MISSING PERSONS: ON GENERIC SENTENCES IN FINNISH

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0. In this paper we are going to discuss one particular subset of generic sentences in Finnish. There is no good definition of a generic sentence that we know of, and we are not about to offer any. Consequently, we have to rely on simple formal criteria to characterize this set. The sentences we are interested in have one feature in common: a major constituent of the sentence appears to be missing; there is no trace of it in the surface structure. Some examples are given in (1):

1.a. Tämän ohjeen ___ voi helposti ymmärtää väärin.

b. Puheestani ___ voi kuulla, että olen ulkomaalainen.

c. Ei ___ aamulla tiedä, miten hauska ___ on iltalla.

This instruction ___ one can easily misinterpret.
From my speech ___ you can hear that I am a foreigner.
You never know in the morning how much fun ___ you will have in the evening.

Semantically these empty slots are akin to free variables ranging over persons. A sentence of the sort illustrated in (1) suggests that you could obtain a true sentence by filling the slot with an arbitrary singular term, such as a proper name or a definite description, which picks out some human individual. This license does not extend to singular terms that refer to non-humans. A sentence like (2) does not say that anything may fall over on a windy day, only that it may happen to anybody.

2. Nähin tuuliseden pähvän ___ voi kaatua.

One can fall over on a windy day like this.

For the lack of a better term, we say that examples such as those in (1) and (2) are "generic sentences with missing persons".

1. As you can see from the English glosses, the empty slots in Finnish sentences get filled in English with one or the other of the two generic pronouns: the colloquial you and the more formal one. We think that the syntax of these two English pronouns closely resembles the constraints on missing persons in Finnish, but it is not our main concern here to show this. There are other obvious parallels as well. For instance, in addition to the empty slots there is an explicit generic pronoun in Finnish, kuka tahansa, 'whosoever', which corresponds closely to (just) anyone in English. Sometimes the empty slot and the pronoun kuka tahansa are almost interchangeable, just as one and anyone are in English. This can be seen by comparing the examples in (1) and (3).
3. a. Tämän ohjeen voi kuka tahansa helposti ymmärtää vähän.
    b. Puheestani voi kuka tahansa kuulla, ettei olen ulkomaalainen.

This instruction anyone can misinterpret.
From my speech anyone can hear that I am a foreigner.

Nevertheless, it is not difficult to find examples to show that the
generic anyone and one/you are not fully interchangeable in English,
and the same goes for kuka tahansa and the empty slot in Finnish.

We will have something more to say about this later on. It would also
be interesting in this connection to study the so-called "impersonal
passive" in Finnish and to compare it with English truncated passives
and with sentences containing the indefinite pronoun they. Again,
one can present certain individual cases where a Finnish sentence with
the impersonal passive seems almost equivalent to a generic sentence
with a missing person. For instance, it is hard to say whether the
examples in (4) really mean something different from those in (1) and
(3), and what exactly this difference is.

4. a. Tämä ohje voidaan helposti ymmärtää vähän.
    b. Puheestani voidaan kuulla, ettei olen ulkomaalainen.

This instruction can easily be misinterpreted.
From my speech people / they can hear that I am a foreigner.

However, it does not take long to discover that the syntactic
constraints on impersonal passives in Finnish are entirely different
from those on generic sentences with missing persons. Similar observa-
tions can be made about the relation between sentences with the
generic you/one and those with the truncated passive or the in-
definite they. The relations between the constructions in (1), (3),
and (4) are intricate and very poorly understood. What we are going
do is to concentrate on sentences of the first type only.

2. Finnish grammarians have been aware of cases like (1) and (2)
but these have usually been misclassified as a subclass of "subject-
less sentences". This is a bad policy for two reasons. First of all,
one should be careful not to confuse generic sentences with an empty
subject slot with sentences which lack a subject altogether. There
are plenty of sentences of the latter kind in Finnish, and they need
not be generic at all. Some examples are given in (5).

5. a. Chicagossa sataa.
    b. Nyt on keväti.
    c. Liisaa jänottaa.
    d. Liisalle kävi hullusti.

It is raining in Chicago.
It is spring now.
Liisa feels thirsty (= it thirsts).
(Things) went bad for Liisa.

The only thing in common between these examples and those in (1) and
(2) is that there is no overt subject and the verb is in the third
person singular. Beyond that, it is not just the subject slot that
can be vacated by the missing person in a generic sentence. Any
major NP constituent can be chosen, as is shown by the examples in
(6).
6.a. Suomessa viehdän aina saunaan.
   b. Saunan jälkeen janottaa.
   c. Siellä kerrotaan totuus.
   d. On hyvä olla, kun on rahaa.
   e. On turvallista ajaa taksilla.
   f. Joskus tunnuu siltä, ettei mitään ei ole vähän.

In Finland they always take you to the sauna.
After the sauna you feel thirsty.
They tell you the truth there.
It's nice when one has money.
It is safe (for you) to take a taxi.
Sometimes one feels that nothing matters.

In (6a) and (6b) we have a generic object NP. In (6c) the missing person is the beneficiary (indirect object) of the sentence; if the empty slot were filled, the noun phrase would have to be in the Allative case. (6d) has a missing possessor (in the Adessive case), and if the missing person in (6e) and (6f) could make a surface appearance, it would be called an Adverbial by traditional Finnish grammarians.

These examples suggest that the empty slot can have any syntactic function that an NP can carry in a sentence. It is by no means self-evident that this generalization holds. However, it seems to us that all the apparent counterexamples result from the interaction of other grammatical constraints which do not directly pertain to missing persons. Two such apparent counterexamples are given in (7).


   *Pekka can seduce one's wife.
   Pekka can seduce one's wife.
   vaivonsa.

Why is it that these sentences cannot be interpreted as generic sentences with missing persons? Note that both of them are grammatical under another interpretation: (7a) in the sense 'Pekka can seduce the wife', (7b) in the sense 'Pekka can seduce his (own) wife'. On these readings, no generic possessor is assumed.

We believe that the lack of generic readings in (7) does not call for any special constraint on missing persons. First of all, examples like (8) show that a possessive suffix -nsa must be attached to the possessed NP whenever the possessor is a missing person.

8.a. *voi vietellä vaivon.
   Pekka can seduce one's wife.
   b. *voi vietellä vaivonsa. One can seduce one's wife.

In this respect, a missing person is similar to possessive personal pronouns, minun 'my', sinun 'your', hänen 'his', etc., which also require a possessive suffix on the possessed NP. (Note that the explicit generic pronoun kuka tahansa 'anyone' is similar to indefinite pronouns, such as joku 'someone', in not requiring this suffix. Thus: kenen tahansa vaimo 'anyone's wife'.) Consequently, (7a) and (8a) are ungrammatical because the obligatory suffix is not there.
be used with a missing generic constituent in a sentence that contains a unique punctual time reference such as tomorrow at 5 a.m. Such time references are in general very inhospitable to missing persons. If the sentence is good in spite of the time reference, we have to thank the verb for it. Some good examples are given in (10) and some bad ones in (11).

10. a. Huomenna klo 5 — voi nukkua. Tomorrow at 5 a.m. one can sleep.
      saa
      tyytyy
      joutaa
      kelpaa
      viitsii
      uskaltaa
      tarkenee
      on hyvä / helppo
      ehti nukkumaan.
      joutuu
      pystysee

b. Huomenna klo 5 — ehtii nukkumaan. Tomorrow at 5 a.m. one intends to sleep.
      *lupaa
      *koettaa
      *haluaa
      *alkaa
      *muistaa
      *unohta
      *pystyty

11. Huomenna klo 5 — *ehtii nukkumaan. Tomorrow at 5 a.m. one intends to sleep.
      promises
      tries
      wants
      begins
      remembers
      forgets
      decides

Incidentally, in the examples it does not matter what the tense is. We could replace the time adverbial by eilen klo 5 'yesterday at 5 a.m.' and put everything in the past tense without changing the facts.

When you look at the two sets of complementizable verbs in (10) and (11), it looks like the verbs in (10) which tolerate missing subjects in the presence of a unique punctual time reference differ in some systematic way from those in (11). This does not seem to represent an arbitrary syntactic classification of Finnish verbs. We expect it to be the case that a verb belongs to one group or the other by virtue of what it means. We would like to call verbs like the ones in (10) "modal verbs" but we acknowledge that it will be difficult to give a precise characterization of this intuitive notion.

4. It is interesting to note that unique singular place adverbials are not as inhospitable to missing persons as time adverbials. When you consider sentences which contain a specific place adverbial such as tänny fö 'here', siellä 'there', O'Hare lenkkentällä 'at O'Hare airport', etc., you find that the class of verbs that can show up with missing subjects is larger than in the previous case. In addition to the modal verbs in (10), there are
We only need to explain why (7b) is ungrammatical while (8b) is not. The reason is that there is an independently motivated constraint on the third person possessive suffix -nsa which requires that, when no explicit possessor is present in the surface structure, the missing possessor must be coreferential with another major NP in the sentence (usually the subject). Cf. Poika lukee kirjaansa 'The boy is reading his (own) book', Poika lukee hänen kirjaansa 'The boy is reading his (= somebody else's) book'. This constraint is met in (8b) and violated in (7b). We conclude that the ungrammaticality of the examples in (7) does not call for any limitation on what syntactic role missing persons can play.

Another apparent counterexample is given in (9).

9.a. *Pekka voi olla laiskempi kuin ___.
   b. *Pekka voi olla __ laiskempi. Pekka can be lazier than one.

Although there is no agreement about the derivation of comparatives, it seems safe to assume that the comparative phrase *laiskempi kuin or *laiskempi 'lazier than one' would have some sort of sentential source, perhaps as in "lazier than one is lazy". Assuming that this view is correct, in the remote structure of (9) the missing person would occur in an embedded sentence which in isolation would yield *on laiska 'one is lazy'. As we will see shortly, this is not a possible generic sentence due to the lack of a modal or some suitable time adverbial. Once this fact is taken into account, we see that there is no need to set up a specific constraint prohibiting the occurrence of missing persons in comparative phrases. This is already predicted by the sentential analysis of comparative phrases. (See also the discussion of generic subordinate sentences below in Sect. 10.)

3. Although any major NP slot can in principle be vacated by a missing person, generic sentences of this sort are constrained in intricate ways. We will start exploring these constraints by looking at some classes of verbs which seem ideally suited for generic use and proceed then to verbs which can be accommodated in generic sentences only in the presence of a certain kind of time, locative, or manner adverbial. A supposedly generic sentence that fails to rise to the level of grammaticality can usually be fixed up by manipulating one of these parameters. Finally, we will look at some compound sentences that involve sentential connectives. It will turn out that, whatever the restrictions are for single sentences, they are not enforced equally strictly in compound sentences. However, there are clear differences among various connectives.

The verbs that are best suited for generic sentences are the three basic modals, voi 'can, may', tHyvy 'must', and saa 'may, be allowed', and a number of other verbs which are not quite as diverse a collection as they might first appear. Most of them seem to call for an analysis that in some way involves one of the classical modalities. The crucial test for this class is whether the verb can
at least four other kinds of verbs that can now occur. These are:
verbs of propositional attitude such as haluta 'want', tehdä 'mieli
'feel like'; verbs describing state e.g. viihtyä 'feel at home',
kukoistaa 'thrive', pelätä 'be afraid'; change of state verbs
(tha)atives) e.g. kuolla 'die', ikävästyy 'get bored', vilistaa
'catch a cold'; verbs of cognitive achievement such as oppia 'learn',
ymmärtää 'understand', nähdä 'see'. Some examples are given in (12).

12.a. Täällä ei opi mitään.
   b. Kotona ikävästyy.
   c. Austinissa tajuaa, miten
      mukava kaupunki Boston on.
   d. Liisan sängyssä tekee
      mieli nukkaa.
   d. Maalla on onnellinen.

You don't learn anything here.
You get bored at home.
In Austin one realizes what a
nice city Boston is.
In Liisa's bed one feels like
sleeping.
In the country one is happy.

One can perhaps understand why singular place adverbials are more
liberal than punctual time adverbials in what they allow in the
way of generic sentences. An example such as (12c) is an open
sentence as far as a time reference is concerned, it can be para-
phrased as "whenever one is in Austin...", or "if one is in Austin...".
As you will see below in Section 7, a sentence of this structure can
always be generic. There is no corresponding interpretation for
punctual time adverbials. For example, one cannot conceive of (11a)
as meaning "at any time (or when) it is tomorrow at 5 a.m.".
Tomorrow at 5 a.m. comes around only once and cannot be revisited.
There is an inherent asymmetry here between the two kinds of ad-
verbials.4

While it is not surprising that place adverbials admit a larger
class of verbs with missing subjects, it is not clear why this
privilege should be extended just to those verbs illustrated in
(12) and not to some others. Given the above rationalization of why
this relaxing of constraints comes about, you would expect that
anything goes. Not quite. There are plenty of verbs that cannot
appear with a missing person even if the sentence does contain a
place reference. Some specimens are given in (13).

13.a. *Kylpyhuoneessa harjaa
      hampaat.
   b. *Englannissa aja tien
      vasenta laitaa.
   c. *Suomessa käy saunassa.
   d. *Liisan sängyssä nukkuu.
   e. *Joissakin perheissä
      antaa lapsille namiraha.
In the bathroom one brushes
one's teeth.
In England one drives on the
left hand side of the road.
In Finland one goes to sauna.
In Liisa's bed one sleeps.
In some families one gives
candy money for kids.

It is curious that those English translations in (13) which are
good are not generic. They are not assertions about what people in
general do, instead one interprets them as normative instructions
which tell you what is the proper thing to do under certain
circumstances. For this purpose you will have to use the impersonal construction in Finnish (see above in (4)). For example, (13b) translates to Finnish with the impersonal passive as in (14),


5. Finally, all constraints fly out of the window in the presence of such adverbials as sunnuntaisin 'on Sundays', jouluisin 'at Christmas'. These permit every imaginable kind of generic sentences, even the kinds in (13). This is shown in (15).

15.a. Sunnuntaisin __ harjaa hampaat.  
      b. Jouluisin __ paistaa kinkun.  

On Sundays one brushes one's teeth.  
At Christmas one roasts a ham.

Time adverbials of this sort do not specify any particular point in time but range over an unbounded stretch of time. Note however that adverbials such as joka sunnuntais 'every Sunday' are just as punctual and restrictive as huomenna klo 5 'tomorrow at 5 a.m.', although it is universally quantified. Thus, (16) is bad.


Every Sunday one brushes one's teeth.

The relation between on Sundays and every Sunday is the same as between any and every.

There is a third kind of adverbial that one should pay attention to. These are manner adverbials, and they seem just as effective as universally quantified time adverbials in allowing almost any verb to show up with a missing generic subject. Some examples of these adverbials are given in (17).

17.a. Moby Dickillä ei __ lue vapaaehtoisesti.  
      b. Hampaa __ harjaa hetkessä.  
      c. Sen työn __ tekee helposti.  
      d. Tuon tehtävän __ ratkaisee vain tietokoneella.  

One doesn't read Moby Dick voluntarily.  
You brush your teeth in a second.  
That job you can easily do.  
That problem you solve only with a computer.

We are somewhat mystified by this class of adverbs. In many cases, such as (17b) and (17d), it looks like the sentence could be analyzed as containing a suppressed modal (can), but this is not all there is. That you have to acknowledge a difference between a generic sentence with a modal and one without a modal is illustrated by (17d'), where we have changed the adverbial.
17.d’. Tuon tehtävä on ratkaista monella eri tavalla. That problem you can solve in many different ways.

6. There is one aspect of generic sentences that deserves to be discussed briefly before we move on to compound sentences. Although the set of singular terms that can replace the empty slot is in principle unlimited, in certain situations a specific individual has precedence over all others. Instead of playing it straight and making an explicit assertion about the person in question, the speaker is beating around the bush and leaving it up to his listener to make the obvious inference. For example, in most situations the following sentences would not be taken to be true of just anyone but in particular of the speaker himself.

18.a. ___ tähyy on he. 

   b. Se sattuu ___ kovasti.
   c. ___ loippaa monista iloista.

   One (that’s me) has to go. 
   It hurts one (= me) a lot. 
   At this age one (that’s me) has to give up many pleasures.

It is important to notice that, although generic sentences can be used to implicate corresponding statements in the first person, they are still subject to all the same restrictions that apply in generic sentences across the board. Thus you don’t get sentences like in (19).


   b. * Vihaa sinua.
   c. * Ei tällä selää kanna.

   Now one (that’s me) found two lady bugs.
   One (that’s me) hates you.
   One (that’s me) doesn’t carry loads with this (my) back.

In cases like the last one above, the speaker has another route available for him. If he wants to avoid making a direct statement about himself and opts for an appearance of generality, he can use the corresponding passive sentence:

20. Ei tällä selää kanna.

   Loads cannot be carried (by me) on this (my) back.

It is interesting to observe that passive sentences, which in Finnish are not as constrained syntactically as generic sentences, are often used for the same conversational purpose: to implicate a statement about a particular individual.

The following sentences would in most situations implicate a corresponding non-generic statement in the second person.

21.a. ___ Ei saa tulla sisään jalat kurassa.

   b. Saiko ___ seliä hyvin kalaa?

   One (you) mustn’t come in with muddy feet.
   Did one (you) get a lot of fish there?
This won't hurt one (namely you).
Is one (= are you) comfortable now?

One could of course take the view that in some of these examples at least, a real personal pronoun has been deleted. However, the fact that sentences of this sort are constrained like generic sentences argues against treating them as anything else. We take the position that, as far as the literal meaning is concerned, the above examples are generic sentences. The fact that they can be and often are used to implicate sentences about specific persons does not, in our view, constitute sufficient grounds for regarding such sentences as semantically ambiguous. This is not a matter of semantics of Finnish in the narrow sense of the term, it falls in the domain of a theory of conversation. This kind of distinction between a literal sense and derived conversational meaning is discussed e.g. in Gordon and Lakoff (1971).

7. And now on to compound sentences. When you look at subordinate and embedded clauses from the point of view of missing persons, you see that one has to recognize at least two cases: (i) if-clauses and relatives, and (ii) that-clauses, infinitival and participial complements.

As far as the first case is concerned, in generic jos 'if', kun 'when', aina kun 'whenever', ellei 'unless' -clauses there are no constraints at all on the kind of verb that can appear there. Anything goes. Some examples are given in (22).

22.a. Jos ___ aikoo laihuta,
    ___ lopettaa syömisem.
    b. Jos ___ lopettaa syömisem,
    ___ aikoo laihuta.
    c. Kun ___ ei ole tuloja,
    ___ ei mene veroa.
    d. Jos ___ vastasi vähänin,
    ei ___ saanut mitään.
    e. Jos punainen valo sytyi,
    ___ oli vastannut vähänin.
    f. Jos ___ oli vastannut vähänin,
    punainen valo syttyi.

If you want to lose weight, you give up eating.
If you give up eating, you intend to lose weight.
When one has no income, one pays no taxes.
If one gave a wrong answer, one didn't get anything.
If the red light turned on, you had given a wrong answer.
If you had given a wrong answer, the red light turned on.

As you can see in (23), the antecedent clauses in (22) are so constructed that they would all be ungrammatical in isolation.

23.a. * Aikoo laihuta.
    b. * Lopettaa syömisem.
    c. * Vastasi vähänin.

One intends to lose weight.
One gives up eating.
One gave a wrong answer.

The second point worth noting in (22) is that the same freedom from constraints extends to the consequent clause as well, especially if both clauses have a missing person. All of the consequent clauses in (22a-e) would be ungrammatical in isolation. These facts make it clear
that generic time adverbials should be analyzed in the manner of generic if-clauses. Whenever the if-clause contains a missing person, and in certain other cases as well, the antecedent of a conditional expresses a condition that can be satisfied at arbitrary points in time, just as a time adverb like sunnuntaisin 'on Sundays'. It cannot be an accident that it is just in these cases where all other constraints on what generic sentences must look like are dropped. It would also be interesting to speculate about the connection between if-clauses and certain modal statements. Superficially if and can do not seem to have much in common, but both allow just about any sentence to have a generic interpretation. 6

In certain cases, a missing person can be further characterized by a seemingly headless relative clause. These cases can also be analyzed as underlying conditionals.

24. Joka tutustuu tilanteeseen rupeaa tekemään outoja päättelmiä. One who gets to know the situation starts to draw strange conclusions.

If you apply the rule of relative preposing, making the clause into a participial construction, the missing person appears as the head of that construction:

25. Tilanteeseen tutustuva rupeaa tekemään outoja päättelmiä. One who gets to know the situation starts to draw strange conclusions.

8. In most of the examples in the previous section there were two empty slots in the same sentence. But this does not mean that there are two persons missing in the same sentence. Consider an example like (26).

26. Jos _saa osallistua, _voi voittaa 100 mk. If one is allowed to participate, one can win 100 marks.

This sentence does not claim that Harry can win 100 marks if John is allowed to participate. The two positions are to be filled by expressions that refer to the same individual. This is one case where there is clear contrast between a missing person and the explicit generic pronoun kuka tahansa in Finnish. The same is true of their English counterparts, one and anyone. Compare (26) and (27).

27. Jos kuka tahansa _saa osallistua, kuka tahansa _voi voittaa 100 mk. If anyone can participate, anyone can win 100 marks.

There is no suggestion in (27) that the participant and the potential winner be the same person. A further difference is illustrated in (28).
28.a. Jos kuka tahansa saa osallistua, If anyone can participate, 
     voi voitaa 100 mk. anyone can win 100 marks.
     b. *Jos kuka tahansa saa osallis-
        tua, hän voi voitaa 100 mk. If anyone can participate, he can win 100 marks.

(28a) shows that the missing person cannot be coreferential with
kuka tahansa, and (28b) demonstrates the further point that kuka
tahansa in the antecedent clause cannot have any coreferential
pronouns outside in the main clause.

9. It seems to us that the division of labor between one and
anyone in English is exactly parallel to what we have observed in
Finnish. However, there is one further twist. As you can see in
(28b), the English gloss associated with a bad Finnish sentence is
not grammatical. It is indeed a good sentence, but not in the
intended sense. The English (28b) is not a generic sentence at all,
it means essentially the same as "if someone can participate, he
can win 100 marks". For a Finn it is obvious that the anyone in
(28b) does not translate into Finnish as kuka tahansa but as kukaan,
(partitive: ketHän), which is the negative counterpart of joku
'someone'. The apparent polarity violation in the antecedent of a
conditional implicates that the antecedent is possibly false.
Thus we feel that there are two anyone's in English, contrary to
what some people seem to assume.7 These can be distinguished by
stress, which produces a very clear contrast in the object position.
As you can see in (29b), the generic anyone, which is stressed like
a lexical noun, cannot be coreferential with a pronoun in the con-
sequent clause.

29.a. Jos epäilet ketHän,
     pidätä hänet. If you suspect anyone, arrest
     b. *Jos epäilet ketH
        tahansa, pidätä hänet. him.

The other anyone, which is a variant of someone, carries low stress.
When it occurs in the antecedent clause of a conditional like (29a),
it can support a coreferential pronoun outside in the consequent,
just like someone, or indeed the generic pronoun one for that matter.
This is another difference between the two generic pronouns; see (30).

30. If one tries this out, he'll find that it won't work.

 Needless to say, the coreference phenomena in (29) would be im-
possible to deal with in any theory that equates the generic anyone
with a universal quantifier that obligatorily has a wide scope and
that insists that coreference relations inside conditional sentences
are a matter of variable binding. Neither one of these views is
tenable.8

10. Let us now take a final look at other kinds of subordinate
clauses. First, consider the that-clauses in (31).
31.a. Pekka ei usko, etth saun 
    jälkeen jnottaa. 
    b. TåssH työssH vaaditaan, 
    etth osaa ruotsia.

Pekka does not believe that one 
feels thirsty after sauna. 
This work requires of you that 
you know Swedish.

The examples above are designed to show that a missing person in a 
that-clause is permissible in case one of the following conditions 
is met: (i) the that-clause would be grammatical by itself, and (ii) 
there is a missing person already in the superordinate structure. 
(31a) meets the former condition, (31b) the latter one. Note that the 
that-clause in (31b) would not be grammatical in isolation. 
The same two conditions also seem to account for all infinitival 
and participial constructions. Consider the examples in (32).

32.a. Kyltti kåskee varomaan 
    vihaista koiraa. 
    b. Ville antaa myydH 
    kissan. 
    c. *Ville toivoo myywHn 
    kissan. 
    d. Jos toivoo myywHnsH 
    kissan, ilmoittaa lehdessH.

The sign tells you to beware of 
a vicious dog. 
Ville lets you sell the cat. 
Ville hopes for you to sell the cat. 
If you hope to sell the cat, 
you'll advertise in the paper.

The first two examples are grammatical, because the two verbs 
involved, kåskeH 'order' and antaa 'let', take both a noun phrase 
object and a sentential complement. The generic subject of the 
complement, which is deleted by Equi, is permissible by virtue of 
the missing person in the main clause. (32c) is ungrammatical as 
it violates the same constraints as (8a). (32d) illustrates the 
fact that it is possible to have a participial construction with 
a missing person only if the person is coreferential with a 
missing person in the superordinate structure - the same constraint 
that we needed in (31b).

11. Modals provide further support for these observations. As 
you can see in (33), modal verbs, such as must and can, are in 
general ambiguous between an epistemic and one or more of so-called 
root senses.

33.a. Pekan tåtvy osata ruotsia. 
Pekka has to know Swedish. 
(deontic), or 
It must be that Pekka knows 
Swedish. (epistemic)

b. Pekka voi uida joka päivH.
Pekka has the opportunity to 
swim every day. (physical poss.) 
or: It is possible that Pekka 
swims every day. (epistemic)

Both examples in (33) are ambiguous.
It is generally assumed that this ambiguity is syntactically reflected in the following way. In their epistemic senses, modals are one place predicates, they only take sentential subjects. In their root senses, modal verbs take a noun phrase subject and a sentential object. From these assumptions it follows that, when the embedded sentential complement of a modal verb is of the type that could not stand alone as a generic sentence, there cannot be any ambiguity between the epistemic and the root sense. Only the latter is possible, otherwise we would not have another missing person upstairs and the sentence would not be grammatical. This prediction is confirmed by the examples in (34) which cannot be interpreted epistemically.

34.a. Tähtyy osata ruotsia. One must know Swedish.(deontic)
   b. Voi kyllä uimassa
      joka piti

However, if the complement is such that it could stand alone as a generic sentence, the ambiguity returns. Consider (35).

35.a. Sieltä tähtyy voida
      saada viinaa.

   b. Sieltä voi joutua
      putkaan.

One has to be able to get
booz there. or:
It must be the case that one is
able to get booz there.
One can end up in jail there.
(epistemic)

12. Taking our clue from John Lawler's paper on generics last year, we apologize for having presented to you too many facts and too few explanations. Our excuse is that most of our facts are new and of the kind that Finnish grammarians so far have successfully avoided. We think there is some merit in bringing them out into daylight. Particularly as regards the relationship between modals and genericity, we feel that we have only been able to touch the tip of an iceberg.

FOOTNOTES

1 However, unlike universal propositions, generic statements are not falsified by a single counterexample. They are regarded as true in case a significant number of their instantiations are true. What counts as a "significant number" varies depending on the particular sentence and the context in which it is uttered. We are not convinced that there is any inherent dichotomy between "existential" and "universal" generics as Lawler (1972) has proposed.

2 These are the most common, although not the only ways of expressing the notion of "generic person" in English. See Jespersen 1957, p.152.
In the latter case, the consequent clause is not in the scope of the quantifier. At first it seems that the difference in the scope of quantifiers in (i) and (ii) could account for the fact that there is a coreference violation in (29b) and no violation in (29a). However, note that sentences like if you suspect someone, arrest him are perfectly grammatical in spite of the fact that they translate into expressions of the form

$$(\exists x) \varphi \supset \psi$$

Now, if (29b) is bad because the consequent contains a pronoun which in fact is not in the scope of the quantifier which is supposed to bind it, the above sentence should also be ungrammatical. It is not. Consequently, the observation that anyone in (29b) has a narrow scope does not by itself explain why the sentence is ungrammatical.

REFERENCES


Regarding such sentences as "subjectless" is not the only mistake that they have made in this connection. Note that in the following quote no distinction is made between generic and universal statements or between human and non-human "pronominality":

"It is very common that an occurrence of the 3rd P. Sg. is not accompanied by a subject filler in case one wants to present the activity denoted by it as something generally valid, in other words, when the pronominal element included in the meaning of the occurrence of the third person verb form, the fact that it refers to something (its pronominality, so to speak), is interpreted as 'anything, anyone, everyone, no one, nothing'... As far as the meaning goes, such occurrences of the 3rd P. Sg. differ from the occurrences of passive forms in that the subject person of the latter type of expression is interpreted as 'some, many, several'... The occurrences of the 3rd P. Sg. in question will be called generalizing expressions or expressions with a generalizingly indefinite person" (Penttilä 1957, p.465).

The fact that punctual time adverbials can occur in generic sentences (see (10)) shows that Curme (1931) and other traditional grammarians are wrong in suggesting that genericity is to be considered as a tense feature. For further discussion, see Kimball 1970.

The conversational use has of course been observed by traditional grammarians as well, for example, see Jespersen 1924, p. 205 and Penttilä 1957, p. 464.

We are not the only ones who seem to be caught in thinking about possible connections between if and can. There is a philosophical tradition (see Austin 1961) according to which, whenever can or could occurs as the main verb of a sentence, an if-clause must always be understood or supplied to complete the meaning of the sentence. Some claim that a sentence like I can lift a finger really means something like I shall lift a finger, if...

Quine (1960) suggested that anyone should always be analyzed as a universal quantifier which obligatorily takes a wide scope with respect to some other logical operator. This suggestion has been adopted and developed further by Horn (1972) and Lasnik (1972). Traditional grammarians in general distinguish between two anyone's (for example, see Curme 1935), just as we do here.

The first claim is contradicted by the fact that anyone in the sentence if you suspect anyone, you are paranoid has a narrow scope with respect to if-then. (This is grammatical, since there is no coreference violation as in (29b).)

The second claim is also false, although the examples in (29) at first seem to support it. Assuming that the English anyone corresponds to the universal quantifier in predicate calculus, these sentences translate into expressions of the following form.

\[
\begin{align*}
(1) & \quad (\forall x)(\varphi \supset \psi) \\
(11) & \quad (\forall x)\varphi \supset \psi
\end{align*}
\]

(29a) (29b)