *Siis sano-taan nyt lukio-on ainakin. hh*
 PTC say-PASS now high.school-ILL at.least
 ‘Or let’s say to high school at least.’

the quantity of the set is open (not all the cups are on the table but rather, some of them).

In this section, we have seen that for *kun*-relatives, the main clauses are most commonly presentational clauses, just like with *joka*- and *mikä*-relatives. For all three relativizers, copular clauses are also fairly common as main clauses. The function of these clause types is different depending on the relativizer. Both the presentational clauses and copular clauses with *kun*-relatives function to introduce a type or class of referents, and the relative clause then serves to negotiate class membership. In contrast, especially the presentational main clauses of *joka*-relatives function to ground the head noun to an already given referent. When studying the relative clauses in the data with respect to the type of main clause, the third major type are relatives which do not have a main clause; their head does not have a syntactic role in any clausal unit but rather, is a free NP. This is especially so with *kun*-relatives. We will discuss these more closely in the next section.

4.2. *Syntactic function of the head noun*

Head NPs of the relative clauses in the data exhibit a variety of syntactic functions. Table 3 shows that complements of existential constructions (E-NPs) are common as heads. This is of course to be expected given the preponderance of presentational constructions among main clauses discussed above. Examples 1 and 2 above illustrate relative clauses which have E-NPs as their heads. Further, the percentage of free NPs among head NPs is relatively high, especially so for *kun*-relatives. Heads functioning as objects are also fairly common in connection with *joka*- and *mikä*-relatives (20% and 16%, respectively), while with *kun*, they are less frequent (10%). For *joka*-relatives, 14% of the head NPs serve as subjects on intransitives (Ss), whereas for *mikä* and *kun*, the percentage of Ss as heads is lower (8% and 4%). There are only three head NPs in the data that function as subjects of transitives (As), all with *joka*-relatives. This is understandable, since crosslinguistically, as well as in Finnish specifically, As tend to be light (e.g. Du Bois 1985, Chafe 1994, Helasvuo 2001): an NP with a relative clause is presumably too heavy to function as an A. Especially the proportion of free NPs among head nouns of relatives is much higher than their overall frequency in conversation (e.g. in

Helasvuo’s data from conversation, subjects of transitives were almost three times more frequent than free NPs, Helasvuo 2001: 90). We could thus say that the co-occurrence of free NPs with relative clauses is significant, especially so for *kun*-relatives. We will therefore discuss relative clauses with free NP heads more closely.

Relativizer	Helasvuo & Laury 2009				Combined data	
	<i>joka</i>		<i>mikä</i>		<i>kun</i>	
	N	%	N	%	N	%
Synt.func. of the head						
A	3	3	0		0	
S	16	14	15	8	3	4
Object	23	20	32	16	7	10
E-NP	23	20	49	25	14	21
Pred.nom.	9	8	23	12	9	13
Oblique	8	7	15	8	15	22
Modifier	2	2	0		0	
Apposition	2	2	19	10	1	1
Free NP	20	18	35	18	18	27
Clause	3	3	5	3	0	
Headless	0		3	2	0	
Unclear	2	2	2	1	0	
Total	113	100	198	100	67	100

Table 3. *Syntactic function of the head NP.*

As we can see from Table 3, free NPs occur frequently as heads for all the relatives. For *kun*-relatives, they are the most frequent head NP type. In Helasvuo & Laury 2009, we found that relative clauses with free NPs as their heads appear in contexts where reference is being negotiated. They may topicalize a referent which is then talked about, or they specify or further characterize a referent that has already been talked about. In other words, the relative clause is linked either to the following, marking a topic shift, or preceding talk, specifying or characterizing a referent mentioned in the preceding talk. These have been discussed in terms of right or left “dislocations” in the literature (see e.g. Geluykens 1992, Pekarek Doehler et al. 2015). In Laury & Helasvuo (2015) we further found that relative clauses with head NPs that had no syntactic function in a preceding clause functioned differently depending on whether they were forward projecting, that is, once which created specific new referents and were followed with subsequent mentions, or backward linking, that is,

predicated upon already mentioned referents, classifying, characterizing or commenting on it in various ways. The forward linking relative clauses tended to have heads which were specific; furthermore, they tended to occur early in extended turns at talk. Backward linking relative clauses with heads that had no syntactic role in a preceding clause, on the other hand, may have heads which are generic or non-specific. They are often responded to by coparticipants. Consider example (5) below.

Example (5) SG112

- 1 Vikke: *.mt sit siä näytt-i t_Qsi: ihana-lta sit*
 then DEM.LOC look-PST.3SG really lovely-ABL then
 ‘it looked really lovely there’
- 2 *ku me lähettiin siältä mum mielestä? .hh*
 ‘when we left I think’
- 3 Missu: *nii.*
 ‘Right.’
- 4 Vikke: *niinku, (0.6) vaikka siis sillee aika, aika pelkis(.)te-ty*
 PTC although PTC in.a.way quite quite reduce-PASS.PCP
 ‘in a way, although quite, quite plain’
- 5 *tai sillee ett ei ollu vi[ä].*
 ‘or so that there wasn’t much yet.’
- 6 Missu: *[nii totta kai*
 ‘yeah, of course’
- 7 Vikke: → *että .hh esimerkiks se< yks seinä?,*
 COMP for.example DEM one wall
 ‘so that for example that one wall’
- 8 → ***mikä** on iha valkonen ja iso seinä*
 MIKÄ be.3SG all white and big wall
 ‘which is all white and big wall’
- 9 *.hh #nii#, e-m mä tiitä oikee*
 PTC NEG-1SG 1SG know quite
 ‘so I don’t quite know’
- 10 *mi-tä sii-hen,*
 what-PTV it-ILL
 ‘what [they/we should put] there,’
- 11 *mut joku semmonen ryijy ku tei-llä,*
 but some DEM-ADJ rug KUN 2PL-ADE

‘but some rug like you (have),’

12 → (.) *se(llas-i-i)* *ku* *sä* *oo-t* *teh-ny*,
 DEM.ADJ-PL-PTV KUN 2SG be-2SG make-PCP
 ‘like the ones that you have made,’

13 Missu: *nii?*, *semmone*, *mutta* *Hanne-lla-ha* *on* *semmone* *kotona*.
 PTC DEM.ADJ but H.-ADE-CLT is DEM.ADJ home-ESS
 ‘oh that kind, but Hanne does have one like that at home.’

In this example, Vikke is telling about a friend’s new apartment. In line 1, she gives an overall assessment about the place: ‘it looked really lovely there’. In line 4 she adds another, slightly downgraded assessment, ‘although it was really plain’. In line 7, she starts to give an example to support her claim. This is done with the help of a free NP and a *mikä*-relative clause (lines 7–8). Note that the head of this relative clause is specific and definite, *se yks seinä* ‘that one wall’, and the referent is then rementioned in line 10 with an oblique NP, *siihen* ‘it-ILL’. In line 12, she makes a further suggestion, also with a free NP and a *ku*-clause. This head NP is non-specific, *sellasii*, and serves to characterize the type of rug she thinks might be suitable for hanging on the wall. Note also that Missu responds to this in line 13, first with a free NP, *semmone* ‘that kind’.

In the data, the different relativizers show fairly similar profiles with respect to the syntactic function of head noun: E-NPs and free NPs are the most common functions. For *kun*-relatives, the proportion of PN heads is also relatively high, but with respect to *kun*-relatives, we have to keep in mind that the numbers are fairly small. Regarding the syntactic function of the head, the relativizers differ only with regard to the function of intransitive subjects: 16 of a total of 113 *joka*-relatives (14%) have head nouns functioning as an S, while only 15 out of 198 *mikä*-relatives (8%) do. For the *kun*-relatives, only three had heads that were Ss.

4.3. *Semantic class of the head NP*

In the data, the different relativizers show drastically differing profiles with respect to the semantic class of the head NP. Table 4 gives a summary.

	Helasvuo & Laury 2009	Combined data	
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Relativizer	<i>joka</i>		<i>mikä</i>		<i>kun</i>	
	N	%	N	%	N	%
Semantic class of the head						
Human	56	50	10	5	11	16
Other animate	1	1	0		4	6
Concrete object	25	22	84	42	24	36
Abstract object	6	5	31	16	15	22
Fluid	1	1	10	5	1	1
Place	7	6	29	15	7	10
Time	3	3	1	1	2	3
2 nd order entity ⁴	12	11	19	10	2	3
Other	2	2	14	7	1	1
Total	113	≈ 100	198	100	67	≈ 100

Table 4. *Semantic class of the head of the relative clause.*

As can be seen from Table 4, the head NPs of *kun*-relatives tend strongly to refer to objects; more than one third of their referents are concrete objects (36%). This is a similarity *kun*-relatives share with *mikä*-relatives. For *mikä*-relatives, heads that referred to concrete objects formed the largest group (42%). Furthermore, there were quite a few *mikä*-relatives that referred to a place (15%); this is not so common for *kun*-relatives, of which 10% referred to a place. Contrasting with the other two relatives, half (50%) of the head NPs of *joka*-relatives have human referents. This is a significant skewing compared to *mikä*-relatives, for which only 5% of the head NPs refer to humans (for similar findings based on data from newspapers, see Pääkkönen 1988: 267; however, in her data, the skewing was not so clear). *Kun*-relatives differ in this respect from *mikä*-relatives, as they are more likely than *mikä*-relatives to have human heads; 16% of the heads of *kun*-relatives had human referents. However, in contrast to both *joka* and *mikä*, the referents of the heads of *kun* tend not to be specific; rather, they represent a class or a kind, as illustrated in examples 2, 4, and 5.

4.4. *Syntactic function of the relativizer*

We will now turn to the syntactic function of the relativizer. As was noted earlier, unlike *joka* and *mikä*, *kun* does not inflect for case. One would assume that this restricts its use in different syntactic functions within the relative clause because

⁴ See Lyons (1977: 446).

kun cannot show grammatical or locative case marking. However, this does not appear to be the case.

Table 5 shows the syntactic functions of the relativizers.

Relativizer	Helasvuo & Laury 2009				Combined data	
	<i>joka</i>		<i>mikä</i>		<i>kun</i>	
	N	%	N	%	N	%
Syntactic function of the relativizer						
A	23	20	2	1	7	10
S	51	45	39	20	22	33
O	9	8	60	30	23	34
E-NP	1	1	16	8	3	4
oblique argument	0	-	6	3	0	-
modifier	1	1	1	-	0	-
adverbial	23	20	70	35	12	18
argum. of an adpos.	3	3	3	2	0	-
unclear	2	2	1	-	0	-
Total	113	100	198	≈100	67	≈100

Table 5. *Syntactic function of the relativizer within the relative clause.*

Table 5 shows a clear difference between *joka* and *mikä*: the majority of *joka*-relativizers function as subjects (As and Ss; 65%), while *mikä*-relativizers are either adverbials (35%) or objects (30%). The difference found in the data between *joka* and *mikä* can be linked to our findings on the semantic class of the heads (see previous section): *joka* favors human referents while *mikä* is used for places and concrete objects. Based on data from Finnish conversation, Helasvuo (2001: 92–93) shows that subjects usually refer to human referents while objects rarely do (over 91% of As but only 6% of objects in her data referred to human referents; for similar findings on other languages, see e.g. Du Bois 1987, Herring 1989, Ashby & Bentivoglio 1993, Nakayama & Ichihashi-Nakayama 1994, Kärkkäinen 1996). Thus, it is not surprising to find that *joka* typically functions as a subject and *mikä* as an adverbial or an object.

For *kun*, Table 5 shows that the most common syntactic function is object (34%) or subject of an intransitive clause (33%), while 10% of the *kun*-relativizers functioned as As. Accounting for its ability to function as Ss and As, note that *kun* is

more likely than *mikä* to have human referents, although not as likely as *joka*. It is noteworthy that quite a few *kun*-relativizers also function as adverbials (18%). This is a patterning that can also be partly explained by the semantic class of the head. Consider examples (6), (7) and (8).

Example (6) C158

- 1 Jukka: *mä näemmä oo-n just nii-tä harvo-j-a*
 1SG namely be-1SG just they-PTV few-PL-PTV
 ‘I seem to be one of the very few’
- 2 → *ku on siel käy-ny.*
 KUN be.3SG there visit-PCP
 ‘who have visited there.’

In example 6, the head noun of *ku* (line 2) refers to humans, and *ku* functions as an S. Note also that here as well, the head NP of *ku*, *niitä harvoja* ‘those few’ refers to a class or kind of humans.

The next example comes from the same conversation as example 2. The participants are discussing the division of an estate. Jaana is describing a valuable cigarette box her deceased father had received from her mother.

Example (7) SG355

- 1 Jaana: *ku ottaa huomioon [että isäl oli*
 ‘but (we) have to take into account that Dad had’
- 2 Mikko: *[tää o hiano,*
 ‘This is great,’
- 3 Jaana: *sellane <hirveen kallis,>*
 ‘a terribly expensive’
- 4 *(.) [tietsä s’mmone*
 ‘you know the kind of’
- 5 Mikko *[mum mielestä (kyllä).*
 ‘in my view indeed.’
- 6 Jaana: *savuke-ra- kotelo tieksää semmone vanhanaikanen*
 cigarette- box PTC DEM-ADJ old.fashioned
 ‘cigarette pac- box you know the kind of old fashioned (type)’

- 7 → *[ku äiti on ostan-nu si-lle joskus,*
 KUN mother be.3SG buy-PCP 3SG-ALL some.time
 ‘that mother has bought him some time,’
- 8 *(0.4) kolkyt luvu-lla.*
 thirty decade-ADE
 ‘in the 1930’s.’

In example (7), the postmodified head noun of the *kun*-relative in line 6 refers to concrete object, as is typical for *kun*-relatives. In the relative clause, *kun* functions as an object. Note that in this clause, the case of the object is accusative, but because of the relativizer is *kun*, case is not shown.

Example (8) illustrates a *kun*-relative where the relativizer functions as an adverbial in the relative clause.

Example (8) D131

- 1 Sari: *mikä se- te teitte,*
 ‘what did it- you do,’
- 2 Teijo: *siis e-n mä ol-lu siinä*
 PTC NEG-1SG 1SG be-PCP DEM.INE
 ‘I mean I wasn’t there’
- 3 → *ku nämä on ol-lu,*
 KUN these be.3SG be-PCP
 ‘where these [guys] have been,’
- 4 *siis kai se on melkein niinku aliasta telkkarissa.*
 ‘I think it is almost like (playing) Alias on TV.’

In this example, the head noun refers to a place or location, expressed in line 2 with *siinä*, the inessive case form of the demonstrative *se*. Here, *ku* (line 3) is an adverbial; if *joka* or *mikä* were to be used here, they would be in the inessive case, but *kun*, as we have noted, does not show case.

To summarize, the different relativizers can function in a variety of syntactic functions. *Joka* clearly favors the subject role. This is understandable in the light of our findings on the semantic class of the head NPs: *joka* shows a preference for

human heads, and subjects often refer to human referents. *Mikä*-relatives favor the object role or function as adverbials. This can be linked to the fact that the heads of *mikä*-relatives often refer to either concrete objects or places. For *kun*, the semantic class of the head provides a partial explanation for the scattered patterning we find in the syntactic function of the *kun*-relativizer in the relative clause. Since the head nouns of *kun*-relatives can have human referents, it is understandable that *kun* can function as an S, as in example (6), or even an A. On the other hand, the heads of *kun*-relatives can also be concrete objects or places, making *kun* available for use as an O or an adverbial, as in examples (7) and (8).

In its conjunction usage, *kun* carries temporal, causal or contrastive meaning (Herlin 1998), very much like adverbs. This makes it understandable that despite its lack of case marking, *kun* as a relativizer can be used in adverbial functions. Subjects are usually in the nominative case, i.e. unmarked for case. Therefore, lack of inflection may be taken as unmarked case marking. In the object role, case alternation between the partitive and the accusative and nominative expresses inter alia aspectual distinctions such as boundedness and telicity (see e.g. Huumo 2010). This expressive resource is of course lost if the element functioning as an object does not inflect for case, like the *kun*-relativizer.

4.5. *Interim summary*

In this section, we have seen that the main clauses of *kun*-relative clauses are most commonly presentational; this is so for *joka*- and *mikä*-relative clauses as well. However, *kun*-relatives occur even more commonly without any main clause. Free NPs are common as head nouns of relative clauses in spoken Finnish in general (Laury & Helasvuo 2015), but *kun*-relativizers have free NPs as heads even more frequently than the other relativizers; they are more common as the heads of *kun*-relative clauses than NPs in any other syntactic function. Obliques and E-NPs are also frequent as head nouns of *kun*-relatives. Most commonly, the heads of *kun*-relatives refer to concrete objects, but abstract objects, places and even humans are not uncommon as referents of the heads of *kun*-relatives. We have also observed that the heads of *kun*-relatives are often non-specific and refer to classes or kinds of objects.

Within the relative clause, *kun*-relativizers function most commonly as objects, but they also function as subjects of intransitive clauses and as adverbials.

But how did the causal, temporal and contrastive *kun* develop a use as a relativizer? This is what we will turn to next.

5. Grammaticalization of *kun* as a relativizer

In this part of the paper, we will consider two paths of grammaticalization for the relativizer *kun*. We will suggest that the relativizer *ku* is more likely to have grammaticalized from the comparator *kuin* ‘as’ rather than the adverbial conjunction *kun* ‘when, because’.

In the languages of the world, relativizers tend to grammaticize from pronominal elements such as demonstratives and interrogatives (Heine and Kuteva 2002: 113–115, 175, 251). As we have already noted, of the other Finnish relative pronouns, *joka* is also used as an indefinite pronoun, and both *mikä* and *kuka* have interrogative uses in addition to being used as relativizers⁵. As also mentioned above, *kun* is multifunctional as well: its most frequent and basic use is as an adverbial conjunction expressing temporal and causal relations, and as a comparator. Thus the grammaticalization of *kun* would seem to involve a rare pattern typologically. However, Swedish offers at least a partial parallel: the Swedish relativizer *som* also functions as a comparator.

5.1. *Development of the kun-relativizer from temporal use*

Given its most frequent and basic use as an adverbial conjunction expressing temporal and causal relations, a plausible route for grammaticalization of *kun* as a relativizer might be uses where it could be interpreted as either an adverbial or a relative conjunction. Herlin (1998) notes that some temporal *kun* clauses could be

⁵ Heine & Kuteva (2006: 204–243) note that the development of relative pronouns and comparators from interrogatives is a common development in European languages. We will not be dealing here with the development of *mikä* and *kuka*, which both function as interrogative and relative pronouns, however.

- 12 B: *ni?*
 PTC
 ‘So?’
- 13 A: *ni (.) [sii]nä (.) #ota#*
 PTC DEM-INE PTC
 ‘So (right) there um’

In this example, the *kun* clause in lines 10–11 is ambiguous between a relative clause and a temporal adverbial clause (cf. Herlin 1998: 18–19). That is, in *sinä päivän ku se kiinnitti ton linssin* ‘the day **ku** s/he fastened that lens’, *ku* could either be analyzed as an adverbial conjunction ‘when’, or as a relativizer ‘on which’, coreferential with *sinä päivän* ‘on the day’, which in that case would be functioning as its head. Note that in our data, it is not uncommon for the heads of *kun*-relatives to be obliques, and for *kun*-relativizers to function as adverbials.

Presumably, then, the grammaticalization of *kun* as a relativizer would have proceeded from cases such as (9), where *kun* could be interpreted as either a temporal conjunction or a relativizer. This would occur in contexts where *kun* could be reanalyzed as an argument in the clause that follows it, and as coreferential with a temporal noun in the main clause, which would then be reanalyzed as its head.

However, in most cases in our data where *kun* is ambiguous between an interpretation as an adverbial conjunction and a relativizer, the head NP does not have a temporal meaning. Overall, the semantic class of the head nouns of *kun* in our data is only rarely temporal; the head nouns are much more likely to refer to concrete objects or places. Only two head nouns of *kun* were temporal, while 24 of them, more than a third of all head nouns of *kun*, referred to concrete objects (Table 4). Consider example (10) below.

Example (10) is extracted from a conversation between employers of a pharmacy who have gathered for coffee at the home of one of them. At this point in the conversation, they are gossiping about a coworker.

Example (10) C134

1 EK : *siis hän rähis mulle (.) turhan takia*

- ‘I mean she chewed me out for nothing’
- 2 (.)
- 3 LP : *nii:z*
‘Yeah’
- 4 (.)
- 5 EK : *syyttäv_ästi suora-a sano-e yhde-st (.) taik siis*
accusingly straight-ILL say-INF one-ELA or PTC
‘actually accused (me) about one (.) or I mean’
- 6 *vasta-s mu-l rumasti ku mä_ä kysy-i-n*
answer-PST.3SG 1SG-ALL nastily CONJ 1SG ask-PST-1SG
‘answered me in a nasty way when I asked’
- 7 → *häne-ltä et, (0.5) #ö:::# semmosest jostai< (.) k^o-*
3SG -ABL COMP DEM-ADJ-ELA some.ELA
‘asked her about some c-‘
- 8 → *kompositiosta että (0.3) et kun hä^a- hän ol-i the-ny*
composition-ELA COMP COMP KUN 3SG be-PST.3SG do-PCP
‘composition that that **ku** she had made’
- 9 *ja: ja sit hän ol-i pan-nu kirja-n pois*
and and then 3SG be-PST.3SG put-PCP book-ACC away
‘and and then she had put the book away’
- 10 *ni mä_ä kysy-i-n häne-ltä ni .hh ni hän*
PTC 1SG ask-PST-1SG 3SG-ABL PTC PTC 3SG
‘So I asked her so she’
- 11 *vasta-s m mm m hyvä rumasti,*
answer-PST.3SG very nastily
‘answered in a very nasty way,’

In this example, the clause in line 8, *kun hä- hän oli tehny* is ambiguous between an adverbial clause ‘because/when she had made (it)’ and a relative clause ‘which she had made’. Note that in this example, unlike in example (9), the potential head noun of the relativizer *kun*, *semmosest jostai ko- kompositiosta* in lines 7–8 does not have a temporal meaning.

What enables the analysis of *kun* as a relativizer is that the coreferential noun in the following clause (the object of *tehdä* ‘to make’) is missing, so that *kun* could be

interpreted as taking the role of object in the clause that follows, and the clause could be analyzed as a relative clause.

In our data, examples like (10), where the head nouns are non-specific, concrete referents, are more common than examples like (9), where the head noun is specific and refer to a time period. Therefore, it is possible that cases like (9) do not provide at least the only pathway to the grammaticalization of *kun* as a relativizer. In what follows, we suggest that a more likely origin is the use of *kun* as a comparator.

5.2. *Comparative ku(i)n as a source of the relativizer kun*

In this section of the article, we will propose that another possible, perhaps more likely source than the temporal *kun* for the relativizer *kun* is the comparative conjunction *ku(i)(n)* 'as', the form which is spelled as *kuin* in Standard Written Finnish. It is important to note that *kun* and *kuin* are historically related. *Kuin* is thought to be the older form, shortened to *kun* in non-stressed position (Saarimaa 1946: 78). Old written Finnish used only *kuin*, and separate uses for comparative *kuin* and temporal and causal *kun* only became conventionalized in the later stages of written Finnish (e. g. Häkkinen 1994: 383–384). As we have noted above, the use of *kun* as a relativizer is non-standard in written Finnish. However, in spoken Finnish, *kun* can be used in such a way, as we have seen. In addition, *kun* can also be used to link phrases.

In comparative use, *kun* is used to link a comparative phrase with its standard of comparison, or it can be used as a linker where the preceding clause contains a phrase with a comparative, a demonstrative, demonstrative adjective or an expression of similarity or difference, and the *ku(i)(n)*-construction contains a phrase or a clause which functions as a complement of that expression (Hakulinen et al. 2004, §1172).

Recall that the most common type of head noun for *kun*-relatives is a non-specific one, that is, one referring to a type or kind; it is often preceded by a demonstrative adjective (*semmonen* 'such') or an expression of similarity or difference. Consider the next example from a multi-party conversation. The participants are discussing their vacation experiences.

Example (11) SG355

1 Jaana: *kreikka-laise-t on hyvi [samantyyppis-i-ä*
Greece-ADJ-PL be.3SG quite same-type-PL-PTV
'Greeks are very similar'

2 Mirja: *[nii-i,*
PTC
'yeah'

3 Jaana: → *ku suoma-laise-t, tai e-m mä tiä,*
CMP Finland-ADJ-PL or NEG-1SG 1SG know
'ku Finns, or I don't know,'

In this example, *ku* is used as a comparator. The phrase *hyvi samantyyppisiä* 'very similar' (line 1) is linked to its standard of comparison, *suomalaiset* 'Finns' with *ku* in line (3).

The next example shows that in its use as a comparator, *ku* can also link a phrase with a clause. This example comes from the same conversation as the previous example. Here the topic of discussion is medical check-ups.

Example (12) SG355

1 Jaana: *se ol-i eilen,*
3SG be-PST.3SG yesterday
'Yesterday s/he had,'

(3 LINES OF OVERLAPPING TALK REMOVED)

2 Jaana: *[men-ny samanlai-seen ultra[tutkimukse-en ku mi-ssä Pena ol-i,*
go-PCP similar-ILL ultra-test-ILL CMP WH-INE Pena be-PST
'gone to a similar ultra(sound?) test **ku** where Pena was,'

Our hypothesis is that the comparator *ku(i)(n)* develops into a relativizer when it can have a grammatical role in the clause that follows. This happens when there is a 'missing' constituent which *kun* can be analyzed as representing. This, of course, is not the case in example (12), which contains a separate relativizer, *missä* 'where, in which'. Compare with example (13) below, where *kun* is the only linker. This example is similar to example (12) in that the phrase in the main clause is a location,

and *kun* is a linker, but there is no relative pronoun representing the locational constituent in the clause that follows. Thus, *kun* can be analyzed as either a comparator or a relativizer.

Example (13) D130

Teijo: *siis e-n mä ol-lu siinä kun nämä on o-llu,*
 PTC NEG-1SG 1SG be-PCP DEM.INE KUN DEM.PL be be.PCP
 ‘I mean I wasn’t in the one **kun** these (guys) have been’

Example (13) is very similar to the example of the clausal *kuin* construction given in the Comprehensive Grammar of Finnish (Hakulinen et al. 2004 §1172), here partly reproduced as example (14).

Example (14) (Hakulinen et al. 2004 §1172)

siinä laajuude-ssa kuin hän ol-i alun perin havitel-lut.
 DEM.INE extent-INE KUN 3SG be-PST.3SG originally wish-PCP
 ‘In the extent **kuin** he had originally wished for’

In example (14), *kuin* is ambiguous between an interpretation as a comparator, ‘in such an extent as he had originally wished for’ and a relativizer, ‘in the extent that he had originally wished for’.

A relativizer analysis is also possible in the following example from our corpus, even though the form of the comparator/relativizer resembles *kuin* rather than *ku*. The speaker is discussing meetings he has participated in.

Example (15) C158

- 1 Jukka: *e-n mää nyt kuule>.(.)=mää e-n ↑muista nii-tä.*
 NEG-1SG 1SG now PTC 1SG NEG-1SG remember 3PL-PTV
 ‘listen I don’t now I don’t remember them.’
- 2 → (0.4) *osa on >sem-mos-i-i kui ei viitti< kerto-o-kaan*
 part be.3SG DEM-ADJ-PL-PTV KUN NEG.3SG feel.like tell-INF-CLT
 ‘some of them are such/the kind **kui** you don’t even feel like telling’
- 3 *mut e-n mää(.)<e-n mää nyt muista>*
 but NEG-1SG 1SG NEG-1SG 1SG now remember
 ‘but I don’t I don’t remember now’

- 4 *et mää o-isi-n kuul-lu mittää semmos-i-i (.)*
 COMP 1SG be-COND-1SG hear-PCP any.PTV such-PL-PTV
 ‘that I would have heard anything like that’
- 5 *(.)ollu piukkoi kokouksii vaan.*
 ‘There have just been difficult meetings.’

In this example, *kui* in line 2 can be interpreted as either a comparator ‘such as’ or a relative pronoun ‘such that’. In other words, it can here be interpreted as coreferential with *semmosii*, which would be its head, and it can be thought to have a grammatical role (here, object) in the clause that follows. However, there are of course even clearer relativizer uses in our data as well in contexts similar to example (15), where the noun phrase in the main clause refers to a class or kind, such as example (2) above, partly repeated below as example (16).

Example (16) SG 355

- 1 Jaana: *no sitte ol-i semmos-i-a kristalle-j-a*
 PTC then be-PST.3SG DEM-ADJ-PL-PTV crystal-PL-PTV
 ‘well then there were a kind of crystals’
- 2 → *kato ku noi-s amppele-i-s roikku-u,*
 see KUN those-INE hanging.basket-PL-INE hang-PRS+3SG
 ‘see that hang from those hanging baskets,’

The use of *ku* in line 2 is a typical context for the use of *ku* as a relativizer, as discussed in section 4 of this article. The head NP *semmosia kristalleja* ‘the kind of chrystals’ contains a demonstrative adjective, and makes non-specific reference. The context of use involves the negotiation of class membership, type or kind ‘those kinds of crystals, you see, which hang in those hanging baskets’.

The use here also resembles the comparative source construction, which, as discussed above, contains a demonstrative adjective in the preceding NP whose complement the *kuin*-construction functions as, although it cannot be easily interpreted as such here. Instead, *ku* here is coreferential with its head *semmosia kristalleja* and has a grammatical role in the clause that follows; here, it is a subject.

Consider the next example, which even more clearly involves negotiation of class membership and the use of the relativizer *ku*. This example comes from the same conversation as example (15). The participants are discussing fish farming.

Example (17) C158

- 1 Mirja: *siis millaset ne on määlүүл-i-n et se on*
 PTC WH.ADJ.PL 3PL be.3SG 1SG think-1SG COMP DEM be.3SG
 ‘So what are they like I thought it was’
- 2 *joku maa-han kaivetta-va kuoppa*
 some dirt-ILL dig-PCP hole
 ‘some hole you dig in the dirt’
- 3 Jukka: → *ei ku ↑mere-en panta-va semmonen allas*
 NEG PTC sea-ILL put-PCP DEM.ADJ pool
 ‘No the kind of pool (meant for) putting in the sea’
- 4 → *ku mere-en pannaan*
 KUN sea-ILL put.PASS
 ‘that you put in the sea’
- 5 Mirja: *ai*
 PTC
 ‘Oh’

In this example, just as in example (16), the context is negotiation of type or kind, or class membership. Mirja suggests (lines 1–2) that fish are farmed in a hole dug in the ground, whereas Jukka suggests in lines 3–4 that the container is the kind of pool you put in the sea. Here, also as in example (16), *ku* is a relativizer; its head is (*mereen pantava*) *semmonen allas* ‘the kind of pool’, and *ku* (line 4) is coreferential with it and has a grammatical role in the clause that follows. Here, it functions as an object.

To summarize, then, we have suggested that rather than the temporal use of *kun*, the source construction of the relativizer *kun* is the comparative construction where a clausal *kuin*-construction functions as a complement of a preceding NP which contains a demonstrative adjective or another expression of similarity. The process involves the reanalysis of the comparator as an argument in the clause that follows.

The origin of the relativizer *kun* we have proposed here is consistent with our findings of the use of *kun* as a relativizer. As we have shown, the heads of *kun*-relatives tend strongly to refer to concrete objects, are non-specific and refer to a class or a kind. In our data, the function of *kun*-relatives often involves negotiation of class membership, which normally involves similarity or comparability. An analogy for this pattern is the Swedish *som*, which is used both as a relativizer and as a comparator; the relativizer is thought to have developed from the comparator use (Wessén 1965: 258–260). It is of course possible that this has been the inspiration of this pattern in Finnish through polysemy copying (Heine & Kuteva 2003), though this requires more study.

6. Conclusion

Our article has discussed the use of the relativizer *kun* in spoken Finnish. We have shown that it is less frequently used than the relativizers *joka* and *mikä*, but that it is more common than the relativizer *kuka*. Typically, the main clause of *kun*, like the main clauses of the other relativizers, are presentational, but even more commonly, *kun*-relatives lack main clauses altogether and have free NPs as their heads. The head nouns of *kun*-relatives tend to refer to concrete objects, although they can also refer to abstract objects and even humans. The head nouns of *kun*-relatives in our data are often non-specific. The syntactic role of the *kun*-relativizer in the relative clause varies; even though *kun* is unmarked for case, it may serve in a variety of syntactic functions. In addition to functioning as a subject or a complement of an existential, it may also function as an adverbial or an oblique. Most commonly, *kun* functions as an object even though objects in Finnish are case marked.

We have also suggested that rather than developing from its function as a temporal conjunction, the source of the relativizer *kun* is from the comparator *kuin*. We argue that the grammaticalization of the *kun* relativizer would develop from the use of the comparator, where an NP referring to a class or type of referent is followed by a comparator phrase linked with *ku(i)n*.

Appendix: Glossing symbols

1, 2, 3	first, second and third person pronoun or verbal suffix
ABL	ablative case
ACC	accusative case
ADE	adessive case
ADJ	adjectival derivational suffix
ALL	allative case
CLT	clitic particle
CMP	comparator
COMP	complementizer
COND	conditional
DEM	demonstrative
ELA	elative case
ESS	essive case
GEN	genitive case
ILL	illative case
INE	inessive case
INF	infinitive
NEG	negation verb
NOM	nominative case
PASS	passive
PCP	participle
PL	plural
PRS	present tense
PST	past tense
PTC	particle
PTV	partitive case
Q	question clitic
SG	singular

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