Is perception a directional relationship?
On directionality and its motivation in Finnish expressions of sensory perception

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Abstract

This article examines the hypothesis that sensory perception is linguistically conceptualized as a directional relationship that involves the motion of a signal between the experiencer and the stimulus. The hypothesis is tested with data from Finnish. The study focuses on expressions of visual, auditory and olfactory perception. The data consist of sentences including a perception verb and a locative element that indicates the position of either the experiencer or the stimulus. There are three options for marking such a locative: a static 'in'/'on'/'at' case, a directional 'from' case, or a directional 'to' case. The results reveal crucial differences on the one hand between different verbs in each domain, on the other between the different sensory domains. Agentive perception verbs favor the directionality experiencer ⇒ stimulus to a greater extent than non-agentive or intransitive perception verbs. The opposite directionality (stimulus ⇒ experiencer) is favored if the stimulus is a signal or a mental content rather than a concrete entity. In general, expressions of visual perception favor the static coding to a greater extent than expressions of auditory and olfactory perception, which favor the directional stimulus ⇒ experiencer coding. It is argued that this difference follows from the conceptualization of auditory and olfactory perception as involving the motion of a signal (a sound or a smell) as opposed to visual perception, which is conceptualized as the perception of a concrete entity.

1. Introduction

Our conception of the world surrounding us is based on sensory perception. Our sensory system determines what kinds of stimuli we are capable of perceiving; it also affects our understanding of the entities we perceive, the point(s) of view on the perceived situation we are able to select, and
what attracts our attention (the figure sensu Talmy 2000) as against what
remains backgrounded (the ground). We also maintain conceptions con-
cerning sensory perception as such; these conceptions are manifested in
the linguistic expressions that designate perception. By studying the lin-
guistic expressions of sensory perception, we can find out how language
conceptualizes perception, its participants and the relationships that pre-
vail between them — in other words, the “folk model” of perception that
underlies its linguistic coding.

In this article I study the linguistic expression of perception as a direc-
tional relationship in Finnish. Finnish is an interesting case in point since
it has a clear-cut and multifold system of locative expressions (cases and
adpositions) that systematically represent not only spatial but also many
other kinds of relationships as static (‘in/at/on’) or directional (‘to’ vs.
‘from’). The Finnish system of expressing spatial relations consists of six
local cases and an extensive system of adpositions, the exact number of
which cannot be determined since the borderline between adpositions
and relator nouns is obscure (see Huumo and Ojutkangas 2006 for de-
tails). The local cases are divided into two series called the internal cases
(expressing relations like ‘inside’, ‘into’, ‘out of’) and the external cases
(‘at’, ‘to at’ and ‘from at’ or ‘on’, ‘onto’ and ‘from on’), where, as can be
seen, a thoroughgoing feature is the expression of directionality: in both
case series there is one static (‘on’ / ‘at’) case, one ‘to’ case and one
‘from’ case. Similar directionality oppositions are expressed by many
adpositions since the adpositional stems are generally inflected in the lo-
cative cases. This is possible because such adpositions have a nominal
background which is reflected by the fact that they still carry local case
endings and take their complement in the genitive form. Such adposi-
tional phrases formally resemble noun phrases where the locative case-
marked head is a relator noun preceded by a genitive modifier.

In cognitive linguistic terms, the locative cases and adpositions basic-
ally indicate a relationship between two participants: the trajector
(= the entity whose position is indicated) and the landmark (the entity
with respect to which the position of the trajector is indicated). In gen-
eral, the static position of a trajector with respect to a landmark is ex-
pressed by a static locative case or adposition; the changing position of a
trajector that enters the (dominion of the) landmark is expressed by a di-
rectional ‘to’ case or adposition; and the changing position of a trajector
that exits the (dominion of the) landmark is expressed by a directional
‘from’ case or adposition.

Finnish also uses locative expressions to indicate nonspatial relations,
such as internal states, time, possession, and relations where spatial and
nonspatial factors interact. In expressions belonging to the latter group
the spatial position of the trajector (with respect to the landmark) remains static, but the trajector also undergoes a non-spatial change which motivates the use of a directional locative to indicate its position. For instance expressions of a cognitive change where the trajector enters the cognitive dominion (i.e., awareness, consciousness, perception or possession) of a sentient reference point (see Langacker 1993 for the term) often take a directional (‘from’) locative that literally indicates motion away from a location. In the Finnish system we for instance ‘find’ or ‘buy’ things from places, even when no spatial motion is indicated, e.g., Löysin seinästä halkeama-n [find-PST-1SG wall-ELA crack-ACC]⁴, literally ‘I found a crack from the wall’. In this example, the ‘from’ case marking of the locative meaning ‘wall’ is motivated by the abstract motion of the crack into the awareness of the speaker. Correspondingly, relations where the trajector exits the cognitive dominion of a sentient reference point often involve the trajector’s fictive motion into its spatial location. For instance, one can ‘lose’, ‘leave’ or ‘forget’ things into their places (for details see Huumo, 2006b, and Section 5 of this article). Such examples show that the directional locative system is a highly complex way of expressing not only spatial but also other kinds of relations, including ones that indicate an interplay between spatial and cognitive-perceptive factors.

The general objective of the present article is to identify the factors that determine the selection of a directional vs. static case in locatives that indicate the spatial position of either the experiencer or the stimulus in a perceptive relation. Locatives indicating a setting where both participants are situated are thus excluded from the study. The detailed analysis deals with the domains of visual, auditory and olfactory perception (shortly: vision, hearing and smell); the domains of taste and touch are not dealt with. This is because vision, hearing and smell constitute our remote senses (as opposed to the proximate senses of taste and touch), in the sense that they allow a considerable distance between experiencer and stimulus. The participants can thus be in separate locations when the perception takes place, making it possible to use locatives in the function of indicating the position of one participant only. In contrast, the perception of touch or taste normally requires direct contact between the participants and thus their presence in the same location.

The discussion proceeds as follows: after introducing the Finnish basic verbs of perception in Section 2, I proceed to discuss some general features of the linguistic coding of perceptive relationships: the nature of the participants (Section 3) and the conceptualization of perception as directional (Section 4). In Section 5, I introduce the abstract uses of the Finnish locative cases and adpositions, in order to build up a general background for the study of expressions of perception. Section 6 forms a
detailed study on the use of directional locatives in expressions of visual
perception, while Section 7 is a similar study of expressions indicating au-
ditory and olfactory perception. In Section 8 I sum up the results of the
study.
In this article I will show, first, that in each sensory domain agentivity
plays a central role in the selection of directionality. Agentive perception
is more likely to be coded by locatives that indicate the directionality
experiencer ⇒ stimulus than non-agentive perception. This reflects the
conceptualization of agentive perception as involving an “energy stream”
that moves from the experiencer-agent towards the stimulus-patient (see
Croft 1991; Langacker 1987). Besides agentivity, another crucial factor is
whether the perception involves the transference of a mental content from
the stimulus to the experiencer. This is the case if the experiencer not only
perceives the stimulus but also acquires information when this happens.
Such expressions strongly favor the directionality stimulus ⇒ experiencer.
The study will also reveal differences between the three sensory domains
studied. Vision differs from hearing and smell by favoring a more static
locative coding of the position of the participants. Hearing and smell
in turn favor the directional coding of the type stimulus ⇒ experiencer.
This suggests that hearing and smell, more systematically than vision,
are conceptualized as involving the motion of a “perceptive signal” from
the stimulus towards the experiencer.

2. The basic verbs of perception in Finnish

Finnish basic verbs of perception follow the typologically common tripar-
tite division proposed in the typological study of Viberg (1984: 124–127;
2001: 1295). Viberg first classifies verbs of perception into two main
groups: experiencer-based verbs (which select the experiencer as the sub-
ject and the stimulus as the object) and phenomenon-based verbs (which
select the stimulus as the subject). In this classification, experiencer-based
verbs are thus transitive and phenomenon-based verbs intransitive verbs
of perception. Experiencer-based verbs are further divided into agentive
activity verbs and non-agentive experience verbs. The experiencer-subject
of the activity verbs also contains features of an agent, since these verbs
indicate self-initiated and controlled perception where the experiencer
actively focuses or directs his or her perceptive organ towards the stimu-
lus. Non-agentive perception verbs indicate involuntary perception,
where the experiencer does not control the perceptive relationship.
This far, Viberg’s system applies to Finnish almost perfectly; consider
the Finnish system of perception verbs in Table 1 below. However, it
needs to be pointed out that the Finnish experience verbs for smell (haista-) and taste (maista-) also allow an agentive interpretation, even though there are separate activity verbs for these domains as well. A more essential deviation from Viberg’s typology is what I take to be the Finnish group of phenomenon-based (i.e., intransitive) verbs of perception. These verbs, listed in the leftmost column of Table 1 under the title perceptibility verbs, indicate generic perceptibility, where the stimulus is in principle perceptible to any potential experiencer who enters the situation. They carry meanings such as ‘be visible’, ‘be audible’, ‘[emit] smell’ etc.

In contrast, the class of phenomenon-based verbs in Viberg’s typology (1984, 2001) includes such expressions as John looks tired or The cloth felt soft, which indicate not perceptibility alone but also an impression evoked by the perception in the (implicit) experiencer. For instance, John looks tired means not only that John is visible to the implicit experiencer but also that his internal state can be evaluated (as tired). Such meanings can also be expressed in Finnish, but since they involve other factors in addition to perceptibility I do not include them in my study. With this difference in mind, consider the system of Finnish verbs of perception in Table 1.

As we can see from Table 1, Finnish quite explicitly codes the distinction in each sensory domain between general perceptibility, perceptive experience and perceptive activity. A comparison of these Finnish verbs with their English counterparts (in the translations) reveals that in English only the domains of vision and hearing have a similar tripartite system, while in the domains of smell, taste and touch a single verb (smell, taste and feel) serves to indicate all three meanings. Note, too, that English lacks distinct lexical counterparts for the perceptibility verbs of vision and hearing. The precise meanings of these Finnish verbs can thus only be expressed by the clumsy circumlocutions be visible and be audible. In some contexts, however, simple verbs like show or sound may be used:

| Table 1. Finnish basic verbs of perception (verb stems) |
|-----------------|-----------------|-----------------|
| MEANING | perceptibility | perceptive experience | perceptive activity |
| vision | näky- ‘be visible’ | näke- ‘see’ | katsa- ‘look; watch’ |
| hearing | kuulo- ‘be audible’ | kuule- ‘hear’ | kuuntele- ‘listen’ |
| smell | haise- ‘[emit] smell’ | haista- ‘[feel a] smell’ | haistele- ‘smell’ |
| taste | maiste- ‘[emit] taste’ | maista- ‘[sense a] taste’ | maistele- ‘taste’ |
| touch | tuntu- ‘feel’ | tunte- ‘feel’ | tunnustele- ‘feel’ |
for instance *The old paint shows through the wallpaper* or *Suddenly a horrible yell sounded*. More canonical examples like (1) and (2) below can only be translated into English using different constructions.

(1) *Taivaa-lla näky- y lintu.*

sky-ADE be.visible-PRES.3SG bird

‘There is a bird in the sky.’ / ‘A bird can be seen in the sky.’

(2) *Laulu kuulu-u piha-lla.*

Singing be.audible-PRES.3SG yard-ADE

‘[The] singing can be heard in the yard.’

As far as the morphological structure of the Finnish perception verbs is concerned, it is easy to see that most of the activity verbs (with the exception of the agentive verb of vision) are derived from the experience verbs by adding the derivative affix –ele (e.g., *haista-* - *ele-* ⇒ *haistele-*)6 Table 1 also shows that most Finnish perceptibility verbs are derived from the experience verbs by adding the affix –U (e.g., *näke-* ‘see’ - - *U-* ⇒ *näky-* ‘be visible’). The general function of this affix is reflexive, but actually it generates many different kinds of intransitive (e.g., anticausative, mediopassive) meanings where no reflexivity is necessarily involved. In semantic terms, perceptibility verbs are not reflexive; for example, *näkyä* ‘be visible’ does not mean either ‘see oneself’ or ‘make oneself seen’. In fact, Finnish perceptibility verbs do not indicate an actual event of ‘being seen’ at all but merely the ongoing potentiality of such an event.

To sum up: in most sensory domains the verbs of perceptibility and activity are morphologically derived from verbs of experience. This may be interpreted as reflecting the central status and neutral meaning of experience verbs in the system. An exception is the domain of smell, where the phenomenon verb has the morphologically simplest form with the stem *haise*; the experiencer verb *haista-* is derived from this by adding the (usually causativizing) affix –tA. This in turn is the stem behind the activity verb *haistele-*, which is derived from it by adding the affix –ele (as in the other sensory domains).

It should also be mentioned that in addition to the basic verbs of perception listed in Table 1 Finnish has a large number of other perception verbs that are not discussed in this article. Especially in the domain of agentive visual perception many descriptive verbs are available (with meanings such as ‘stare’, ‘glare’, ‘gape’ etc.; see Pajunen 2001: 320). Furthermore, many of the basic verbs of perception listed in Table 1 also have abstract meanings, where they indicate other than perceptive relationships (such as ‘understanding’), but such uses are also excluded from this discussion (for a discussion on the abstract meanings of English perception verbs see Sweetser 1990: 37–44).
3. The perceptive relationship and its participants

A perceptive relationship generally takes place between two participants, the experiencer and the stimulus (for defining the prototypical transitive clause, see Kittilä 2002). In a linguistic expression that designates the perceptive relationship one or both of these participants can sometimes be left without overt coding. The clearest example of such an omission is the class of perceptibility verbs, which omit the experiencer from their argument structure. In semantic terms, however, even perceptibility verbs imply the participation of a generic, implicit experiencer: their meaning is to indicate that the stimulus (the referent of the subject) is perceptible to any potential experiencer that enters the situation. The context can also imply that the role of the implicit experiencer is fulfilled by the speech act participants. Such an implication arises for instance if the sentence contains deictic expressions that refer to the deictic center of the speech event (3).

(3) Vesitorni näky-y tää-lta.
Watertower be.visible-PRES.3SG here-ABL
‘The water tower is visible from here.’

The semantic gap between perceptibility verbs (indicating potential perception) and experience verbs (indicating actual perception) is closed when the latter are used in the so-called zero subject construction. In this construction, the verb is in the 3rd-person singular form but there is no overt subject to code the experiencer, and the interpretation is generic in the same way as in (3). This construction is illustrated by example (4), which can be compared with example (5) with an overt subject NP (for a detailed analysis of the Finnish zero-subject construction see Laitinen, 2006).

(4) Vesitorni-n näke-e tää-lta.
Watertower-ACC see-PRES.3SG here-ABL
‘One can see the water tower from here.’

(5) Liisa näke-e vesitorni-n tää-lta.
Name see-PRES.3SG watertower-ACC here-ABL
‘Liisa sees [can see] the water tower from here.’

The structural difference between examples (3) (with the verb näkyä ‘be visible’) and (4) is that in (3) the clause-initial nominative form vesitorni ‘water tower’, indicating the stimulus, is the syntactic subject, whereas in (4) the initial vesitornin is the syntactic object (as shown by the accusative case marking) and no overt subject is present; hence the term zero subject. Example (5) is the corresponding example with an overt subject. It is easy
to see that examples (3) and (4) resemble each other in that both indicate non-agentive visual perception, where only the stimulus is specified by an overt NP but the experiencer has no overt coding and is interpreted as generic (see Löflund 1998: 153–154; Laitinen, 2006). The perceptive relationship is also similar in the two examples, in the sense that both indicate potential rather than actual perception. The reasons for this, however, are different: in (3) it is the lexical meaning of the verb näkyä that indicates such a meaning, whereas in (4) the meaning of potentiality is created by the zero-subject construction, where the experiencer is understood as generic. Examples (3), (4) and (5) can thus be seen as forming a continuum from the meaning of general perceptibility to the meaning of actual visual perception by a specific experiencer.

In a perceptive relationship, the range of potential fillers of the experiencer role is quite narrow: the experiencer must be an animate entity that is capable of sensory perception (unless a metaphorical reading is intended). In contrast, the nature of the stimulus can vary freely: it can be a concrete entity (as in I saw a dog), an event (I saw a dogfight), or some kind of a substance such as radiation (I saw light). In addition to “pure” perception of a concrete entity, a perceptive relationship can also include mental operations such as the interpretation or evaluation of what is perceived or the drawing of conclusions from it (for a thorough discussion, see Kirsner and Thompson 1976; Miller and Johnson-Laird 1976: 583–618). If this is the case, then the stimulus can also be a proposition expressed by a whole subordinate clause (e.g., I saw that he had cried; for different kinds of stimuli in perceptive relations, see Dik and Hengeveld 1991). Though it is usually the case that in perceiving an event or a situation we also perceive the participants of that situation, Kirsner and Thompson (1976: 209) show that there are instances where an event is only perceived globally, without perceiving an individual participant of the event (as in their example I have seen faith accomplish miracles).

Many expressions of sensory perception, especially non-visual perception, also allow the speaker to choose between different conceptualizations of the nature of the stimulus. The stimulus can often be understood either as a signal or as a concrete entity emitting the signal. We can for instance say, conveying approximately the same meaning, either I heard a nightingale or I heard the singing of a nightingale; either I smelt a rose or I smelt the scent of a rose. On the grounds of such variation, Panther and Thornburg (2003: 225–229) argue that many (English) expressions of sensory perception are in fact metonymic, in the sense that they literally refer to a signal but that their actual referent is the entity emitting the signal. For instance, the question What is that noise? can be understood as metonymic if the purpose of the speaker is to obtain information about
the causer of the sound instead of the sound itself (e.g., when expecting an answer like *It’s a squirrel* rather than *It’s a cracking sound*). Panther and Thornburg argue that such expressions utilize the metonymy **perceptual event for its cause**. Interestingly, this metonymy also seems to work in the opposite direction: we can say for instance *Rotten fish smelt in the empty warehouse*, without meaning that there is actually a rotten fish in the warehouse; it suffices if such a smell can be detected.

Importantly, Panther and Thornburg (2003) also point out that nominal expressions referring to a signal are most typical in the domains of hearing, smell and taste (e.g., *I heard a loud noise, I felt the fresh smell of newly baked bread, I tasted the salty taste of seawater*). In the domain of vision, on the other hand, such expressions are rare. In fact, there is no neutral word for a visual stimulus corresponding semantically to nouns like *sound* and *smell* (see also Miller and Johnson-Laird 1976: 617–618). Nouns like *look, vision or sight* are of course candidates, but their meaning is narrower and their use is clearly more restricted than the use of the other words (Miller and Johnson-Laird 1976: 618). For instance, we can ask questions like *What is that smell ~ noise ~ taste?* when we refer to these non-visual stimuli, but in asking about visual perception we normally use questions like *What is that?* (instead of *What is that vision ~ sight?* etc.). Panther and Thornburg argue that this reflects the status of visual perception as our primary sense, giving rise to a conceptualization where vision provides more direct information about the stimulus than the other senses. In the folk model of perception we thus see things “themselves” but smell, taste and hear only their signals. According to Viberg (2001), expressions of vision tend to be structurally unmarked, and verbs of visual perception easily spread into other sensory meanings. Viberg also points out that when we refer to situations where a stimulus is perceived with more than one sense at the same time, we tend to use expressions of vision rather than expressions of the other sense modalities. If non-visual expressions are used, then the implication easily arises that visual perception is not involved. For example the sentence *I saw a skunk crawl into my bed* does not exclude the possibility that the skunk was also detected by other senses (hearing noises, feeling motions or smells), whereas *I heard ~ smelt ~ felt a skunk crawl into my bed* is easily understood as implying that visual perception did not occur.

## 4. Perception, directionality and fictive motion

A pervasive feature of expressions of perception is the representation of perception as directional. There has been debate in linguistics as to
whether (visual) perception involves motion and whether verbs of perception should thus be classified among motion verbs (see Wierzbicka 1980: 100). Though the participants of a perceptive relationship may remain stationary in spatial terms, the use of directional elements to designate their position is very common in linguistic expressions of perception (as in *I can see you from where I am standing*). Talmy (2000: 115–116) argues that the directionality of visual perception is one instantiation of the general phenomenon of fictive motion, i.e., the conceptualization of static situations as involving dynamic features which then motivate the use of dynamic linguistic elements to refer to them. The best-known examples of fictive motion are expressions of what Talmy calls *coextension paths*. These indicate the static position of an elongated entity using motion verbs and directional locative elements: for example *This highway goes from Turku to Helsinki*. According to Talmy, the use of such dynamic elements reflects a dynamic conceptualization of the static situation, whereby the conceptualizer mentally “builds up” the spatial configuration in a part by part manner and approaches it from a particular perspective (see also Langacker 1991). In addition to classic examples of coextension paths, the concept of fictive motion can also explain the use of dynamic elements in many expressions of directionality, pointing (in directions), radiation, emission and other such phenomena, including the directionality of visual perception.

In general, the directionality of perception can proceed in two ways: from the experiencer towards the stimulus or vice versa. In the directionality *experiencer ⇒ stimulus*, the experiencer is understood as an energy source (like a metaphorical radar or echo sounder) that emits a fictive signal towards the stimulus. This directionality is involved if the locative that indicates the position of the experiencer is marked with a ‘from’ case, or if the locative indicating the position of the stimulus is marked with a ‘to’ case. Expressions that reflect the opposite directionality, *stimulus ⇒ experiencer*, are based on a conceptualization where it is the stimulus that emits a signal, which then moves towards the experiencer. In such expressions the locative element indicating the position of the stimulus is marked with a ‘from’ case and the position of the experiencer is indicated by a ‘to’ case.

The signal that moves between the participants in a perceptive relationship can be, in Talmy’s terms, either fictive (not veridical) or factive (veridical; see Talmy 2000: 100–103). A signal emitted by the experiencer towards the stimulus is always fictive, whereas a signal emitted by the stimulus can be either fictive or factive depending on the nature of the perceptive relationship. According to Talmy (2000), the motion of the signal in visual perception is conceived as fictive (though physically based on...
the motion of light waves), since it cannot actually be detected or sensed
(see the discussion in Talmy 2000: 112). In the domains of hearing and
smell, on the other hand, the motion of the signal can also be understood
as factive. For instance, a sound proceeds through the air and its motion
can be detected in echo phenomena. Smell consists of the (relatively slow)
motion of gas particles in the air, and this motion is also detectible to our
sensory system. For instance, if we bring a smelling object into a room, it
takes some time for the smell to spread to different parts of the room; the
further the experiencer is from the source of the smell, the longer it takes
for the smell to reach him or her. In this sense hearing and smell are
clearly different from vision. Such differences can also explain the obser-
vation made by Panther and Thornburg (2003) that expressions indicat-
ing the stimulus of auditory or olfactory perception often refer to a signal
instead of the concrete entity emitting the signal, whereas expressions of
visual perception can (normally) only refer to the concrete entities them-
selves. The reason may thus be that our sensory system is capable of de-
tecting the motion of the signals in the auditory and olfactory domains
but not in the visual domain.

5. Fictive energies and directional expressions in Finnish: an overview

In the Introduction I briefly discussed the fact that Finnish uses direc-
tional locatives in many kinds of expressions that refer to situations where
no spatial motion occurs. In this section I introduce the Finnish locative
case system, with special attention to the uses of the cases where spatial
and cognitive factors interact. The locative case system of Finnish is very
explicit and is used extensively in the coding of not only concrete (spatial)
but also abstract directionality. To give an overview of the system in a
nutshell, Finnish has three separate series of local cases. Two of these
series, the internal and external local cases, share the basic function of in-
dicating concrete spatial relationships. They both consist of three cases:
one static ‘at/in/on’ case, indicating the nonchanging position of the tra-
jector with respect to the landmark (for these terms see Langacker 1991);
one ‘to’ case, indicating the trajectory’s motion towards or into the land-
mark; and one ‘from’ case, indicating the trajectory’s motion out of or
away from the landmark (for a more detailed account in English, see Sul-
kala and Karjalainen 1992; Helasvuo 2001). The internal local cases des-
ignate relationships of containment, where the trajectory is situated inside
the landmark (INESSIVE ‘in a box’), or moves into it (ILLATIVE ‘into a box’)
or out of it (ELATIVE ‘out of a box’). The external local cases designate the
position of the trajectory with respect to the outside of the landmark. The
static external case (adessive) indicates that the trajector is either on top
of the landmark (if the landmark is an entity with a salient surface, e.g., a
table) or in its vicinity (e.g., ‘at/on a box’). The external ‘to’ case (allative)
indicates that the trajector moves onto or towards the landmark
(‘towards / onto a box’), and the external ‘from’ case (ablative) that the
trajector moves away from the landmark (‘away from / off the box’). In
addition to their locative functions the external cases are also used pro-
ductively in the expression of possessive relationships, where they mark
elements indicating a possessor, a recipient or a beneficiary (for a typo-
logical perspective see Kittilä 2005). The static ‘at/on’ case, adessive, in-
dicates a (canonical) possessor who has or owns something, the ‘to’ case,
allative, indicates a possessor who gains something, and the ‘from’ case
ablative indicates a possessor who loses something. The third local case
series is called the general local cases; it designates abstract nonspatial
meanings, such as being in (essive) or entering into (translative) a role
or an occupation (e.g., ‘[working] as a teacher’ vs. ‘[becoming] a teacher’).
This case series lacks a ‘from’ case.

In addition to expressions of actual motion or change, the directional
cases are also used in many contexts where only an implicit energy stream
or potential motion is indicated or the motion is abstract (Alhoniemi
1975). Consider examples (6) and (7).

(6) Lauluja laulo-i mikrofoni-in.
singer sing-PST.3SG microphone-ILL
‘The singer was singing into the microphone’ (implicit mover =
sound).

(7) Rikollinen joht-i liiga-a vankila-sta.
Criminal lead-PST.3SG gang-PAR prison-ELA
‘The criminal was leading the gang from prison’ (mover = fictive
energy stream).

In example (6) there is an implicit mover, a sound, which is not referred
to by any overt NP in the sentence. Nevertheless, its motion is indicated
by the locative marked with a directional case. In (7) the directionality is
based on the motion of a fictive energy stream emitted by the agentive
referent of the subject from its location.

In addition to such non-spatial meanings, the directional cases are also
used in many expressions that indicate an interaction between the cogni-
tive dominion of a sentient participant and the outside world (see Huumo
2006a, 2006b, 2007). As pointed out in the Introduction, the general ten-
dency is to use the ‘from’ cases to mark the spatial position of a partici-
plant that enters the cognitive dominion (consciousness, awareness, per-
ception or possession) of a sentient reference point (8–9), and a ‘to’ case
to mark the spatial position of a participant that exits such a cognitive
dominion (10–11).

(8) Löys-i-n seinä-stä halkeama-n.
find-PST.3SG wall-ELA crack-ACC
‘I found a crack in [lit. “from”] the wall.’

(9) Ost-i-n talo-n Espanja-sta
buy-PST-1SG house-ACC Spain-ELA
‘I bought a house in [lit. “from”] Spain.’

(10) Unohd-i-n sateenvarjo-n bussi-in.
forget-PST-1SG umbrella-ACC bus-ILL
‘I left [lit. forgot] the umbrella in [lit. “into”] the bus.’

(11) Jät-i-n koira-n koppi-in-sa.
leave-PST-1SG dog-ACC dog.house-ILL-3PX
‘I left the dog in [lit. “into”] its dog-house.’

These examples set up a wider background, against which we can discuss
the uses of the locatives in expressions of sensory perception. What moti-
vates the ‘from’ case in (8) and (9) is not actual spatial motion by the
-crack or the house, since these entities remain stationary in the designated
situation. It is their entrance into the cognitive dominion or possession of
the sentient reference point (in these examples the speaker) that triggers
the ‘from’ case marking of the locative. Correspondingly, in (10) and
(11) the umbrella and the dog remain in their respective locations. What
motivates the ‘to’ case marking is now the cessation of cognitive contact
between these entities and the sentient reference point (the speaker).
When these entities exit the speaker’s cognitive dominion, they are thus
conceptualized as fictively moving into their respective spatial locations.
Such examples clearly show how spatial and cognitive factors participate
in a multifold interaction in the Finnish locative system.

6. Our basic sense: visual perception

In this section I study expressions of visual perception, with special atten-
tion to the case marking of locative elements that indicate the position of
one participant only. I use examples where the experiencer and the stimu-
lus are both stationary, in order to exclude the possibility that the direc-
tional case marking might be caused by the actual motion of a partici-
 pant. When the participants are stationary, the directional case marking
can only be motivated by the conceived directionality of the perceptive rel-
tionship itself. In the last part of this section (6.4) I discuss the relation
between visual perception and existentiality, starting from the assumption
that visual perception often includes recognition of the existence of the stimulus. Such a feature may also contribute to the syntactic and semantic structure of the sentence. I start out by examining the experience verb nähdä 'see', followed by the perceptibility verb näkyä 'be visible' and the activity verb katsaa 'look; watch'. In each case, I discuss separately locatives indicating the position of the experiencer and those indicating the position of the stimulus.

6.1. Nähdä 'see'

6.1.1. The position of the experiencer. The experience verb nähdä 'see' allows relatively free variation in the case marking of the locative modifier that indicates the position of the experiencer (see also Huumo 2004). Both a 'from' case and a 'to' case are normally possible (12–13; the two options are given in braces).

(12) Näe-n paraatu-n {parvekkeet-illan / parvekkeen-illan}.
see-PRES.1SG parade-ACC balcony-ABL-1PX / -ALL-1PX
'I [can] see the parade from my balcony.'

(13) Näe-n Liisa-n {tänne / tänne}.
see-PRES.1SG name-ACC here-to / here.to
'I [can] see Liisa from here.'

These examples show that the locatives indicating the position of the experiencer allow both directionalities, i.e., experiencer ⇒ stimulus and vice versa. However, the 'from' cases are semantically a more neutral choice than the 'to' cases, which foreground the experiencer’s ability to perceive the stimulus and may for instance imply that the experiencer need not move to another location for the perceptive event to be possible. For instance, in (12) the ‘to’ case implies more strongly than the ‘from’ case that the speaker considers alternative places to watch the parade but concludes that the balcony is a choice good enough. In (13), the alternative tänne ('to here') could be uttered in a situation where Liisa is going to perform something and her visibility to the speaker is thus relevant. Sometimes a ‘to’ case may also emphasize the distance between the participants; see (14):

(14) Näe-n seinässä ole-vaa-n tahra-n
see-PRES.1SG wall-INE be-PRTC-ACC stain-ACC
yli kymmenen-metri-n pää-hän.
over ten-GEN meter-GEN distance-ILL
'I [can] see the stain on the wall from [lit. “into’’] the distance of more than ten meters.'
In (14), the ‘to’ case illative emphasizes the experiencer’s ability to perceive the stimulus. The ‘from’ case elative would also be possible in (14), without a significant change of meaning, but the context that foregrounds the experiencer’s ability to see the stain in spite of the relatively long distance makes the ‘to’ case a natural choice. Sometimes the different case markers may also carry different implications regarding the successfulness of the perception. In (15) the ‘to’ case implies that the perception succeeded in spite of the long distance, whereas in (16) the ‘from’ case allows the implication that visibility was poor because of the distance.

(15) Na¨-i-n tappelu-n yli sada-n metri-n pää-hän.
    see-PST-1SG fight-ACC over hundred-GEN meter-GEN distance-ILL
    ‘I saw the fight from [lit. “to”] the distance of over 100 meters’ (it
    was so remarkable).

(16) Na¨-i-n tappelu-n yli sada-n metri-n pää-stä.
    see-PST-1SG fight-ACC over hundred-GEN meter-GEN distance-ELA
    ‘I saw the fight from the distance of over 100 meters’ (I did not see
    it well enough e.g., to recognize the fighters).

To sum up: the neutral alternative for indicating the position of the experiencer in examples with the verb nähda ‘see’ is the ‘from’ case. As argued above, the ‘from’ case, when used in this function, represents visual perception as a fictive signal proceeding from the experiencer towards the stimulus. However, the ‘to’ cases are a possible alternative especially if visibility is obscured or endangered, or if the distance between the participants is foregrounded.

In addition to the directional cases, another option for marking the position of the experiencer is the use of a static (‘in/at/on’) case. The range of such usage, however, seems to be very limited. This is because in examples with nähda ‘see’ the main function of the static cases is to indicate either an all-embracing setting, where both the experiencer and the stimulus are situated, or the location of the stimulus alone (see Section 6.1.2. below). Leino (1989, 201–202) has pointed out that the static cases are in many instances ambiguous between these two readings (setting vs. location of the stimulus). He does not mention the possibility that a static case might also be used to indicate the position of the experiencer alone. In some contexts, however, such a reading is clearly possible, especially when the locative element is in clause-initial position and it is clear (for
pragmatic reasons) that only the experiencer but not the stimulus can be
situated inside the location. Consider (17).

(17) Juna-ssa ná-i-n mets-i-en vihertävä-t puu-t,
Train-INE see-PST-1SG forest-PL-GEN greenish-PL tree-PL
vasta puhjen-nee-t kuka-t ja lehmä-t
recently burst-PRTC-PL flower-PL and cow-PL
laitum-i-lla-an
pasture-PL-ADE-3PX
‘On the train I saw the greenish trees of the forests, recently
blossomed flowers, and the cows in their pastures.’

In (17) the initial locative ‘on the train’ is marked with a static case but
indicates the position of the experiencer (the speaker) alone, whereas the
stimuli are situated outside the location. Such clause-initial locatives have
a loose connection with the verb; in this respect they resemble setting ad-
verbials rather than verb modifiers. In spite of this they do not indicate a
setting but the location of one participant only (for a discussion of Finn-
ish locatives, their scoping relations and word order see Huumo 1996;
1999). They also easily receive what in Huumo (1996) I call the temporal
reading of a locative, a reading that foregrounds the temporal duration of
the locative relationship (‘when I was on the train’). Such examples show
that the static cases can also indicate the position of the experiencer
alone, though this is not a very common usage; as argued above, the neutral
way of indicating the position of the experiencer is to use the direc-
tional cases.

6.1.2. The position of the stimulus. Locative elements used with the
verb náihdä ‘see’ can also designate the position of the stimulus alone. As
mentioned above, the semantically unmarked option is to use the static
cases in this function, especially if the stimulus is a concrete entity and
the sentence expresses “pure” visual perception, i.e., that the experiencer
perceives the presence of the stimulus in a particular location. When a
static locative is used the perceptive relationship is conceptualized as
static and not directional, and the conceptualization that is evoked does
not include motion of a fictive signal between the participants. In general,
the use of static locatives to indicate the position of only one participant
in a transitive relationship is not common in Finnish (Alhoniemi 1975).
The typical function of static locatives is to indicate a setting where both
participants are situated; only few kinds of verbs allow such a locative to
indicate the position of the referent of the object alone (Alhoniemi 1975:
8). Consider examples (18) and (19), indicating visual perception:
In (18) ‘the tree’ and in (19) ‘the yard’ can be locations of the stimuli alone, if the experiencer is understood as observing the situation from outside. However, both examples also allow the reading of the locative as a setting for both participants. Such examples show how static locatives are often ambiguous between different scope interpretations with regard to the participants of the event.

Another option to mark the position of the stimulus alone is to use a ‘from’ case. This is possible if the perceptive relationship is understood as involving the transference of a “visual image” or another kind of mental content that the experiencer acquires by observing the stimulus. The ‘from’ cases are a natural choice for instance if the object refers to a radiation such as light, or to a proposition representing a conclusion that the experiencer draws on the basis of what is visually perceived. Consider (20–22).

In (20) the object refers to a radiation rather than a concrete entity. The ‘from’ case marking of the locative reflects the conceptualization of the light as moving from the ship towards the experiencer. Correspondingly, in (21) the object refers to an abstract mental content that the experiencer receives when visually observing the television set. If the static ‘in’ case inessive were used here, the example would mean that the speaker merely noticed that the newscast was on but possibly did not pay attention to it. In contrast, the ‘from’ case elative conveys the meaning that information was acquired. Example (22) is another interesting case in point: the ‘from’ case elative means that the experiencer received information about the phone number when s/he saw it in the phone book. If the static inessive
were used instead (example [23] below), the meaning would be one where the experiencer merely noticed the fact that the addressee’s phone number was in the phone book (see Huumo 2004).

(23) Nä-i-n numero-si puhelin-luettelo:ssa.
See-PST-1SG number-2SG.ACC phone-book-INE
‘I saw that you were in the phone book.’

Similar minimal pairs can be constructed for the meaning conveyed by (21). In the following example, the object Krisse-n [name-ACC] can refer either to a concrete person, a Finnish television show hostess, or to the television show named after her. If the locative ‘television’ carries the static ‘in’ case, it launches the interpretation where the object refers to the concrete person. If the locative is marked with the ‘from’ case, the object is understood as referring to the show. This is because only the show but not the person can constitute a mental content that “moves” from the television set to the experiencer.

(24) Nä-i-n {televisio-ssa / televisio-sta} Krisse-n.
See-PST-1SG television-INE / -ELA name-ACC
‘I saw Krisse on television.’

It is also worth pointing out that in examples where a ‘from’ case indicates the location of the stimulus, the whole conceptualization of the situation and the semantic role assignment to different participants often differ from those in sentences with a static locative. In examples with a ‘from’ case the concrete target of the visual perception is often “demoted” to the status of a source location (and thus referred to by a locative expression), while the syntactic object, indicating the stimulus of the perceptive relationship, refers to the signal or mental content that proceeds from this source to the experiencer. In the Finnish system, a television set as an artifact is conceptualized as the stimulus and referred to with the syntactic object (as in I saw a television set on the bookshelf). In the context of watching television, however, the television set is conceptualized as the source of a mental content referred to by the object (as in examples (21) and (24)).

In 6.1.1. we saw that the ‘to’ case marking of the locative that indicates the position of the experiencer often emphasizes his or her ability to perceive something (e.g., in spite of a distance) and the fact that the line of sight is clear. In contrast, the ‘from’ cases lacked such implications. If we now consider locatives indicating the position of the stimulus from the same point of view, we observe that in the latter function the ‘from’ case sometimes conveys similar implications as the ‘to’ case in the former function (of indicating the position of the experiencer). These types of
marking are of course both manifestations of the general directionality stimulus ⇒ experiencer. This directionality turns out to be typical in expressions that indicate either the transference of an abstract mental content to the experiencer, or the success of a perceptive event in spite of possible obstacles obstructing the line of sight. Like the ‘to’ cases in (12) and (13) above, the ‘from’ cases marking the position of the concrete stimulus are possible if the line of sight is not clear or if visibility is otherwise endangered. Compare the directional adposition takaa ‘from behind’ with its static counterpart in (25).

(25) Nää-n sinut verho-n {takana / takaa}.
    See-PRES.1SG you.ACC curtain-GEN behind / from.behind
    ‘I [can] see you behind the curtain.’

The difference between the cases is that the postposition takaa ‘from behind’ is directional, but takana ‘(at) behind’ is static. Semantically, the directional takaa emphasizes the speaker’s ability to see the addressee, who may for instance be hiding behind the curtain, while the static takana merely states the fact that the speaker sees the addressee in a particular location. The difference is more striking if the example is negated: in (26) the directional ‘from’ case means that the experiencer cannot see the location where the stimulus is (but knows, or at least assumes, that the stimulus is there), while the static ‘at’ case means that the location itself is visible to the experiencer but the stimulus is not there.

(26) En nää sinu-a verho-n {takana / takaa}.
    NEG.1SG see.CONNEG you-PAR curtain-GEN behind / from.behind
    ‘I cannot see you behind the curtain.’

The negation in the two examples is thus different: with the dynamic takaa (‘from behind’) the denial concerns the successfulness of the perceptive event but not the presence of the stimulus in the location. With the static takana the presence of the stimulus in the location is denied, and the location itself is visible to the experiencer.

In addition to the static cases and the directional ‘from’ cases, the third logical possibility for expressing the location of the stimulus is the ‘to’ case. However, ‘to’ cases are normally not used in this function. To my knowledge, there is only one construction type that allows a ‘to’ case in a closely related function; consider (27).

(27) Nää-n ikkuna-sta-ni järve-lle.
    See-PRES.1SG window.ELA-1PX lake-ALL
    ‘I [can] see to the lake from my window.’
Example (27) does not express visual perception of a particular stimulus but general possibility of seeing in the direction of a location. The construction exemplified by (27) thus lacks a syntactic object that would refer to the stimulus.

6.2. Katsoa ‘look; watch’

6.2.1. The position of the experiencer. If we now compare the agentive activity verb katsoa ‘look; watch’ with the non-agentive experience verb nähdä ‘see’ discussed above, we find that agentivity clearly supports the general directionality experiencer ⇒ stimulus in the case marking of locatives indicating the position of the experiencer. The ‘from’ cases are now the only option for marking the position of the experiencer. Consider (28) (compare it with (12) and (13) above):

(28) Katso-n paraati-a watch-PRES.1SG parade-PAR
    {parvekkee-Ita-ni / *parvekkee-lle-ni}.
    balcony-ABL-1PX / -ALL-1PX
    ‘I [am] watching the parade from my balcony.’

The fact that the ‘to’ case is not possible in (28) shows how strongly agentive visual perception is associated with the directionality experiencer ⇒ stimulus. The obvious motivation of this is the conceptualization of agentivity as involving a fictive energy transmitted from the experiencer-agent towards the stimulus-patient. The third possible option, a static case, is marginally possible in the same way as in sentences with nähdä ‘see’; consider (29).

(29) Kato-lla isä katso-i piha-lla
    Roof-ADE father watch-PST.3SG yard-ADE
    leikki-vääisas-lla.
    play-PRTC-PAR child-PAR
    ‘On the roof, (a/the) father was watching the child who was
    playing in the yard.’

In (29) it is only the father who is on the roof, and the interpretation of the locative is very similar to that in example (17) above. The initial locative of (29) is easily interpreted as carrying a temporal meaning (‘while on the roof’). Interestingly, the use of a static locative may also prevent the conceptualization of ‘looking’ or ‘watching’ as involving a fictive energy stream moving from the experiencer towards the stimulus, and even the agentivity of the verb katsoa ‘look; watch’ may be understood as reduced
in examples with a static locative. In such instances, ‘watching’ is conceived more as an internal activity of the experiencer than as active interaction between the experiencer and the stimulus. Consider the locative case marking in (30) (static) as opposed to (31) (‘from’):

(30) \( \text{Isä katso-i sohva-lla uutis-i-a.} \)

Father watch-PST.3SG sofa-ADE news-PL-PAR

‘Father was watching the news on the sofa.’

(31) \( \text{Isä katso-i sohva-lta vihaisesti huone-seen astu-nut-ta kaupparatsu-a.} \)

father look-PST.3SG sofa-ABL angrily room-ILL step-PRTC-PAR salesman-PAR

‘From the sofa father looked angrily at the salesman who had just entered the room.’

In (30), the predication ‘watching the news’ is compatible with the static adessive marking of the locative ‘sofa’, suggesting that ‘watching the news’ is understood more as an internal activity of the father than as an agentive interaction between him and the television set. In (31), in contrast, the directional ‘from’ case ablative is the most natural choice, since the example represents the angry look of the father as active interaction with the salesman, possibly conveying the message that the father would like the salesman to leave. The aspectual interpretation of the two examples is also relevant from this point of view: in (30) ‘watching the news’ is an unbounded activity, whereas in (31) the visual activity is conceived as a punctual act of glaring.

6.2.2. **The position of the stimulus.** In Section 6.1.2 we saw that in sentences with the experience verb nähdä ‘see’ the unmarked option for marking the position of the stimulus is a static case, even though a ‘from’ case is also possible if the perceptive relationship involves the transference of a mental content from the stimulus to the experiencer. The situation is very much the same in sentences with the activity verb katsoa, though in general the possibility of using a verb-modifying locative to indicate the position of the stimulus alone is more restricted. With katsoa ‘look; watch’ there is a strong tendency to interpret a static locative either as an indicator of a setting where both participants are situated, or (if it indicates the position of the stimulus alone) as a nominal modifier that forms part of the object NP. Consider (32) and compare it with (18) (a similar example with nähdä ‘see’):

(32) \( \text{Katso-i-n puu-ssa lintu-a.} \)

Watch-PST-1SG tree-INE bird-PAR

‘I watched the bird in the tree.’
The locative element *puussa* ‘in the tree’ in (32) is more likely than its counterpart in (18) to be interpreted as indicating a setting where both participants are situated. Because it precedes the object *lintua* ‘bird’, it must be interpreted as a verb modifier (not a nominal modifier inside the object NP, in which case it would indicate the position of the bird alone). The main difference between the two verbs is thus that the narrow-scoped use of a verb-modifying locative, where it indicates the position of the stimulus, is possible with *nähdä* ‘see’ but not with *katsoa* ‘watch’. A possible reason is that *nähdä* ‘see’ often indicates an inchoative perceptive relationship where the presence of the stimulus in the location is new information to the experiencer, whereas *katsoa* ‘watch’ means that the experiencer actively observes a stimulus whose presence in a location s/he already knows.

The other way of indicating the position of the stimulus is a ‘from’ case. This is possible under the same circumstances as in the examples with *nähdä* ‘see’ discussed in Section 6.1.2. A general condition for the use of the ‘from’ cases is that the experiencer acquires a mental content when visually perceiving the stimulus. Consider (33) and (34) and compare them with (21) and (22).

(33) Katso-i-n televisio-sta uutise-t.
    Watch-PST-1SG television-ELA news-PL.NOM
    ‘I watched the news on [‘from’] television.’

(34) Katso-i-n numero-si puhelin-luettelo-sta.
    Look-PST-1SG number-2SG.ACC phone-book-ELA
    ‘I looked up your number in [‘from’] the phone book.’

In the same way as (21) and (22), examples (33) and (34) mean that the experiencer acquires information in the course of the perceptive activity. Note the relevance of the case-marking of the object in these examples from this point of view: instead of the partitive object that indicates aspectual unboundedness, these examples have the accusative object, which causes a reading with bounded aspect. Canonically, perceptive activity verbs indicate unbounded activities (for English perception verbs see Miller and Johnson-Laird 1976: 598–600) and in Finnish they are thus expected to take the partitive object. The reason for the use of the accusative in (33) and (34) is that ‘watching the news’ or ‘checking the phone number’ are undertakings that reach an end-point when the whole news-cast has been watched or the number has been found, and thus the situations they designate are aspectually bounded.

An interesting difference between the experience vs. activity verbs of vision is that examples like (25) (with the person hiding behind the curtain) do not have a counterpart with the activity verb *katsoa*. An example like
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(35) can only mean that it is the experiencer (not the stimulus) who is behind the curtain.

(35) Katso-i-n sinu-a verho-n takaa.

Watch-PST-1SG you-PAR curtain-GEN from.behind

‘I watched ~ was watching you from behind the curtain.’

Exactly like the experience verb nähdä ‘see’, the activity verb katsoa ‘look; watch’ does not allow a ‘to’ case to indicate the position of a concrete stimulus. The ‘to’ case can be used, however, to indicate the general direction of vision (36; cf. with 27)

(36) Katso-n ikkuna-sta-ni järve-lle.

Look-PRES.1SG window-ELA-1PX lake-ALL

‘I am looking at the [in direction of the] lake from my window.’

However, there are some crucial differences between (27) and (36) that concern the directionality and extension of the perceptive relationship. First of all, (36) expresses actual, ongoing visual perception, whereas (27) may merely express the general ability or possibility to see all the way to the lake. When uttering (27), the speaker may thus be merely describing the view from his or her window, but by using 36 s/he means that s/he is actually watching the lake.

Another interesting difference between the two examples is that nähdä ‘see’ foregrounds the distance of vision (‘how far can you see?’) whereas the agentive katsoa ‘look; watch’ foregrounds its direction (‘which way are you looking?’). Thus example (27) (nähdä) emphasizes the speaker’s ability to see as far as the lake, whereas (36) (katsoa) foregrounds the direction of the experiencer’s gaze towards the lake. Such a difference is compatible with the argument of Kirsner and Thompson (1976: 226, 230) that agentic perception involves not only perceiving but also the direction of attention. They give the pair of examples Turning his head, Tom saw (‘noticed’) Joan crossing the street vs. Turning his head, John watched (‘followed visually by changing the direction of his gaze’) Joan crossing the street, which neatly illustrates the difference. Miller and Johnson-Laird (1976: 603) point out that there is “a similarity between looking at something and pointing at something: looking is directing an eye, pointing is directing a finger”. In Finnish, the difference can be made clearer by adding to the examples different kinds of particles that foreground distance vs. direction. In the following examples, the terminative particle asti ‘as far as / all the way to’ foregrounds distance, whereas the particle pääin ‘towards / in the direction of’ foregrounds direction.
(37) Nää-n ikkuna-sta-ni järve-lle
See-PRES.1SG window-ELA-1PX lake-ALL
{asti / pääin}.
all.the.way.to / towards
‘I [can] see {all the way to / towards} the lake from my window.’

(38) Katso-n ikkuna-sta-ni järve-lle
Look-PRES.1SG window-ELA-1PX lake-ALL
{pääin / asti}.
towards / all the way to
‘I am looking {at the [in the direction of the] / as far as} lake
from my window.’

With the particle asti ‘as far as’, (37) is very similar in meaning to (27):
the view from the speaker’s window extends all the way to the lake. The
particle pääin ‘towards’ in turn introduces the additional feature of restrict-
ing the field of vision: from the window one can see in the direction of the
lake but possibly not in other directions. Pääin thus adds extra meaning to
the original example and changes its interpretation more fundamentally
than asti. This is because distance and ability to perceive (but not the di-
rection of perception) are already part of the meaning of the verb nähdä
itself. Example (38), with katsoa, is different in this respect: now it is the
particle pääin ‘towards’ that is more compatible with the meaning of the
verb, adding very little to the general meaning of the sentence. In con-
trast, asti ‘all the way to’ changes the meaning of the sentence fundamen-
tally: it means that the speaker did not direct his or her gaze beyond the
lake. Such particles thus show that nähdä ‘see’ and katsoa ‘look; watch’
are semantically different not only with respect to agentivity but also
with respect to other features of the perceptive relationship: first, nähdä
foregrounds the ability to perceive while katsoa indicates actual percep-
tion, and second, nähdä foregrounds the distance of perception while
katsoa foregrounds its direction.

Another use of the ‘from’ case-marked locative with katsoa (but not
with nähdä) that has not yet been discussed is the meaning ‘(visually)
search for something’. Consider (39).

(39) Katso-i-n jo komero-sta.
Look-PST.1SG already closet-ELA
‘I already looked in the closet [to find something].’

Example (39) means that the experiencer-agent is searching for something
in the closet. The motivation for the ‘from’ case is the intended transfe-
rence of a mental content, i.e., knowledge about the location of the entity
being searched. Such examples bear a resemblance with examples like (8),
which showed that verbs indicating a cognitive change (‘find’, ‘notice’) where the stimulus enters the cognitive dominion of a sentient reference-point, often take a ‘from’ case-marked locative. The use of the ‘from’ case in (39) may appear surprising from the viewpoint of the agentivity of \textit{katsoa} ‘look; watch’; as argued above (Section 6.1.1), agentivity typically favors the directionality \textit{experiencer} \Rightarrow \textit{stimulus}. In (39), however, the agitative verb allows a case ending indicating the opposite directionality (\textit{stimulus} \Rightarrow \textit{experiencer}).

6.3. Näkyä ‘be visible’

6.3.1. The position of the experiencer. The intransitive perceptibility verb näkyä ‘be visible’ differs from the other two verbs of visual perception discussed above with respect to its argument structure. It selects the stimulus as its subject and leaves the experiencer out of its argument structure. This causes a meaning where the perceiver is generic, unless the context implies that the role of the implicit experiencer is actually fulfilled by one or more specific individuals, most typically the speech act participant(s). The nature of the perceptive relationship indicated by the verb näkyä ‘be visible’ also differs from that indicated by the transitive verbs discussed above. Above we have seen that nähdä ‘see’ can sometimes indicate the continuous ability or possibility of visually perceiving something rather than actual seeing, i.e., potentiality rather than actuality in the terminology of Panther and Thornburg (2003). With the verb näkyä ‘be visible’, the interpretation involving mere potentiality of perception is the primary one; in other words, this verb means that the stimulus is visually perceptible, not that it is actually perceived by someone — although the context may of course evoke such implications. Consider (40).

\begin{align*}
(40) & \, \text{Akkia horisonti-ssa näky-i laiva.} \\
& \quad \text{Suddenly horizon-INE be.visible-PST.3SG ship} \\
& \quad \text{‘Suddenly a ship appeared [‘was visible’] in the horizon.’}
\end{align*}

Example (40) is easily understood as indicating that the ship was not only visible (to anyone) but also that it was actually sighted (e.g., by the speaker). Note, too, that in aspectual terms (40) is inchoative even though the basic meaning of näkyä ‘be visible’ is to indicate the state of continuous perceptibility.

It is interesting that even though the experiencer is generic and not referred to by any nominal argument of näkyä ‘be visible’, its position can be indicated by locative elements. The case marking of such locatives
resembles the case marking of similar locatives used with ‘näkyä ‘see’, in
the sense that both a ‘from’ case and a ‘to’ case are possible (41).

(41) Laiva näky-i {ranna-lle / ranna-lta}.
Ship be.visible-PST.3SG shore-ALL / -ABL
‘The ship was visible from the shore.’

Since näkyä ‘be visible’ is an intransitive verb and selects the stimulus as
its subject, one might expect it to favor the directionality stimulus ⇒
experiencer. However, as (41) shows, both directionalities are possible.
In this respect, näkyä resembles the experience verb nähda ‘see’. A subtle
difference between the two verbs is that the semantic markedness of the
‘to’ case as opposed to the ‘from’ case observed with nähda (see Section
6.1.1.) now disappears and the two alternatives are equal. Thus the
‘from’ case does not carry similar implications about visibility being ob-
scured or about the consideration of other possible locations for percep-
tion, as it does with nähda ‘see’.

In Section 3 I pointed out that näkyä semantically resembles nähda
‘see’ when the latter is used in the generic zero-subject construction with
no overt subject NP (4). In fact, even näkyä can be used without an overt
subject. Since the subject of näkyä codes the stimulus, its omission results
in a construction where neither the experiencer (which is always implicit
with this verb) nor the stimulus is referred to by an overt NP. Such an ex-
pression, however, must contain locatives that indicate the position of the
implicit experiencer and the general direction of perceptibility:

(42) Kukkula-lta näky-y mere-lle.
Hill-ABL be.visible-PRES.3SG ocean-ALL
‘From the hill one can see to the ocean.’

Note that even though example (42) structurally resembles the zero per-
son construction and could be classified as such on a purely formal basis,
its meaning is problematic for such an analysis. Since the overt subject of
näkyä designates the stimulus and not the experiencer, one would expect
the zero subject to take on this role as well; in other words, the zero-
subject construction would indicate the visibility of a generic stimulus. If
example (42) were a typical zero-subject construction, it would thus be
expected to mean ‘from the hill one is visible to the ocean’. This is indeed
a possible but a clearly marginal interpretation of the example; the inter-
pretation given in the English gloss of (42) is the primary one (Huumo
2006a). Thus in (42) it is most likely the generic experiencer who is
located on the hill, and the semantic role of the assumed zero subject is
not the one indicated by an overt subject. To see the difference more
clearly, consider (43), which has an overt subject NP:
What these examples show is that in spite of the basic meaning of *näkyä* ‘be visible’, the preferred role occupying the zero subject in such constructions is the implicit experiencer. Another possibility, suggested by Huumo (2006a), is to interpret (42) not as a zero subject construction at all but as a (properly) subjectless expression, indicating the condition of visibility in a particular location. In this case, its structure corresponds to subjectless weather expressions, such as *(Tää-llä) sata-a [(here-ADE) rain-PRES.3SG]* ‘It is raining (here)’, or *(Tää-llä haise-e [here-ADE smell-PRES.3SG]* ‘It smells in here’), where no generic zero subject can be assumed, since the meaning of these examples is clearly not ‘One rains/smells in here’.

6.3.2. The position of the stimulus. In very much the same way as in examples with the experience verb *nähda* ‘see’ (5.1.1.), the position of the stimulus of *näkyä* ‘be visible’ can be indicated by either a static case or a ‘from’ case. However, the general conditions for the use of the ‘from’ cases we observed with *nähda* ‘see’ (i.e., that the stimulus consists of a mental content or that the line of sight is endangered), are not met in examples with *näkyä* ‘be visible’. The latter verb allows the ‘from’ cases to be used more freely, including cases where the stimulus is a concrete entity and no transference of a mental content is indicated, nor is the line of sight obscured or the ability to perceive endangered.

The main difference between the static vs. ‘from’ cases is now that the static case indicates purely the location of visibility of the stimulus and gives rise to no implicatures as to the location of the implicit experiencer, whereas the ‘from’ case implicates that visibility is being considered with respect to the exterior of the location, i.e., whether the stimulus is visible from other places. Thus example (44) below, with a static locative, allows the interpretation where the implicit experiencer is also in the marketplace (sharing the same location with the stimulus), while 45 sets up an external viewpoint and places the implicit experiencer outside the marketplace (note that another reading of (45) is the one where the marketplace is the location of the experiencer and not the stimulus). Therefore only (45) but not (44) allows another locative that indicates the position of the experiencer explicitly.

(44) *Patsas näky-y tori-lla.*
    Statue be.visible-PRES.3SG marketplace-ADE
    ‘The statue can be seen in the marketplace.’
These examples show again how the static locative favors the interpretation as a setting where both the stimulus and the implicit experiencer are situated, whereas the directional locative requires the two participants to be in separate locations.

As pointed out above, nakyä ‘be visible’ allows greater liberty in the use of the ‘from’ cases to mark the location of the stimulus than nähdä ‘see’. With nakyä, the stimulus does not need to be an abstract mental content for the ‘from’ case to be possible. The difference becomes clear if we compare example 45 with the similar zero-subject expression containing the verb nähdä ‘see’ (46). In (45) the ‘from’ case-marked locative is ambiguous as to whether it indicates the position of the experiencer or the stimulus, but in (46) it can only indicate the location of the experiencer, not the stimulus:

(45) Patsas naky-y tori-lta (kirko-lle)
Statue be.visible-PRES.3SG marketplace-ABL (church-ALL)
‘The statue [that is in the marketplace] is visible [from the church].’

(46) Patsaa-n nake-e tori-lta.
Statue-ACC see-PRES.3SG marketplace-ABL
‘One can see the statue from the marketplace.’

To sum up the differences between nakyä ‘be visible’ and the two other vision verbs considered above: nakyä favors the directionality stimulus ⇒ experiencer to a greater extent than the other two verbs. This is not surprising if we take into account the fact that the stimulus is now indicated by the syntactic subject and thus also constitutes the semantic starting point for the whole predication (in the sense of Chafe 1994 or Langacker 1991). Thus it is only to be expected that the directionality can be construed from the point of view of the stimulus more freely than in expressions with the other verbs of perception, which select the experiencer as their subject. However, we have also seen that even though the experiencer remains implicit, it nevertheless has a relatively strong status in the meaning of nakyä: in the zero-subject-like construction exemplified by (42), it conquers the status of the assumed zero argument, and its position can also be referred to by many kinds of locative elements.

6.4. Visual perception and existentiality

Above it has been suggested that expressions of visual perception often include a feature of existentiality, where the presence of the stimulus in the location is new information (to the experiencer) and the perception...
of its presence amounts to the discovery of its existence. Thus the concept of existentiality, the introduction of a discourse-new referent into a situation (i.e., a referent which is discourse-new to the addressee of the utterance), may also be understood in a wider sense and from the point of view of a participant of the designated relationship. In *John found a letter on his table*, for instance, the letter is not only discourse-new to the addressee (as shown by the indefinite article), but is also “new” to John, the referent of the subject, since the sentence designates a situation in which John becomes aware of the letter (for a discussion on definiteness in perceptive relationships, see Wierzbicka 1980: 102–105, 112). Such a conception of existentiality is of course based on the assumption that existentiality is a semantic rather than a syntactic category.

In general, transitive verbs cannot be used in the Finnish syntactic existential construction (for details see e.g., Huumo 2003). Among the Finnish verbs of visual perception it is only the intransitive *näkyy* ‘be visible’ that is available for the syntactic existential construction. The Finnish existential construction deviates from corresponding intransitive sentences in three central features: inverse word order (XVS), lack of subject-verb agreement in person and number, and, in many instances, case marking of the subject with the partitive rather than the canonical nominative of non-existent constructions (for a more detailed account see Huumo 2003). The partitive subject of existentials indicates an unbounded, indefinite quantity of the referent if the subject is a singular mass noun or a plural form. In semantic terms, a central feature of the Finnish existential construction is that even though it can take many kinds of intransitive verbs, the holistic existential meaning of the construction suppresses the dynamic meaning of the verb and foregrounds the existential relationship (as first argued by Penttilä 1956 and Schlachter 1957; a more detailed analysis in English is Vilkuna 1989).

In very much the same way, the perceptibility verb *näkyy* ‘be visible’ seems to background its perceptual meaning when used in the existential construction. For instance, the existential example (47) conveys the meaning ‘there are children in the park’ and backgrounds the meaning of the children’s visibility to an implicit experiencer, as opposed to the non-existent (48).

(47) *Puisto-ssa näky-y laps-i-a.*  
Park-INE be.visible-PRES.3SG child-PL-PAR  
‘There are [seem to be] children in the park.’

(48) *Lapse-t näky-vât puisto-ssa.*  
Chil-PL.NOM be.visible-PRES.3PL park-INE  
‘The children can be seen ~ are visible [if they are] in the park.’
As pointed out by Penttilä (1956), näkyä ‘be visible’ in fact behaves exceptionally as an existential verb, since it sometimes allows the partitive marking of even a singular count noun subject. Thus example (49) with the canonical existential verb olla ‘be; exist’ is ungrammatical with its partitive-marked count noun singular subject, but example (50) with näkyä is acceptable as it indicates partial visibility of the stimulus.

(49) *Ranna-lla on vene-ttä.
   Shore-ADE be.PRES.3SG boat-PAR
   ‘*There is some boat on the shore [intended reading: some pieces of a broken boat].’

(50) Nieme-n takaa näky-y jo vene-ttä.
    Cape-GEN from.behind be.visible already boat-PAR
    ‘[Part of] the boat is already coming into sight from behind the cape.’

Examples like (50) launched an intensive debate between Finnish syntacticians in the 1950s. It was argued that “divisibility” (i.e., the substance-like nature of the referent of the partitive subject) could be understood differently with different verbs, and that entities that were normally indivisible could be understood as “divisible from the point of view of visibility”, making possible such partitive subjects of näkyä (Penttilä 1956: 30; Ikola 1956: 336–337). From our present viewpoint, it is worth pointing out that the locatives in the relevant examples (such as [50]) are marked with the ‘from’ case and not a static case. The directional case marking seems to be a condition for the use of the count-noun partitive subject: if the static locative nieme-n takana [cape-GEN at.behind] ‘behind the cape’ were used in (50), the example would be much less natural. To see the reason for this, compare (50) with our earlier example (25) with nähdä ‘see’ (‘I can see you [“from”] behind the curtain’), which showed that static locatives often indicate a location that is visible to the experiencer, whereas a ‘from’ case-marked locative indicates that visibility is endangered. In my view, it is specifically the meaning of the ‘from’ case that allows the partitive in the singular count noun subject. This is because the ‘from’ case foregrounds the line of sight and the implicit experiencer’s ability to see, but at the same time implies that the location itself is not visible to the experiencer. Example (50) also implies that the boat is gradually entering the field of vision of the experiencer. In my view, it is precisely this incremental (in the sense of Dowty 1991) participation of the boat in the situation that makes the boat “divisible” in the example.

It may also be worth pointing out that among the scholars who studied Finnish existentials in the 1950s, Ikola (1956) suggested that the subject of such examples does not actually refer to the concrete boat but to a visual...
image of the boat, which can be conceived as moving from the boat towards the person who sees it. This interpretation resembles Panther and Thornburg’s (2003) analysis, based on metonymy, in suggesting that an NP that literally indicates a concrete entity may actually refer to a signal emitted by such an entity. This makes example (50) metonymic in the same sense as many of the expressions of hearing and smell discussed in Section 3. In such expressions the NP literally refers to a concrete entity but is metonymically understood as referring to a signal emitted by such an entity (e.g., in I can hear the train the object may actually refer to the noise of the train).

7. Our other remote senses: auditory and olfactory perception

Having concluded our discussion of verbs of vision, we now proceed to verbs indicating auditory and olfactory perception, i.e., hearing and smell. In Section 3, hearing and smell were also characterized as remote senses, since they do not require direct physical contact between the experiencer and the stimulus. In fact, the distance between the participants can be remarkably great, as in I heard the explosion ~ smelt the forest fire from 20 kilometers away. As human sensory capabilities, hearing and smell must nevertheless be considered secondary to vision, which is our primary sense and also linguistically represented as such (cf. the discussion in Section 3).

In the following I discuss expressions of hearing and smell in a similar order as to the discussion of expressions of vision above. Since the two sensory domains have much in common, I discuss them together to avoid repetition. However, I also pay attention to differences between the two domains where such can be observed. I first discuss the experience verbs kuulla ‘hear’ and haistaa ‘smell’, then proceed to the perceptibility verbs kuulua ‘be audible; sound’ and haista ‘[emit] smell’, and finally to the activity verbs kuunnella ‘listen’ and haistella ‘smell’.

7.1. Kuulla ‘hear’ and haistaa ‘smell’

7.1.1. The position of the experiencer. With the experience verbs of hearing and smelling, the position of the experiencer is indicated in much the same way as in the corresponding expressions of vision. Both a ‘from’ case and a ‘to’ case are possible alternatives. However, the semantic markedness of the ‘to’ case that we observed in expressions of vision now vanishes: in expressions of hearing and smell, the ‘to’ case indicating
the position of the experiencer does not foreground his or her ability to
perceive something but is a quite neutral way to refer to the position of
the experiencer.

What causes this difference between the sensory domains is probably
the conceptualization of hearing and smell as the motion of a signal (a
sound or a smell) between the stimulus and the experiencer. Vision, in
contrast, is conceptualized as the perception of a concrete entity in a loca-
tion. Another factor that needs to be taken into account is that in the do-
 mains of hearing and smell the ‘from’ cases are a more productive way of
indicating the position of the stimulus than in the domain of vision (see
Section 7.1.2.). This causes potential ambiguity as to whether a ‘from’-
case-marked locative refers to the position of the experiencer or the stim-
ulus, and may motivate the more extensive use of ‘to’-case-marked loca-
tives in the former function.

In the following discussion I use two kinds of examples at each point:
one where the object refers to a concrete entity and ones where it refers
to a signal (a noise or a smell). As far as the position of the experiencer is
concerned this factor does not affect the case marking. The following ex-
amples show that both the ‘from’ cases and the ‘to’ cases can be used in
this function, irrespective of the nature of the stimulus. Consider first the
locatives in examples (51) and (52) with the verb *haista* ‘smell’; though
some of these locatives are ambiguous (as to whose position they refer
to), the relevant reading is the one where the locative indicates the posi-
tion of the experiencer.

(51) Haista-n roskapöntö-n
    Smell-PRES.1SG garbage-bin-ACC
    {makuuhuonee-sta-ni / makuuhuonee-see-ni}.
    bedroom-ELA-1PX / -ILL-1PX
    ‘I can smell the garbage bin from my bedroom.’

(52) Haista-n roskapöntö-n löyhkä-n
    Smell-PRES.1SG garbage-bin-GEN stink-ACC
    {makuuhuonee-sta-ni / makuuhuonee-see-ni}.
    bedroom-ELA-1PX / -ILL-1PX
    ‘I can smell the stink of the garbage bin from my bedroom.’

In (51), the stimulus is a concrete entity, whereas in (52) it is a signal. In
both cases the position of the experiencer can be indicated by either a
‘from’ case or a ‘to’ case. However, as pointed out above, the ‘from’ cases
are often ambiguous: they can alternatively be understood as referring to
the position of the stimulus (the garbage bin). This interpretation is most
likely in (52) if the elative ‘from’ case is used, since the object refers to a
signal. The example can also be understood as indicating that the stink is
coming out of the bedroom and sensed by the experiencer who is outside the bedroom. A speaker who wishes to avoid such ambiguities has the option of using the ‘to’ cases to mark the position of the experiencer. Now consider similar examples of hearing, (53) and (54).

(53) Kuule-n radio-n
    Hear-PRES.1SG radion-ACC
    {makuuhuonee-sta-ni / makuuhuonee-see-ni}.
    bedroom-ELA-1PX / -ILL-1PX
    ‘I can hear the radio from my bedroom.’

(54) Kuule-n musiiki-n
    Hear-PRES.1SG music-ACC
    {makuuhuonee-sta-ni / makuuhuonee-see-ni}.
    bedroom-ELA-1PX / -ILL-1PX
    ‘I can hear the music from my bedroom.’

The interpretations of these examples resemble those of (51) and (52); the ‘from’ case is ambiguous as to whether it indicates the position of the experiencer or the stimulus, whereas the ‘to’ case can only indicate the position of the experiencer. In particular (54), where the object refers to a signal, allows the alternative interpretation where the elative indicates the source of the music. With the illative, the locative unambiguously refers to the position of the experiencer.

In addition to such directional cases, it is also possible to use static cases to express the position of the experiencer. In such uses they have a similar setting-like function as in our earlier examples of visual perception (Section 6.1.1.). Consider (55) and (56) where the stimulus is a signal:

(55) Parvekkee-lla kuul-i-n kadu-n ääne-t.
    Balcony-ADE hear-PST-1SG street-GEN noise-PL.NOM
    ‘On the balcony I could hear the noises of the street.’

(56) Kadu-lla haisto-i-n paperi-tehtaa-n savu-n.
    Street-ADE smell-PST-1SG paper-factory-GEN smoke-ACC
    ‘On the street I could smell the smoke of the paper factory.’

Here the initial static locative indicates the position of the experiencer alone, in the sense that the entities emitting the signal (the cars and people on the street, the paper factory) are not situated in that location. However, since the object refers to a signal and not to a concrete entity, it is also possible to understand the static locative as actually indicating a setting where both the experiencer and the stimulus (i.e., the noise of the traffic or the smoke of the paper factory) are situated. This is because the signal (noise or smoke) is a substance that fills the whole space.
between its source and the experiencer, and some of it is thus also present in the location of the experiencer.

7.1.2. The position of the stimulus. The question of whether the stimulus is a concrete entity or a signal is even more relevant when we look at locatives marking the position of the stimulus. The ‘from’ cases are now the neutral option if the stimulus is a signal (examples [57] and [58] below), but if it is a concrete entity, then the static cases are the neutral alternative (see [59] and [60]). In addition, there are differences between the two sensory domains (hearing and smell). In (57) (hearing), the use of a static case instead of the ‘from’ case would change the interpretation of the locative into a setting where the experiencer is also situated. The example would then mean that the speaker was in the closet when s/he heard the rustling of the mice. In (58) (smell), it is also possible to use the static inessive (kaapi-ssa [closet-INE]), without changing the scope interpretation where it is only the stink (or the entity emitting the stink) and not the experiencer that is inside the closet.

(57) Kuuli-n kaapi-sta hiir-ten rapina-a.  
Hear-PST-1SG closet-ELA mouse-PL GEN rustling-PAR  
‘I heard the rustling of mice in [‘from’] the closet.’

(58) Haisto-i-n kaapi-sta [~kaapi-ssa] tunkkaise-n löykä-n.  
Smell-PST-1SG closet-ELA[~INE] fusty-ACC stink-ACC  
‘I smelt a fusty stink in [‘from’] the closet.’

This difference hints at the possibility that hearing is understood as a more dynamic and motional sensory relationship than smelling, which amounts to the observation of the presence of the stimulus in a location (roughly the same way as vision). This hypothesis may be supported by the fact that sound waves move relatively rapidly, whereas smells (gases) are slow to move; therefore they are typically not understood as moving but as either being present in a location or not. The situation is different if the stimulus is a concrete entity. In that case even expressions of hearing allow static locatives to indicate the position of the stimulus only. However, the ‘from’ cases are also an option for expressing this meaning. Consider (59) and (60).

(59) Kuuli-n {puu-sta / puu-ssa} satakiele-n.  
Hear-PST-1SG {tree-ELA / -INE} nightingale-ACC  
‘I heard a nightingale in the tree.’

(60) Haisto-i-n {komero-sta / komero-ssa} kuollee-n rota-n.  
Smell-PST-1SG {closet-ELA / -INE} dead-ACC rat-ACC  
‘I smelt a dead rat in the closet.’
With the static cases these examples resemble the expressions of visual perception discussed in Section 6.1.2: the experiencer senses that the stimulus is in a location. The difference lies in the range of use of the ‘from’ cases: these can be used more freely in expressions of hearing and smell than in expressions of vision. However, in the same way as in expressions of vision, the ‘from’ case may bring to the examples an emphasis on the experiencer’s ability to perceive or distinguish the presence of the stimulus by a sense, as if the experiencer were fictively “picking up” the stimulus from its location by perceiving it. Furthermore, in the same way as with visual perception, the static cases may cause an existential-like meaning ‘to perceive by a sense that there is an X in Y’. The distinction is subtle but may show up in examples like 61, where the static inessive and the ‘from’ case elative indicate a semantic opposition.

(61) Haisto-i-n {keito-ssa / keito-sta} valkosipuli-n.
   Smell-PST-1SG {soup-INE / -ELA} garlic-ACC
   ‘I smelt garlic in the soup.’

In this example the static inessive causes an existential-like interpretation ‘I smelt that there was garlic in the soup’. The elative ‘from’ case, on the other hand, foregrounds the perceptive path and the mental operation of detecting the smell of garlic from the soup. The elative would be natural in a context where the cook had mistakenly put garlic in the soup and then, after realizing that the speaker dislikes garlic, tried to hide its smell by adding other spices. Another way of putting it would be to say that the elative takes the presence of garlic in the soup for granted, whereas the inessive introduces the garlic as new information. Consider also (62):

(62) Huume-koira haisto-i amfetamiini-n
   Drug-dog smell-PST.3SG amphetamine-ACC
   matkalauku-sta.
   suitcase-ELA
   ‘The drug dog smelt the amphetamine in the suitcase.’

In (62), the ‘from’ case is preferred, and this kind of a context is indeed what its use is all about: the example emphasizes the dog’s ability to uncover the stimulus from a place where it has been hidden. It is easy to see that this example resembles examples of visual perception such as (25) (‘I can see you “from” behind the curtain’).

7.2. Kuulua ‘be audible’ and haista ‘[emit] smell’

In the same way as visual perception, the domains of auditory and olfactory perception can also be designated by perceptibility verbs that code
the stimulus as their subject and leave the experiencer out of their argument structure. The alternation in the nature of the stimulus between a concrete entity and a signal also shows up in the subject of these verbs; in other words, the subject can refer either to a concrete entity emitting a signal or to the signal itself. The neutral way of indicating the position of the implicit experiencer is to use a ‘to’ case, though a ‘from’ case and a static case are sometimes possible alternatives at least in the domain of hearing (less so in the domain of smell). In this respect these verbs differ from the corresponding verb of vision, nakyä ‘be visible’, which allows both directionalitys relatively freely. With the verbs kuulua ‘be audible’ and haista ‘[emit] smell’, however, the preferred interpretation of a ‘from’ case is clearly the one where it indicates the position of the stimulus and not the experiencer. Therefore other means (such as deictic elements) need to be used to disambiguate the interpretation of the ‘from’ case, if the speaker specifically wants to use a ‘from’ case to express the position of the experiencer. Consider the following examples, where (63) and (65) have subjects that refer to concrete entities and (64) and (66) ones that refer to signals:

(63) Radio-si kuulu-u ylækerta-an.
Radio-2PX be.audible-PRES.3SG upstairs-ILL
‘Your radio can be heard upstairs.’

(64) Laulu-si kuulu-u kada-lle.
Singing-2PX be.audible-PRES.3SG street-ALL
‘Your singing can be heard on the street.’

(65) Roskapöntö haise-e ylækerta-an (asti)
Garbage.bin smell-PRES.3SG upstairs-ILL (all.the.way.to)
‘The garbage bin smells (all the way) upstairs.’

(66) Viemäri-n loyhka haise-e makuuhuonee-seen asti.
Sewer-GEN stink smell-PRES.3SG bedroom-ILL all.the.way.to
‘The stink of the sewer smells all the way to the bedroom.’

Note that especially examples (65) and (66) are more natural if they include the terminative particle asti ‘all the way to / from’ (discussed briefly in Section 6.2.2.), which foregrounds the distance and extension of the perceptive path. These examples are also possible without such particles, but in that case the distance between the participants is not foregrounded, and for instance example (66) can be interpreted as meaning that the sewer is spreading a smell in the bedroom, as if the bedroom were a setting where the sewer itself was also situated.
If the ‘from’ cases are used in such examples, they prefer the interpretation where they indicate the position of the stimulus. This is true especially in the domain of olfactory perception. Compared with the experience verbs of hearing and smell discussed above, and also with the perceptibility verb of vision näkä ‘be visible’, the perceptibility verbs of hearing and smell thus strongly prefer the directionality stimulus ⇒ experiencer. In some contexts, however, even the ‘from’ case can be interpreted as referring to the position of the experiencer. As in (65) and (66) above, this interpretation is more natural if the terminative particle asti ‘all the way to / from’ is used. Consider (67) and (68).

(67) Riitely-nne kuulu-u piha-lta asti.
Quarreling-2PX be.audible-PRES.3SG yard-ABL all.the.way.from
‘One can hear your quarreling as far as from/in the yard.’ [Unless asti is present, it is the quarreling persons that are understood to be in the yard].

(68) Tuo kala haise-e olohuonee-sta asti.
That fish smell-PRES.3SG living.room-ELA all.the.way.from
‘One can smell that fish all the way from the living room.’ [Unless asti is present, it must be the fish that is in the living room.]

If the terminative particle asti is present, it is possible to interpret the locatives in these examples as indicating the position of the experiencer, although in (68) this interpretation is still rather marginal compared to the one where it is the stimulus that is in the location. However, the ‘to’ cases would certainly be a more natural way of expressing the position of the experiencer. Without the particle asti, these ‘from’ case-marked locatives can only indicate the position of the stimulus, i.e., the quarreling persons or the fish. This fact clearly shows the strength of the preference for the directionality stimulus ⇒ experiencer in the case of these verbs.

An interesting question is why the terminative particle asti can change the interpretation so dramatically. A possible explanation is that the typical function of such a terminative particle is to demote the locative semantically to a secondary status, as argued by Päiviö (2007). This is seen most clearly in expressions including two locatives, only one of which is modified by the terminative particle. In such examples, the bare locative is understood as constituting a more fixed sort of landmark than the one modified by the terminative particle. The latter can therefore be characterized as a relative landmark, and its function is to measure a distance from the fixed landmark. Consider (69) and (70).
Juoks-i-n posti-lta kirko-lle asti.

Run-PST.1SG post.o‰ce-ABL church-ALL all.the.way.to
‘I ran from the post office all the way to the church’ [post office =
fixed landmark, church = relative landmark].

(70) Juoks-i-n posti-lta asti kirko-lle.
Run-PST.1SG post.o‰ce-ABL all.the.way.from church-ALL
‘I ran all the way from the post office to the church’ [church =
fixed landmark, post office = relative landmark].

In both examples the bare locative indicates the fixed landmark, with re-
spect to which the distance is measured. For instance in (69) it is taken for
granted that the running started from the post office, and the church is
then introduced as a point of measure for the distance that has been run.
This is easy to understand because it is also supported by the direc-
tionality of the locatives: the expression with the meaning ‘post office’ is
marked with a ‘from’ case and indicates a source location, whereas the
expression with the meaning ‘church’ is marked with a ‘to’ case and indi-
cates the goal of the motion. The example can thus answer a question like
‘how far did you run from the post office?’ Example (70) is more problem-
atic: it shows that the relative status of a landmark is not dependent on
the direction of the motion. In (70) it is the endpoint of the traversed
path that is selected as the fixed landmark, and the starting point of the
path, the post office, is now a relative landmark, a point of measure. The
example can thus answer the question ‘from how far did you run to the
church?’

This function of the terminative particle asti as indicator of a relative
landmark also plays a central role in the examples of auditory and olfac-
tory perception discussed above. In (67) and (68) it is precisely the status
of the ‘from’ case-marked locative as indicator of a relative landmark that
makes it possible to interpret it as indicating the position of the experi-
encer. In such a case the fixed landmark (the position of origin of the
stimulus) remains implicit. Such examples thus actually answer questions
like ‘how far away from its source is the signal (smell or sound) detect-
ible?’ As further examples, consider (71) and (72):

(71) Roskapõnttö haise-e sauna-lle (asti).
Garbage.bin smell-PRES.3SG sauna-ALL all.the.way.to
‘The garbage bin smells (all the way) to the sauna.’

(72) Roskapõnttö haise-e sauna-lta (asti).
Garbage.bin smell-PRES.3SG sauna-ABL all.the.way.to
‘The garbage bin smells (all the way) from the sauna.’

In (71) the locative ‘sauna’ is marked with a ‘to’ case and indicates the
location of the implicit experiencer irrespective of whether the terminative
particle is present. The ambiguity arises in (72), which contains the ‘from’
case-marked locative. The bare locative in (72) is understood as the indi-
cator of a fixed landmark (the position of the garbage bin which is situ-
ated at the sauna and spreads its smell from there). With asti, however,
the example allows both the reading where the garbage bin is at the
sauna, and the one where the sauna is the location of the experiencer
(‘one can smell the garbage bin as far as the sauna’). The mutual status
of the locative expression thus changes when the terminative particle is
added to the example: it becomes a relative landmark and measures the
distance that the signal carries. Recall that expressions of smell strongly
favor the directionality stimulus ⇒ experiencer; as our example (3) in
Section 2 showed, ‘emitting a smell’ can be conceived as a more autono-
mous process than the corresponding relations in other sensory domains.
These factors probably contribute to the conceptualization where it is the
stimulus and not the experiencer whose location constitutes the fixed
landmark.

I now leave the topic of directional locatives and discuss the remaining
alternative, i.e., the use of static locatives to indicate the position of the
participants. In general, static expressions when used with the verbs under
discussion can indicate the position of either the stimulus or the implicit
experiencer. Thus example (73) can mean either that the radio is audible
when it is in the bedroom itself (e.g., it receives a signal only there), or
that the implicit experiencer, who is in the bedroom, can hear the radio,
which is not. Again, the terminative particle asti ‘as far as’ foregrounds
the latter interpretation by making the bedroom a relative landmark.
Similarly in example (74) it is possible that the blue cheese (the stimulus)
is in the living room itself, or that an implicit experiencer who perceives
the smell of the cheese is in the living room. The particle asti again fore-
grounds the latter reading.

(73) Radio kuulu-u makuhuuonee-ssa (asti).
Radio be.audible-PRES.3SG bedroom-INE (as.far.as)
‘The radio sounds (= is on) in the bedroom.’ / ‘One can hear the
radio even in the bedroom.’

(74) Homejuusto haise-e olohuonee-ssa (asti).
Blue.cheese smell-PRES.3SG living.room-INE (as.far.as)
‘Blue cheese smells in the living room.’ / ‘It smells of blue cheese
in the living room.’ / ‘One can smell the blue cheese even in the
living room.’

One reason for the differences between the sensory domains (vision vs.
hearing-smell) is that compared with ‘being visible’, the states of ‘being
audible’ and especially that of ‘smelling’ can be understood as more
autonomous processes where an entity is emitting a signal. Thus the
status of an implicit experiencer is weaker in such expressions than it is
in expressions of vision: a stimulus can emit a smell or a sound auto-
nomously, without being observed by an experiencer. ‘Being visible’, on the
other hand, is a relationship between a stimulus and an experiencer; it
cannot be conceived as an autonomous process of emitting a sensory sig-
nal. Thus the perceptibility verb of vision is semantically different from
the perceptibility verbs of hearing and smell in that the role and status of
the implicit experiencer is stronger. As we saw in Section 2 (example [3]),
in particular the perceptibility verb for smell, haista, has the autonomous
meaning ‘emit a smell’, and does not necessarily imply an experiencer at
all. ‘[Emitting] smell’ is thus conceptualized as the most autonomous pro-
cess of the three; ‘being audible’ (in the sense ‘emitting a sound’) has an
intermediary status between the two other domains; ‘being visible’ has
the weakest status as an autonomous process.

7.3. Kuunnella ‘listen’ and haistella ‘smell’

The perceptive activity verbs kuunnella ‘listen’ and haistella ‘smell’ are
agentive verbs, like their visual counterpart katsoa ‘look; watch’. It is
thus not surprising that they favor the ‘from’ case marking of the locative
that indicates the position of the experiencer. It can be argued that this
reflects the conceptualization of agentive perception as an energy stream
directed from the experiencer towards the stimulus. A static case is often
a possible alternative, conceptualizing the perceptive relationship more as
an internal activity of the experiencer than as interaction between the ex-
periencer and the stimulus (cf. our earlier visual examples [30] and [31] in
Section 6.2.1). In the following examples the ‘from’ case is therefore more
natural in (75) than in (76): in (75), ‘listening to the speaker’ is a relation-
ship of interaction, while in (76) ‘listening to the radio’ is conceived as an
internal activity of the father rather than as interaction between him and
the radio. In spite of such preferences, both examples allow both kinds of
case marking. Example (77) indicates olfactory perception, and it also al-
loows both the static case and the ‘from’ case in the locative expression
that indicates the position of the agentive experiencer.

(75) Pormestari kuuntel-i puhuja-a
Mayor listen-PST.3SG speaker-PAR
{parvekkee-ltta-an ~ parvekkee-lta-an}.
{balcony-ADE-3PX / -ABL-3PX}
‘The mayor listened to the speaker on [~from] his balcony.’
It is worth pointing out that at least in expressions of auditory perception, even a ‘to’ case can marginally be used to indicate the position of the experiencer. In example (78) the ‘to’ case of the locative is motivated by the conceptualization of the perceptive relationship as involving the transference of a mental content (the sports results) to the awareness of the athlete:

(78)  
Urheilija kuuntel-i tulokse-t takahuonee-seen.9  
Athlete listen-PST.3SG result-PL.NOM backroom-ILL  
‘The athlete listened to the results in [‘into’] the back room.’

If we look at locatives that indicate the position of the stimulus, we can again observe some crucial differences between the sensory domains, on the one hand auditory / olfactory perception, on the other vision. Considering that the verbs haistella ‘smell [agentive]’ and kuunnella ‘listen’ strongly favor the ‘from’ case marking of the position of the experiencer, it may be surprising that they also favor the ‘from’ cases in the coding of the position of the stimulus. This is especially clear in expressions that convey the meaning of ‘searching’ (by a sense). Consider 79 and 80, and compare them with the visual example (39).

(79)  
Huunekoira haistel-i matkalauku-sta  
Drug.dog smell-PST.3SG suitcase-ELA amfetamiini-a.  
amphetamine-PAR  
‘The drug dog sniffed the suitcase for amphetamine.’

(80)  
Kuuntel-i-n välikato-sta hiir-ten  
Listen-PST-1SG ceiling-ELA mouse-PL.GEN rapina-a.  
scratching-PAR  
‘I was listening for the scratching of mice in the roof.’

In the same way as in (39), these examples mean that the agentive experiencer is attempting to find something by actively observing a location.
is thus this attempted transfer of a mental content from the location to
the experiencer that motivates the ‘from’ case marking in these examples,
just as in example (39) indicating vision. However, the use of the ‘from’
cases is not limited to such instances. Especially if the stimulus is a signal,
the ‘from’ case is a quite productive and neutral way of indicating its
location.

8. Conclusions

This analysis of the locative modifiers of Finnish verbs of perception has
revealed substantial differences on one hand between the different verbs in
each domain, on the other between the different sensory domains as a
whole. Within each sensory domain there are differences between the
verbs of perceptibility, perceptive experience and perceptive activity. A
general tendency is that the agentive activity verbs favor the directionality
experiencer ⇒ stimulus to a greater extent than the other verb types. This
is easy to explain by the nature of agentive perception as involving a fictive
energy stream directed by the experiencer-agent towards the stimulus.
There are also differences between the two remaining groups of verbs:
intransitive perceptibility verbs (which select the stimulus as the subject)
favor the directionality stimulus ⇒ experiencer to a greater extent than
transitive verbs of perceptive experience. This difference is much stronger
in the domains of auditory and olfactory perception than it is in vision.
However, in all three domains the conceptualization of the perception as
involving the transference of a mental content from the stimulus to the
experiencer strengthens the tendency to use locatives marking the direc-
tionality as stimulus ⇒ experiencer.

In general, vision differs from the two other domains in that static loca-
tives may be used more productively to indicate the position of the stimu-
lus alone. Expressions of vision also favor the directionality experiencer
⇒ stimulus over the directionality stimulus ⇒ experiencer to a greater ex-
tent than the other domains. Static cases are the basic means for indicating
the position of the stimulus (the referent of the object) with the experi-
ence verb nähdä ‘see’, unless the transference of a mental content is
indicated or the clarity of the line of sight is endangered. In those cases,
a ‘from’ case is the most typical means of marking the position of the
stimulus. The situation is different in the other sensory domains. With
the experience verbs kuulla ‘hear’ and haistaa ‘smell’, the ‘from’ cases are
a neutral means of indicating the position of all kinds of stimuli, includ-
ing concrete entities that do not constitute a mental content. In these do-
mains there are thus no similar restrictions for the use of the ‘from’ cases
as there are in the domain of vision. Within the group of intransitive perceptibility verbs, the vision verb näkyä ‘be visible’ is more neutral with respect to directionality and allows both codings, whereas the verbs kuulua ‘be audible’ and haista [emit] smell’ show a strong preference for the directionality stimulus ⇒ experiencer.

A fundamental difference that may explain such differences between vision and the other two domains is that in vision the stimulus is canonically conceived as a concrete object, whereas in the domains of hearing and smell it can also be conceived as a signal. Even if the NP indicating the stimulus literally refers to a concrete object, there are reasons for arguing that the interpretation should be understood as metonymic and that the actual referent of the expression is a signal, not a concrete entity emitting the signal (Panther and Thornburg 2003). Furthermore, as has been argued above, the motion of auditory and olfactory signals (sounds and smells) can be more directly detected by human beings than the motion of a visual signal, which is based on the invisible motion of light. It is thus possible that this different nature of the stimuli plays a central role in the determination of directionality in the different sensory domains, strengthening the likelihood of the directional conceptualization stimulus ⇒ experiencer in the domains of auditory and olfactory perception.

Expressions of perception can also be studied from the point of view of existentiality, i.e., as indicators of the existence of the stimulus, which is introduced as new information. Above we have seen that the perceptibility verb of vision, näkyä ‘be visible’, can be productively used in the Finnish existential construction. In this construction, the lexical meaning of the verb (perceptibility) is backgrounded and partly replaced with the holistic existential meaning of the construction. If we now consider the perceptibility verbs of hearing and smell from the viewpoint of existentiality, we find that these verbs differ from the visual verb in their ability to be used in the existential construction. The verb kuulua ‘be audible’ allows the existential use if its subject refers to a sound signal which is continuous and thus quantitatively unbounded. Consider (81).

(81) Metsä-ssa kuulu-i lintu-jen laulu-a
wood-INE be.audible-PST.3SG bird-PL.GEN singing-PAR
‘In the woods one could hear birdsong.’ / ‘Birdsong sounded in the woods.’

This verb also has an idiomatic use in negated existentials, where it can indicate the subject’s failure to appear in a location (also implying that someone is expecting it there). In this usage, the subject normally refers to an animate entity, and auditory perception is not involved at all:
The boy did not come home [though someone was waiting for him].

In contrast, the perceptibility verb *haista* ‘emit smell’ does not allow the partitive subject even if the word order is XVS and the subject is a mass noun. For instance, (83) can only take the nominative subject, and the partitive *kahvi-a* [coffee-PAR] is impossible.

Coffee smells in here.’ / ‘It smells of coffee in here.’

Finally, let us return to the opposition between static vs. directional cases in expressions designating the position of the stimulus. Above it has been argued that the selection of a ‘from’ case, as opposed to a static case, often reflects the construal of the perceptive relationship as involving the transference of a mental content from the stimulus to the experiencer. This is the case especially in the domain of vision. However, other semantic factors may also be involved that have not been thoroughly discussed above. Such a factor is the degree of subjectivity and the difference in perspective of the speaker on the designated situation. When using a static expression to indicate the position of the stimulus, the speaker conceptualizes the perceptive relationship in a subjective manner, “from inside”, identifying his or her perspective with that of the experiencer. In such a case the speaker “only senses what the experiencer senses”: either that the stimulus is sensed in the location (in affirmative sentences) or that it is not sensed there (in negated sentences). When using a ‘from’ case, on the other hand, the speaker selects an external, objective and “omniscient” perspective on the situation and is also able to “sense what the experiencer cannot sense”, i.e., that the stimulus may be in the location even if the experiencer cannot sense it. The difference shows up in examples where the perceptive relationship involves the factor of a subjective interpretation, i.e., where the stimulus is not a concrete entity but an abstract quality of such a nature that people may disagree on whether it is there or not. Consider (84) and (85).

Liisa could hear the composer’s anguish in the music.”
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(85)  
Liisa kuul-i musiiki-sta säveltäjän-
Name hear-PST.3SG music-ELA composer-GEN
ahdistukse-n.
anguish-ACC
‘Liisa could hear the composer’s anguish from [= by listening to] the music.’

In (84), the ‘composer’s anguish’ is understood as a feature of the music, whereas in (85) the music is merely a channel or medium through which Liisa can detect the anguish of the actual composer (Viinamäki 2006). There is also a difference in the degree of the speaker’s commitment to the existence of the anguish: in (84) it is possible that the anguish is merely Liisa’s subjective interpretation of the music, but in (85) the speaker is committed to the actual existence of the anguish. This difference is also related to the more general question of whether verbs of perception are implicative or not (see Kirsner and Thompson [1976: 212–213] and Miller and Johnson-Laird [1976: 586–586] for arguments against such a view). In Finnish, the selection of a static vs. a dynamic case may thus contribute to the conceived implicativity of the perceptive expression. The following are semantically more concrete examples which display the same difference.

(86)  
Pekka maisto-i keito-ssa valkosipuli-n
Name taste-PST.3SG soup-INE garlic-ACC
‘Pekka [thought he] tasted garlic in the soup’

(87)  
Pekka maisto-i keito-sta valkosipuli-n
Name taste-PST.3SG soup-ELA garlic-ACC
‘Pekka [was able to] taste the garlic in the soup’

Again, the static case in (86) limits the conceptualizer’s perspective on what Pekka perceives, or what kind of sensation he has when he tastes the soup. The speaker is not committed to the existence of garlic in the soup but merely describes Pekka’s experience. In (87), on the other hand, the presence of garlic in the soup is taken for granted and the question is of whether Pekka is able to detect it or not.

In negated sentences this difference is even clearer: the static case amounts to a denial of the presence of the stimulus in the location, whereas the ‘from’ case may implicate that the stimulus is in the location but the experiencer is not able to detect it. Thus the negated (88), with the static inessive, leaves it open whether there was garlic in the soup at all, whereas (89), with the ‘from’ case elative, implies that there was garlic in the soup but Pekka was unable to detect it.
This phenomenon is also related to the existential meaning often associated with the static cases: the negation of existence amounts to the denial of the presence of the stimulus in its location (in the perceptive dominion of the experiencer), whereas the negation of the predication indicated by the ‘from’ case amounts to the denial of a (fictive or factive) motion by a signal towards the experiencer. Such differences clearly show how the speaker can manipulate not only the conceived directionality of perception and interpretations based on this, but also implications concerning his or her degree of commitment to the successfulness and validity of the perceptive relationship.

Notes

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2. The technical definition for the trajector is “the figure within a relational profile”, and for the landmark, “a salient substructure other than the trajector of a relational predication or the profile of a nominal predication” (Langacker 1987: 490, 494). Thus in a relational predication, such as the one indicated by a verb, an adposition, or a semantic case ending, the trajector is the more prominent entity, the primary focus of attention, and often the entity to be located with respect to a landmark. For instance, in the NP the book on the table there is a relational locative predication indicated by the preposition on, which selects ‘the book’ as its trajector and ‘the table’ as its landmark. This distinction exemplifies the more general cognitive phenomenon of figure / ground organization (see Talmy 2000: Chapter 5).


4. The following abbreviations are used in the glosses: ABL = ablative, ACC = accusative, ALL = allative, ELA = elative, CONNEG = connegative verb form, ESS = essive, GEN = genitive, ILL = illative, INE = inessive, NEG = negation verb, NOM = nominative, PAR = partitive, PL = plural, PRES = present tense, PRTC = participle, PST = past tense, PX = (Xth person) possessive suffix, REFL = reflexive, SG = (Xth person) singular, TRA = translative.
5. Note that Table 1 shows the stems of these verbs (to make it easier to discuss their mutual derivational relations); in the rest of this article, however, I refer to them in the text using their infinitival forms.

6. Elsewhere this affix has an iterative meaning. For instance, when attached to the semelfactive verb stem *aivasta* - ’sneeze (once)’ the affix -ele- produces the iterative *aivastele* - ’sneeze repeatedly’. In verbs of perception, however, this affix introduces not the iterative but the agentive meaning.

7. The concept of veridicality must not be understood in an absolute sense. According to Talmy (2000: 100), the term ‘factive’ is intended to indicate “a cognitive assessment of greater veridicality but not to suggest that a representation is in some sense objectively real”. Correspondingly, the term ‘factive’ is used “for its reference to the imaginal capacity of cognition, not to suggest that a representation is somehow objectively unreal”.

8. Recall that normally only mass nouns and plural forms take the partitive in affirmative existentials.

9. I am grateful to Krista Ojutkangas for this example.

References


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