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Is perception a directional relationship? On directionality and its motivation in Finnish expressions of sensory perception¹

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12 *Abstract*

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14 *This article examines the hypothesis that sensory perception is linguistically*
15 *conceptualized as a directional relationship that involves the motion of a*
16 *signal between the experiencer and the stimulus. The hypothesis is tested*
17 *with data from Finnish. The study focuses on expressions of visual, auditory*
18 *and olfactory perception. The data consist of sentences including a percep-*
19 *tion verb and a locative element that indicates the position of either the ex-*
20 *periencer or the stimulus. There are three options for marking such a loca-*
21 *tive: a static ‘in’/‘on’/‘at’ case, a directional ‘from’ case, or a directional*
22 *‘to’ case. The results reveal crucial differences on the one hand between dif-*
23 *ferent verbs in each domain, on the other between the different sensory*
24 *domains. Agentive perception verbs favor the directionality experiencer ⇒*
25 *stimulus to a greater extent than non-agentive or intransitive perception*
26 *verbs. The opposite directionality (stimulus ⇒ experiencer) is favored if*
27 *the stimulus is a signal or a mental content rather than a concrete entity.*
28 *In general, expressions of visual perception favor the static coding to a*
29 *greater extent than expressions of auditory and olfactory perception, which*
30 *favor the directional stimulus ⇒ experiencer coding. It is argued that this*
31 *difference follows from the conceptualization of auditory and olfactory per-*
32 *ception as involving the motion of a signal (a sound or a smell) as opposed*
33 *to visual perception, which is conceptualized as the perception of a concrete*
34 *entity.*

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37 **1. Introduction**

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39 Our conception of the world surrounding us is based on sensory percep-
40 tion. Our sensory system determines what kinds of stimuli we are capable
41 of perceiving; it also affects our understanding of the entities we perceive,
42 the point(s) of view on the perceived situation we are able to select, and

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1 what attracts our attention (the *figure* sensu Talmy 2000) as against what
2 remains backgrounded (the *ground*). We also maintain conceptions con-
3 cerning sensory perception as such; these conceptions are manifested in
4 the linguistic expressions that designate perception. By studying the lin-
5 guistic expressions of sensory perception, we can find out how language
6 conceptualizes perception, its participants and the relationships that pre-
7 vail between them — in other words, the “folk model” of perception that
8 underlies its linguistic coding.

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

30 In cognitive linguistic terms, the locative cases and adpositions basi-
31 cally indicate a relationship between two participants: the *trajector*
32 (= the entity whose position is indicated) and the *landmark* (the entity
33 with respect to which the position of the trajector is indicated).² In gen-
34 eral, the static position of a trajector with respect to a landmark is ex-
35 pressed by a static locative case or adposition; the changing position of a
36 trajector that enters the (dominion of the) landmark is expressed by a di-
37 rectional ‘to’ case or adposition; and the changing position of a trajector
38 that exits the (dominion of the) landmark is expressed by a directional
39 ‘from’ case or adposition.³

40 Finnish also uses locative expressions to indicate nonspatial relations,
41 such as internal states, time, possession, and relations where spatial and
42 nonspatial factors interact. In expressions belonging to the latter group

1 the spatial position of the trajector (with respect to the landmark) remains
2 static, but the trajector also undergoes a non-spatial change which moti-
3 vates the use of a directional locative to indicate its position. For instance
4 expressions of a cognitive change where the trajector enters the cognitive
5 dominion (i.e., awareness, consciousness, perception or possession) of a
6 sentient reference point (see Langacker 1993 for the term) often take a di-
7 rectional ('from') locative that literally indicates motion away from a lo-
8 cation. In the Finnish system we for instance 'find' or 'buy' things *from*
9 places, even when no spatial motion is indicated, e.g., *Löys-i-n seinä-stä*
10 *halkeama-n* [find-PST-1SG wall-ELA crack-ACC]⁴, literally 'I found a
11 crack *from* the wall'. In this example, the 'from' case marking of the loca-
12 tive meaning 'wall' is motivated by the abstract motion of the crack into
13 the awareness of the speaker. Correspondingly, relations where the trajec-
14 tor exits the cognitive dominion of a sentient reference point often involve
15 the trajector's fictive motion into its spatial location. For instance, one
16 can 'lose', 'leave' or 'forget' things *into* their places (for details see
17 Huumo, 2006b, and Section 5 of this article). Such examples show that
18 the directional locative system is a highly complex way of expressing not
19 only spatial but also other kinds of relations, including ones that indicate
20 an interplay between spatial and cognitive-perceptive factors.

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

36 The discussion proceeds as follows: after introducing the Finnish basic
37 verbs of perception in Section 2, I proceed to discuss some general fea-
38 tures of the linguistic coding of perceptive relationships: the nature of the
39 participants (Section 3) and the conceptualization of perception as direc-
40 tional (Section 4). In Section 5, I introduce the abstract uses of the Finn-
41 ish locative cases and adpositions, in order to build up a general back-
42 ground for the study of expressions of perception. Section 6 forms a

1 detailed study on the use of directional locatives in expressions of visual
 2 perception, while Section 7 is a similar study of expressions indicating au-
 3 ditory and olfactory perception. In Section 8 I sum up the results of the
 4 study.

5 In this article I will show, first, that in each sensory domain *agentivity*
 6 plays a central role in the selection of directionality. Agentive perception
 7 is more likely to be coded by locatives that indicate the directionality
 8 *experiencer* \Rightarrow *stimulus* than non-agentive perception. This reflects the
 9 conceptualization of agentive perception as involving an “energy stream”
 10 that moves from the experiencer-agent towards the stimulus-patient (see
 11 Croft 1991; Langacker 1987). Besides agentivity, another crucial factor is
 12 whether the perception involves the *transference of a mental content* from
 13 the stimulus to the experiencer. This is the case if the experiencer not only
 14 perceives the stimulus but also acquires information when this happens.
 15 Such expressions strongly favor the directionality *stimulus* \Rightarrow *experiencer*.
 16 The study will also reveal differences between the three sensory domains
 17 studied. Vision differs from hearing and smell by favoring a more static
 18 locative coding of the position of the participants. Hearing and smell
 19 in turn favor the directional coding of the type *stimulus* \Rightarrow *experiencer*.
 20 This suggests that hearing and smell, more systematically than vision,
 21 are conceptualized as involving the motion of a “perceptive signal” from
 22 the stimulus towards the experiencer.

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25 2. The basic verbs of perception in Finnish

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27 Finnish basic verbs of perception follow the typologically common tripar-
 28 tite division proposed in the typological study of Viberg (1984: 124–127;
 29 2001: 1295). Viberg first classifies verbs of perception into two main
 30 groups: *experiencer-based verbs* (which select the experiencer as the sub-
 31 ject and the stimulus as the object) and *phenomenon-based verbs* (which
 32 select the stimulus as the subject). In this classification, experiencer-based
 33 verbs are thus transitive and phenomenon-based verbs intransitive verbs
 34 of perception. Experiencer-based verbs are further divided into agentive
 35 *activity verbs* and non-agentive *experience verbs*. The experiencer-subject
 36 of the activity verbs also contains features of an agent, since these verbs
 37 indicate self-initiated and controlled perception where the experiencer
 38 actively focuses or directs his or her perceptive organ towards the stimu-
 39 lus. Non-agentive perception verbs indicate involuntary perception,
 40 where the experiencer does not control the perceptive relationship.

41 This far, Viberg’s system applies to Finnish almost perfectly; consider
 42 the Finnish system of perception verbs in Table 1 below. However, it

1 Table 1. Finnish basic verbs of perception (verb stems)⁵

2 MEANING	3 perceptibility intransitive	perceptive experience transitive, non-agentive	perceptive activity transitive, agentive
4 vision	<i>näky-</i> ‘be visible’	<i>näke-</i> ‘see’	<i>katso-</i> ‘look; watch’
5 hearing	<i>kuulu-</i> ‘be audible’	<i>kuule-</i> ‘hear’	<i>kuuntele-</i> ‘listen’
6 smell	<i>haise-</i> ‘[emit] smell’	<i>haista-</i> ‘[feel a] smell’	<i>haistele-</i> ‘smell’
7 taste	<i>maistu-</i> ‘[emit] taste’	<i>maista-</i> ‘[sense a] taste’	<i>maistele-</i> ‘taste’
8 touch	<i>tuntu-</i> ‘feel’	<i>tunte-</i> ‘feel’	<i>tunnustele-</i> ‘feel’

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13 needs to be pointed out that the Finnish experience verbs for smell
14 (*haista-*) and taste (*maista-*) also allow an agentive interpretation, even
15 though there are separate activity verbs for these domains as well. A
16 more essential deviation from Viberg’s typology is what I take to be the
17 Finnish group of phenomenon-based (i.e., intransitive) verbs of percep-
18 tion. These verbs, listed in the leftmost column of Table 1 under the title
19 *perceptibility verbs*, indicate generic perceptibility, where the stimulus is in
20 principle perceptible to any potential experiencer who enters the situation.
21 They carry meanings such as ‘be visible’, ‘be audible’, ‘[emit a] smell’ etc.
22 In contrast, the class of phenomenon-based verbs in Viberg’s typology
23 (1984, 2001) includes such expressions as *John looks tired* or *The cloth*
24 *felt soft*, which indicate not perceptibility alone but also an impression
25 evoked by the perception in the (implicit) experiencer. For instance, *John*
26 *looks tired* means not only that John is visible to the implicit experiencer
27 but also that his internal state can be evaluated (as tired). Such meanings
28 can also be expressed in Finnish, but since they involve other factors in
29 addition to perceptibility I do not include them in my study. With this
30 difference in mind, consider the system of Finnish verbs of perception in
31 Table 1.

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

1 for instance *The old paint shows through the wallpaper* or *Suddenly a hor-*
 2 *rible yell sounded*. More canonical examples like (1) and (2) below can
 3 only be translated into English using different constructions.

- 4 (1) *Taivaa-lla näky-y lintu.*
 5 sky-ADE be.visible-PRES.3SG bird
 6 ‘There is a bird in the sky.’ / ‘A bird can be seen in the sky.’
 7 (2) *Laulu kuulu-u piha-lla.*
 8 Singing be.audible-PRES.3SG yard-ADE
 9 ‘[The] singing can be heard in the yard.’
 10

11 As far as the morphological structure of the Finnish perception verbs is
 12 concerned, it is easy to see that most of the activity verbs (with the excep-
 13 tion of the agentive verb of vision) are derived from the experience verbs
 14 by adding the derivative affix *-ele* (e.g., *haista-* - *-ele-* ⇒ *haistele-*).⁶ Table
 15 1 also shows that most Finnish perceptibility verbs are derived from the
 16 experience verbs by adding the affix *-U* (e.g., *näke-* ‘see’ - *-U-* ⇒ *näky-*
 17 ‘be visible’). The general function of this affix is reflexive, but actually it
 18 generates many different kinds of intransitive (e.g., anticausative, medio-
 19 passive) meanings where no reflexivity is necessarily involved. In semantic
 20 terms, perceptibility verbs are not reflexive; for example, *näkyä* ‘be visi-
 21 ble’ does not mean either ‘see oneself’ or ‘make oneself seen’. In fact,
 22 Finnish perceptibility verbs do not indicate an actual event of ‘being
 23 seen’ at all but merely the ongoing potentiality of such an event.

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

33 It should also be mentioned that in addition to the basic verbs of per-
 34 ception listed in Table 1 Finnish has a large number of other perception
 35 verbs that are not discussed in this article. Especially in the domain of
 36 agentive visual perception many descriptive verbs are available (with
 37 meanings such as ‘stare’, ‘glare’, ‘gape’ etc.; see Pajunen 2001: 320). Fur-
 38 thermore, many of the basic verbs of perception listed in Table 1 also
 39 have abstract meanings, where they indicate other than perceptive rela-
 40 tionships (such as ‘understanding’), but such uses are also excluded from
 41 this discussion (for a discussion on the abstract meanings of English per-
 42 ception verbs see Sweetser 1990: 37–44).

1 **3. The perceptive relationship and its participants**

2

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

17 (3) *Vesitorni näky-y tää-ltä.*
18 Watertower be.visible-PRES.3SG here-ABL
19 'The water tower is visible from here.'

20
21 The semantic gap between perceptibility verbs (indicating potential per-
22 ception) and experience verbs (indicating actual perception) is closed
23 when the latter are used in the so-called zero subject construction. In this
24 construction, the verb is in the 3rd-person singular form but there is no
25 overt subject to code the experiencer, and the interpretation is generic in
26 the same way as in (3). This construction is illustrated by example (4),
27 which can be compared with example (5) with an overt subject NP (for a
28 detailed analysis of the Finnish zero-subject construction see Laitinen,
29 2006).

30 (4) *Vesitorni-n näke-e tää-ltä.*
31 Watertower-ACC see-PRES.3SG here-ABL
32 'One can see the water tower from here.'

33 (5) *Liisa näke-e vesitorni-n tää-ltä.*
34 Name see-PRES.3SG watertower-ACC here-ABL
35 'Liisa sees [can see] the water tower from here.'

36
37 The structural difference between examples (3) (with the verb *näkyä* 'be
38 visible') and (4) is that in (3) the clause-initial nominative form *vesitorni*
39 'water tower', indicating the stimulus, is the syntactic subject, whereas in
40 (4) the initial *vesitornin* is the syntactic object (as shown by the accusative
41 case marking) and no overt subject is present; hence the term *zero subject*.
42 Example (5) is the corresponding example with an overt subject. It is easy

1 to see that examples (3) and (4) resemble each other in that both indicate
 2 non-agentive visual perception, where only the stimulus is specified by an
 3 overt NP but the experiencer has no overt coding and is interpreted as ge-
 4 neric (see Löflund 1998: 153–154; Laitinen, 2006). The perceptive rela-
 5 tionship is also similar in the two examples, in the sense that both indicate
 6 potential rather than actual perception. The reasons for this, however, are
 7 different: in (3) it is the lexical meaning of the verb *näkyä* that indicates
 8 such a meaning, whereas in (4) the meaning of potentiality is created by
 9 the zero-subject construction, where the experiencer is understood as ge-
 10 neric. Examples (3), (4) and (5) can thus be seen as forming a continuum
 11 from the meaning of general perceptibility to the meaning of actual visual
 12 perception by a specific experiencer.

13 In a perceptive relationship, the range of potential fillers of the experi-
 14 encer role is quite narrow: the experiencer must be an animate entity that
 15 is capable of sensory perception (unless a metaphorical reading is in-
 16 tended). In contrast, the nature of the stimulus can vary freely: it can be
 17 a concrete entity (as in *I saw a dog*), an event (*I saw a dogfight*), or some
 18 kind of a substance such as radiation (*I saw light*). In addition to “pure”
 19 perception of a concrete entity, a perceptive relationship can also include
 20 mental operations such as the interpretation or evaluation of what is
 21 perceived or the drawing of conclusions from it (for a thorough discus-
 22 sion, see Kirsner and Thompson 1976; Miller and Johnson-Laird 1976:
 23 583–618). If this is the case, then the stimulus can also be a proposition
 24 expressed by a whole subordinate clause (e.g., *I saw that he had cried*; for
 25 different kinds of stimuli in perceptive relations, see Dik and Hengeveld
 26 1991). Though it is usually the case that in perceiving an event or a
 27 situation we also perceive the participants of that situation, Kirsner and
 28 Thompson (1976: 209) show that there are instances where an event is
 29 only perceived globally, without perceiving an individual participant of
 30 the event (as in their example *I have seen faith accomplish miracles*).

31 Many expressions of sensory perception, especially non-visual percep-
 32 tion, also allow the speaker to choose between different conceptualiza-
 33 tions of the nature of the stimulus. The stimulus can often be understood
 34 either as a signal or as a concrete entity emitting the signal. We can for
 35 instance say, conveying approximately the same meaning, either *I heard*
 36 *a nightingale* or *I heard the singing of a nightingale*; either *I smelt a rose*
 37 or *I smelt the scent of a rose*. On the grounds of such variation, Panther
 38 and Thornburg (2003: 225–229) argue that many (English) expressions of
 39 sensory perception are in fact metonymic, in the sense that they literally
 40 refer to a signal but that their actual referent is the entity emitting the sig-
 41 nal. For instance, the question *What is that noise?* can be understood as
 42 metonymic if the purpose of the speaker is to obtain information about

1 the causer of the sound instead of the sound itself (e.g., when expecting an
2 answer like *It's a squirrel* rather than *It's a cracking sound*). Panther and
3 Thornburg argue that such expressions utilize the metonymy PERCEPTUAL
4 EVENT FOR ITS CAUSE. Interestingly, this metonymy also seems to work in
5 the opposite direction: we can say for instance *Rotten fish smelt in the*
6 *empty warehouse*, without meaning that there is actually a rotten fish in
7 the warehouse; it suffices if such a smell can be detected.

8 Importantly, Panther and Thornburg (2003) also point out that nomi-
9 nal expressions referring to a signal are most typical in the domains of
10 hearing, smell and taste (e.g., *I heard a loud noise*, *I felt the fresh smell of*
11 *newly baked bread*, *I tasted the salty taste of seawater*). In the domain of
12 vision, on the other hand, such expressions are rare. In fact, there is no
13 neutral word for a visual stimulus corresponding semantically to nouns
14 like *sound* and *smell* (see also Miller and Johnson-Laird 1976: 617–618).
15 Nouns like *look*, *vision* or *sight* are of course candidates, but their mean-
16 ing is narrower and their use is clearly more restricted than the use of the
17 other words (Miller and Johnson-Laird 1976: 618). For instance, we can
18 ask questions like *What is that smell ~ noise ~ taste?* when we refer to
19 these non-visual stimuli, but in asking about visual perception we nor-
20 mally use questions like *What is that?* (instead of *?What is that vision ~*
21 *sight?* etc.). Panther and Thornburg argue that this reflects the status of
22 visual perception as our primary sense, giving rise to a conceptualization
23 where vision provides more direct information about the stimulus than
24 the other senses. In the folk model of perception we thus see things
25 “themselves” but smell, taste and hear only their signals. According to
26 Viberg (2001), expressions of vision tend to be structurally unmarked,
27 and verbs of visual perception easily spread into other sensory meanings.
28 Viberg also points out that when we refer to situations where a stimulus is
29 perceived with more than one sense at the same time, we tend to use ex-
30 pressions of vision rather than expressions of the other sense modalities.
31 If non-visual expressions are used, then the implication easily arises that
32 visual perception is not involved. For example the sentence *I saw a skunk*
33 *crawl into my bed* does not exclude the possibility that the skunk was also
34 detected by other senses (hearing noises, feeling motions or smells),
35 whereas *I heard ~ smelt ~ felt a skunk crawl into my bed* is easily under-
36 stood as implying that visual perception did not occur.

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39 **4. Perception, directionality and fictive motion**

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41 A pervasive feature of expressions of perception is the representation of
42 perception as directional. There has been debate in linguistics as to

1 whether (visual) perception involves motion and whether verbs of percep-
 2 tion should thus be classified among motion verbs (see Wierzbicka 1980:
 3 100). Though the participants of a perceptive relationship may remain
 4 stationary in spatial terms, the use of directional elements to designate
 5 their position is very common in linguistic expressions of perception (as
 6 in *I can see you from where I am standing*). Talmy (2000: 115–116) argues
 7 that the directionality of visual perception is one instantiation of the gen-
 8 eral phenomenon of fictive motion, i.e., the conceptualization of static sit-
 9 uations as involving dynamic features which then motivate the use of dy-
 10 namic linguistic elements to refer to them. The best-known examples of
 11 fictive motion are expressions of what Talmy calls *coextension paths*.
 12 These indicate the static position of an elongated entity using motion
 13 verbs and directional locative elements: for example *This highway goes*
 14 *from Turku to Helsinki*. According to Talmy, the use of such dynamic
 15 elements reflects a dynamic conceptualization of the static situation,
 16 whereby the conceptualizer mentally “builds up” the spatial configuration
 17 in a part by part manner and approaches it from a particular perspective
 18 (see also Langacker 1991). In addition to classic examples of coextension
 19 paths, the concept of fictive motion can also explain the use of dynamic
 20 elements in many expressions of directionality, pointing (in directions),
 21 radiation, emission and other such phenomena, including the directionality
 22 of visual perception.

23 In general, the directionality of perception can proceed in two ways:
 24 from the experiencer towards the stimulus or vice versa. In the direction-
 25 ality *experiencer* \Rightarrow *stimulus*, the experiencer is understood as an energy
 26 source (like a metaphorical radar or echo sounder) that emits a fictive
 27 signal towards the stimulus. This directionality is involved if the locative
 28 that indicates the position of the experiencer is marked with a ‘from’ case,
 29 or if the locative indicating the position of the stimulus is marked with a
 30 ‘to’ case. Expressions that reflect the opposite directionality, *stimulus* \Rightarrow
 31 *experiencer*, are based on a conceptualization where it is the stimulus
 32 that emits a signal, which then moves towards the experiencer. In such
 33 expressions the locative element indicating the position of the stimulus is
 34 marked with a ‘from’ case and the position of the experiencer is indicated
 35 by a ‘to’ case.

36 The signal that moves between the participants in a perceptive relation-
 37 ship can be, in Talmy’s terms, either fictive (not veridical) or factive (ve-
 38 ridical; see Talmy 2000: 100–103).⁷ A signal emitted by the experiencer
 39 towards the stimulus is always fictive, whereas a signal emitted by the
 40 stimulus can be either fictive or factive depending on the nature of the
 41 perceptive relationship. According to Talmy (2000), the motion of the sig-
 42 nal in visual perception is conceived as fictive (though physically based on

1 the motion of light waves), since it cannot actually be detected or sensed
2 (see the discussion in Talmy 2000: 112). In the domains of hearing and
3 smell, on the other hand, the motion of the signal can also be understood
4 as factive. For instance, a sound proceeds through the air and its motion
5 can be detected in echo phenomena. Smell consists of the (relatively slow)
6 motion of gas particles in the air, and this motion is also detectible to our
7 sensory system. For instance, if we bring a smelling object into a room, it
8 takes some time for the smell to spread to different parts of the room; the
9 further the experiencer is from the source of the smell, the longer it takes
10 for the smell to reach him or her. In this sense hearing and smell are
11 clearly different from vision. Such differences can also explain the obser-
12 vation made by Panther and Thornburg (2003) that expressions indicat-
13 ing the stimulus of auditory or olfactory perception often refer to a signal
14 instead of the concrete entity emitting the signal, whereas expressions of
15 visual perception can (normally) only refer to the concrete entities them-
16 selves. The reason may thus be that our sensory system is capable of de-
17 tecting the motion of the signals in the auditory and olfactory domains
18 but not in the visual domain.

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

22

23 In the Introduction I briefly discussed the fact that Finnish uses direc-
24 tional locatives in many kinds of expressions that refer to situations where
25 no spatial motion occurs. In this section I introduce the Finnish locative
26 case system, with special attention to the uses of the cases where spatial
27 and cognitive factors interact. The locative case system of Finnish is very
28 explicit and is used extensively in the coding of not only concrete (spatial)
29 but also abstract directionality. To give an overview of the system in a
30 nutshell, Finnish has three separate series of local cases. Two of these
31 series, the *internal* and *external local cases*, share the basic function of in-
32 dicating concrete spatial relationships. They both consist of three cases:
33 one static ‘at/in/on’ case, indicating the nonchanging position of the tra-
34 jector with respect to the landmark (for these terms see Langacker 1991);
35 one ‘to’ case, indicating the trajector’s motion towards or into the land-
36 mark; and one ‘from’ case, indicating the trajector’s motion out of or
37 away from the landmark (for a more detailed account in English, see Sul-
38 kala and Karjalainen 1992; Helasvuoto 2001). The internal local cases des-
39 ignate relationships of containment, where the trajector is situated inside
40 the landmark (INESSIVE ‘in a box’), or moves into it (ILLATIVE ‘into a box’)
41 or out of it (ELATIVE ‘out of a box’). The external local cases designate the
42 position of the trajector with respect to the outside of the landmark. The

1 static external case (ADESSIVE) indicates that the trajector is either on top
 2 of the landmark (if the landmark is an entity with a salient surface, e.g., a
 3 table) or in its vicinity (e.g., ‘at/on a box’). The external ‘to’ case (ALLA-
 4 TIVE) indicates that the trajector moves onto or towards the landmark
 5 (‘towards / onto a box’), and the external ‘from’ case (ABLATIVE) that the
 6 trajector moves away from the landmark (‘away from / off the box’). In
 7 addition to their locative functions the external cases are also used pro-
 8 ductively in the expression of possessive relationships, where they mark
 9 elements indicating a possessor, a recipient or a beneficiary (for a typo-
 10 logical perspective see Kittilä 2005). The static ‘at/on’ case, adessive, in-
 11 dicates a (canonical) possessor who has or owns something, the ‘to’ case,
 12 allative, indicates a possessor who gains something, and the ‘from’ case
 13 ablative indicates a possessor who loses something. The third local case
 14 series is called the *general local cases*; it designates abstract nonspatial
 15 meanings, such as being in (ESSIVE) or entering into (TRANSLATIVE) a role
 16 or an occupation (e.g., [‘working] as a teacher’ vs. [‘becoming] a teacher’).
 17 This case series lacks a ‘from’ case.

18 In addition to expressions of actual motion or change, the directional
 19 cases are also used in many contexts where only an implicit energy stream
 20 or potential motion is indicated or the motion is abstract (Alhoniemi
 21 1975). Consider examples (6) and (7).

- 22 (6) *Laulaja laulo-i mikrofonin-in.*
 23 singer sing-PST.3SG microphone-ILL
 24 ‘The singer was singing into the microphone’ (implicit mover =
 25 sound).
 26 (7) *Rikollinen joht-i liiga-a vankila-sta.*
 27 Criminal lead-PST.3SG gang-PAR prison-ELA
 28 ‘The criminal was leading the gang from prison’ (mover = fictive
 29 energy stream).
 30

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

36 In addition to such non-spatial meanings, the directional cases are also
 37 used in many expressions that indicate an interaction between the cogni-
 38 tive dominion of a sentient participant and the outside world (see Huumo
 39 2006a, 2006b, 2007). As pointed out in the Introduction, the general ten-
 40 dency is to use the ‘from’ cases to mark the spatial position of a partici-
 41 pant that enters the cognitive dominion (consciousness, awareness, per-
 42 ception or possession) of a sentient reference point (8–9), and a ‘to’ case

1 to mark the spatial position of a participant that exists such a cognitive
2 dominion (10–11).

- 3 (8) *Löys-i-n seinä-stä halkeama-n.*
4 find-PST.3SG wall-ELA crack-ACC
5 ‘I found a crack in [lit. “from”] the wall.’
6 (9) *Ost-i-n talo-n Espanja-sta*
7 buy-PST-1SG house-ACC Spain-ELA
8 ‘I bought a house in [lit. “from”] Spain.’
9 (10) *Unohd-i-n sateenvarjo-n bussi-in.*
10 forget-PST-1SG umbrella-ACC bus-ILL
11 ‘I left [lit. forgot] the umbrella in [lit. “into”] the bus.’
12 (11) *Jät-i-n koira-n koppi-in-sa.*
13 leave-PST-1SG dog-ACC dog.house-ILL-3PX
14 ‘I left the dog in [lit. “into”] its dog-house.’
15

16 These examples set up a wider background, against which we can discuss
17 the uses of the locatives in expressions of sensory perception. What moti-
18 vates the ‘from’ case in (8) and (9) is not actual spatial motion by the
19 crack or the house, since these entities remain stationary in the designated
20 situation. It is their entrance into the cognitive dominion or possession of
21 the sentient reference point (in these examples the speaker) that triggers
22 the ‘from’ case marking of the locative. Correspondingly, in (10) and
23 (11) the umbrella and the dog remain in their respective locations. What
24 motivates the ‘to’ case marking is now the cessation of cognitive contact
25 between these entities and the sentient reference point (the speaker).
26 When these entities exit the speaker’s cognitive dominion, they are thus
27 conceptualized as fictively moving into their respective spatial locations.
28 Such examples clearly show how spatial and cognitive factors participate
29 in a multifold interaction in the Finnish locative system.
30

31 32 **6. Our basic sense: visual perception**

33
34 In this section I study expressions of visual perception, with special atten-
35 tion to the case marking of locative elements that indicate the position of
36 one participant only. I use examples where the experiencer and the stimu-
37 lus are both stationary, in order to exclude the possibility that the direc-
38 tional case marking might be caused by the actual motion of a partici-
39 pant. When the participants are stationary, the directional case marking
40 can only be motivated by the conceived directionality of the perceptive re-
41 lationship itself. In the last part of this section (6.4) I discuss the relation
42 between visual perception and existentiality, starting from the assumption

1 that visual perception often includes recognition of the existence of the
 2 stimulus. Such a feature may also contribute to the syntactic and seman-
 3 tic structure of the sentence. I start out by examining the experience verb
 4 *nähdä* ‘see’, followed by the perceptibility verb *näkyä* ‘be visible’ and the
 5 activity verb *katsoa* ‘look; watch’. In each case, I discuss separately loca-
 6 tives indicating the position of the experiencer and those indicating the
 7 position of the stimulus.

8
 9
 10 6.1. Nähdä ‘see’

11 6.1.1. *The position of the experiencer.* The experience verb *nähdä* ‘see’
 12 allows relatively free variation in the case marking of the locative modi-
 13 fier that indicates the position of the experiencer (see also Huumo 2004).
 14 Both a ‘from’ case and a ‘to’ case are normally possible (12–13; the two
 15 options are given in braces).

17 (12) *Näe-n* *paraati-n* {*parvekke-lta-ni* / *parvekke-lle-ni*}
 18 see-PRES.1SG parade-ACC balcony-ABL-1PX / -ALL-1PX
 19 ‘I [can] see the parade from my balcony.’

20 (13) *Näe-n* *Liisa-n* {*tää-ltä* / *tänne*}
 21 see-PRES.1SG name-ACC here-ABL / here.to
 22 ‘I [can] see Liisa from here.’

23 These examples show that the locatives indicating the position of the ex-
 24 periencer allow both directionalities, i.e., *experiencer* \Rightarrow *stimulus* and vice
 25 versa. However, the ‘from’ cases are semantically a more neutral choice
 26 than the ‘to’ cases, which foreground the experiencer’s ability to perceive
 27 the stimulus and may for instance imply that the experiencer need not
 28 move to another location for the perceptive event to be possible. For in-
 29 stance, in (12) the ‘to’ case implies more strongly than the ‘from’ case that
 30 the speaker considers alternative places to watch the parade but con-
 31 cludes that the balcony is a choice good enough. In (13), the alternative
 32 *tänne* (‘to here’) could be uttered in a situation where Liisa is going to
 33 perform something and her visibility to the speaker is thus relevant.
 34 Sometimes a ‘to’ case may also emphasize the distance between the par-
 35 ticipants; see (14):

37 (14) *Näe-n* *seinä-ssä* *ole-va-n* *tahra-n*
 38 see-PRES.1SG wall-INE be-PRTC-ACC stain-ACC
 39 *yli* *kymmene-n* *metri-n* *pää-hän*.
 40 over ten-GEN meter-GEN distance-ILL
 41 ‘I [can] see the stain on the wall from [lit. “into”] the distance of
 42 more than ten meters.’

1 In (14), the ‘to’ case illative emphasizes the experiencer’s ability to per-
2 ceive the stimulus. The ‘from’ case elative would also be possible in (14),
3 without a significant change of meaning, but the context that foregrounds
4 the experiencer’s ability to see the stain in spite of the relatively long dis-
5 tance makes the ‘to’ case a natural choice. Sometimes the different case
6 markers may also carry different implications regarding the successfulness
7 of the perception. In (15) the ‘to’ case implies that the perception suc-
8 ceeded in spite of the long distance, whereas in (16) the ‘from’ case allows
9 the implication that visibility was poor because of the distance.

10

11 (15) *Nä-i-n* *tappelu-n yli sada-n* *metri-n*
12 see-PST-1SG fight-ACC over hundred-GEN meter-GEN
13 *pää-hän.*
14 distance-ILL

15 ‘I saw the fight from [lit. “to”] the distance of over 100 meters’ (it
16 was so remarkable).

17 (16) *Nä-i-n* *tappelu-n yli sada-n* *metri-n*
18 see-PST-1SG fight-ACC over hundred-GEN meter-GEN
19 *pää-stä.*
20 distance-ELA

21 ‘I saw the fight from the distance of over 100 meters’ (I did not see
22 it well enough e.g., to recognize the fighters).

23

24 To sum up: the neutral alternative for indicating the position of the experi-
25 encier in examples with the verb *nähdä* ‘see’ is the ‘from’ case. As argued
26 above, the ‘from’ case, when used in this function, represents visual per-
27 ception as a fictive signal proceeding from the experiencer towards the
28 stimulus. However, the ‘to’ cases are a possible alternative especially if
29 visibility is obscured or endangered, or if the distance between the partic-
30 ipants is foregrounded.

31 In addition to the directional cases, another option for marking the po-
32 sition of the experiencer is the use of a static (‘in/at/on’) case. The range
33 of such usage, however, seems to be very limited. This is because in exam-
34 ples with *nähdä* ‘see’ the main function of the static cases is to indicate ei-
35 ther an all-embracing setting, where both the experiencer and the stimulus
36 are situated, or the location of the stimulus alone (see Section 6.1.2. be-
37 low). Leino (1989, 201–202) has pointed out that the static cases are in
38 many instances ambiguous between these two readings (setting vs. loca-
39 tion of the stimulus). He does not mention the possibility that a static
40 case might also be used to indicate the position of the experiencer alone.
41 In some contexts, however, such a reading is clearly possible, especially
42 when the locative element is in clause-initial position and it is clear (for

1 pragmatic reasons) that only the experiencer but not the stimulus can be
 2 situated inside the location. Consider (17).

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

12
 13 In (17) the initial locative ‘on the train’ is marked with a static case but
 14 indicates the position of the experiencer (the speaker) alone, whereas the
 15 stimuli are situated outside the location. Such clause-initial locatives have
 16 a loose connection with the verb; in this respect they resemble setting ad-
 17 verbials rather than verb modifiers. In spite of this they do not indicate a
 18 setting but the location of one participant only (for a discussion of Finn-
 19 ish locatives, their scoping relations and word order see Huumo 1996;
 20 1999). They also easily receive what in Huumo (1996) I call the *temporal*
 21 reading of a locative, a reading that foregrounds the temporal duration of
 22 the locative relationship (‘when I was on the train’). Such examples show
 23 that the static cases can also indicate the position of the experiencer
 24 alone, though this is not a very common usage; as argued above, the neu-
 25 tral way of indicating the position of the experiencer is to use the direc-
 26 tional cases.

27
 28 6.1.2. *The position of the stimulus.* Locative elements used with the
 29 verb *nähdä* ‘see’ can also designate the position of the stimulus alone. As
 30 mentioned above, the semantically unmarked option is to use the static
 31 cases in this function, especially if the stimulus is a concrete entity and
 32 the sentence expresses “pure” visual perception, i.e., that the experiencer
 33 perceives the presence of the stimulus in a particular location. When a
 34 static locative is used the perceptive relationship is conceptualized as
 35 static and not directional, and the conceptualization that is evoked does
 36 not include motion of a fictive signal between the participants. In general,
 37 the use of static locatives to indicate the position of only one participant
 38 in a transitive relationship is not common in Finnish (Alhoniemi 1975).
 39 The typical function of static locatives is to indicate a setting where both
 40 participants are situated; only few kinds of verbs allow such a locative to
 41 indicate the position of the referent of the object alone (Alhoniemi 1975:
 42 8). Consider examples (18) and (19), indicating visual perception:

- 1 (18) *Nä-i-n puu-ssa linnu-n.*
 2 See-PST-1SG tree-INE bird-ACC
 3 'I saw a bird in the tree.'
 4 (19) *Nä-i-n piha-lla tappelu-n.*
 5 See-PST-1SG yard-ADE fight-ACC
 6 'I saw a fight in the yard.'

7
 8 In (18) 'the tree' and in (19) 'the yard' can be locations of the stimuli
 9 alone, if the experiencer is understood as observing the situation from
 10 outside. However, both examples also allow the reading of the locative
 11 as a setting for both participants. Such examples show how static loca-
 12 tives are often ambiguous between different scope interpretations with re-
 13 gard to the participants of the event.

14 Another option to mark the position of the stimulus alone is to use a
 15 'from' case. This is possible if the perceptive relationship is understood
 16 as involving the transference of a "visual image" or another kind of men-
 17 tal content that the experiencer acquires by observing the stimulus. The
 18 'from' cases are a natural choice for instance if the object refers to a radi-
 19 ation such as light, or to a proposition representing a conclusion that the
 20 experiencer draws on the basis of what is visually perceived. Consider
 21 (20–22).

- 22 (20) *Nä-i-n mere-ltä laiva-n valo-t.*
 23 See-PST-1SG ocean-ABL ship-GEN light-PL
 24 'I saw the lights of a ship in ["from"] the ocean.'
 25 (21) *Nä-i-n televisio-sta uutise-t.*
 26 See-PST-1SG television-ELA news-PL
 27 'I saw the news on ["from"] television.'
 28 (22) *Nä-i-n numero-si puhelin-luettelo-sta.*
 29 See-PST-1SG number-2SG.ACC phone-book-ELA
 30 'I got ["saw"] your number from the phone book.'

31
 32 In (20) the object refers to a radiation rather than a concrete entity. The
 33 'from' case marking of the locative reflects the conceptualization of the
 34 light as moving from the ship towards the experiencer. Correspondingly,
 35 in (21) the object refers to an abstract mental content that the experiencer
 36 receives when visually observing the television set. If the static 'in' case
 37 inessive were used here, the example would mean that the speaker merely
 38 noticed that the newscast was on but possibly did not pay attention to it.
 39 In contrast, the 'from' case elative conveys the meaning that information
 40 was acquired. Example (22) is another interesting case in point: the 'from'
 41 case elative means that the experiencer received information about the
 42 phone number when s/he saw it in the phone book. If the static inessive

1 were used instead (example [23] below), the meaning would be one where
 2 the experiencer merely noticed the fact that the addressee's phone number
 3 was in the phone book (see Huumo 2004).

- 4 (23) *Nä-i-n numero-si puhelin-luettelo-ssa.*
 5 See-PST-1SG number-2SG.ACC phone-book-INE
 6 'I saw that you were in the phone book.'
 7

8 Similar minimal pairs can be constructed for the meaning conveyed by
 9 (21). In the following example, the object *Krisse-n* [name-ACC] can refer
 10 either to a concrete person, a Finnish television show hostess, or to the
 11 television show named after her. If the locative 'television' carries the
 12 static 'in' case, it launches the interpretation where the object refers to
 13 the concrete person. If the locative is marked with the 'from' case, the ob-
 14 ject is understood as referring to the show. This is because only the show
 15 but not the person can constitute a mental content that "moves" from the
 16 television set to the experiencer.

- 17 (24) *Nä-i-n {televisio-ssa / televisio-sta} Krisse-n.*
 18 See-PST-1SG television-INE / -ELA name-ACC
 19 'I saw Krisse on television.'
 20

21 It is also worth pointing out that in examples where a 'from' case indi-
 22 cates the location of the stimulus, the whole conceptualization of the situ-
 23 ation and the semantic role assignment to different participants often dif-
 24 fer from those in sentences with a static locative. In examples with a
 25 'from' case the concrete target of the visual perception is often "demoted"
 26 to the status of a source location (and thus referred to by a locative ex-
 27 pression), while the syntactic object, indicating the stimulus of the percep-
 28 tive relationship, refers to the signal or mental content that proceeds from
 29 this source to the experiencer. In the Finnish system, a television set as an
 30 artifact is conceptualized as the stimulus and referred to with the syntactic
 31 object (as in *I saw a television set on the bookshelf*). In the context of
 32 watching television, however, the television set is conceptualized as the
 33 source of a mental content referred to by the object (as in examples (21)
 34 and (24)).

35 In 6.1.1. we saw that the 'to' case marking of the locative that indicates
 36 the position of the experiencer often emphasizes his or her ability to per-
 37 ceive something (e.g., in spite of a distance) and the fact that the line
 38 of sight is clear. In contrast, the 'from' cases lacked such implications.
 39 If we now consider locatives indicating the position of the stimulus from
 40 the same point of view, we observe that in the latter function the 'from'
 41 case sometimes conveys similar implications as the 'to' case in the former
 42 function (of indicating the position of the experiencer). These types of

1 marking are of course both manifestations of the general directionality
 2 *stimulus* ⇒ *experiencer*. This directionality turns out to be typical in ex-
 3 pressions that indicate either the transference of an abstract mental con-
 4 tent to the experiencer, or the success of a perceptive event in spite of pos-
 5 sible obstacles obstructing the line of sight. Like the ‘to’ cases in (12) and
 6 (13) above, the ‘from’ cases marking the position of the concrete stimulus
 7 are possible if the line of sight is not clear or if visibility is otherwise en-
 8 dangered. Compare the directional adposition *takaa* ‘from behind’ with
 9 its static counterpart in (25).

- 10 (25) *Näe-n sinut verho-n {takana / takaa}*.
 11 See-PRES.1SG you.ACC curtain-GEN behind / from.behind
 12 ‘I [can] see you behind the curtain.’
 13

14 The difference between the cases is that the postposition *takaa* ‘from be-
 15 hind’ is directional, but *takana* ‘(at) behind’ is static. Semantically, the di-
 16 rectional *takaa* emphasizes the speaker’s ability to see the addressee, who
 17 may for instance be hiding behind the curtain, while the static *takana*
 18 merely states the fact that the speaker sees the addressee in a particular
 19 location. The difference is more striking if the example is negated: in (26)
 20 the directional ‘from’ case means that the experiencer cannot see the loca-
 21 tion where the stimulus is (but knows, or at least assumes, that the stimu-
 22 lus is there), while the static ‘at’ case means that the location itself is visi-
 23 ble to the experiencer but the stimulus is not there.

- 24 (26) *En näe simu-a verho-n*
 25 NEG.1SG see.CONNEG you-PAR curtain-GEN
 26 {*takana / takaa*}.
 27 behind / from.behind
 28 ‘I cannot see you behind the curtain.’
 29

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

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

- 40 (27) *Näe-n ikkuna-sta-ni järve-lle*.
 41 See-PRES.1SG window.ELA-1PX lake-ALL
 42 ‘I [can] see to the lake from my window.’

1 Example (27) does not express visual perception of a particular stimulus
 2 but general possibility of seeing in the direction of a location. The con-
 3 struction exemplified by (27) thus lacks a syntactic object that would refer
 4 to the stimulus.

6.2. Katsoa ‘look; watch’

6
 7
 8
 9 6.2.1. *The position of the experiencer.* If we now compare the agentive
 10 activity verb *katsoa* ‘look; watch’ with the non-agentive experience verb
 11 *nähdä* ‘see’ discussed above, we find that agentivity clearly supports the
 12 general directionality *experiencer* ⇒ *stimulus* in the case marking of loca-
 13 tives indicating the position of the experiencer. The ‘from’ cases are now
 14 the only option for marking the position of the experiencer. Consider (28)
 15 (compare it with (12) and (13) above):

16 (28) *Katso-n* *paraati-a*
 17 watch-PRES.1SG parade-PAR
 18 {*parvekkee-lta-ni* / **parvekkee-lle-ni*}.
 19 balcony-ABL-1PX / -ALL-1PX
 20 ‘I [am] watch[ing] the parade from my balcony.’
 21

22 The fact that the ‘to’ case is not possible in (28) shows how strongly agen-
 23 tive visual perception is associated with the directionality *experiencer* ⇒
 24 *stimulus*. The obvious motivation of this is the conceptualization of agen-
 25 tivity as involving a fictive energy transmitted from the experiencer-agent
 26 towards the stimulus-patient. The third possible option, a static case, is
 27 marginally possible in the same way as in sentences with *nähdä* ‘see’; con-
 28 sider (29).

29 (29) *Kato-lla* *isä* *katso-i* *piha-lla*
 30 Roof-ADE father watch-PST.3SG yard-ADE
 31 *leikki-vä-ä* *las-ta*.
 32 play-PRTC-PAR child-PAR
 33 ‘On the roof, (a/the) father was watching the child who was
 34 playing in the yard.’
 35

36 In (29) it is only the father who is on the roof, and the interpretation of
 37 the locative is very similar to that in example (17) above. The initial loca-
 38 tive of (29) is easily interpreted as carrying a temporal meaning (‘while on
 39 the roof’). Interestingly, the use of a static locative may also prevent the
 40 conceptualization of ‘looking’ or ‘watching’ as involving a fictive energy
 41 stream moving from the experiencer towards the stimulus, and even the
 42 agentivity of the verb *katsoa* ‘look; watch’ may be understood as reduced

1 in examples with a static locative. In such instances, ‘watching’ is con-
2 ceived more as an internal activity of the experiencer than as active inter-
3 action between the experiencer and the stimulus. Consider the locative
4 case marking in (30) (static) as opposed to (31) (‘from’):

5 (30) *Isä katso-i sohva-lla uutis-i-a.*
6 Father watch-PST.3SG sofa-ADE news-PL-PAR
7 ‘Father was watching the news on the sofa.’

8 (31) *Isä katso-i sohva-lta vihaisesti huonee-seen*
9 father look-PST.3SG sofa-ABL angrily room-ILL
10 *astu-nut-ta kaupparatsu-a.*
11 step-PRTC-PAR salesman-PAR
12 ‘From the sofa father looked angrily at the salesman who had just
13 entered the room.’

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

26 6.2.2. *The position of the stimulus.* In Section 6.1.2 we saw that in sen-
27 tences with the experience verb *nähdä* ‘see’ the unmarked option for
28 marking the position of the stimulus is a static case, even though a
29 ‘from’ case is also possible if the perceptive relationship involves the
30 transference of a mental content from the stimulus to the experiencer.
31 The situation is very much the same in sentences with the activity verb
32 *katsoa*, though in general the possibility of using a verb-modifying loca-
33 tive to indicate the position of the stimulus alone is more restricted. With
34 *katsoa* ‘look; watch’ there is a strong tendency to interpret a static loca-
35 tive either as an indicator of a setting where both participants are situ-
36 ated, or (if it indicates the position of the stimulus alone) as a nominal
37 modifier that forms part of the object NP. Consider (32) and compare it
38 with (18) (a similar example with *nähdä* ‘see’):

40 (32) *Katso-i-n puu-ssa lintu-a.*
41 Watch-PST-1SG tree-INE bird-PAR
42 ‘I watched the bird in the tree.’

1 The locative element *puussa* ‘in the tree’ in (32) is more likely than its
 2 counterpart in (18) to be interpreted as indicating a setting where both
 3 participants are situated. Because it precedes the object *lintua* ‘bird’, it
 4 must be interpreted as a verb modifier (not a nominal modifier inside the
 5 object NP, in which case it would indicate the position of the bird alone).
 6 The main difference between the two verbs is thus that the narrow-scoped
 7 use of a verb-modifying locative, where it indicates the position of the
 8 stimulus, is possible with *nähdä* ‘see’ but not with *katsoa* ‘watch’. A pos-
 9 sible reason is that *nähdä* ‘see’ often indicates an inchoative perceptive
 10 relationship where the presence of the stimulus in the location is new in-
 11 formation to the experiencer, whereas *katsoa* ‘watch’ means that the expe-
 12 riencer actively observes a stimulus whose presence in a location s/he al-
 13 ready knows.

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

- 20 (33) *Katso-i-n televisio-sta uutise-t.*
 21 Watch-PST-1SG television-ELA news-PL.NOM
 22 ‘I watched the news on [“from”] television.’
 23 (34) *Katso-i-n numero-si puhelin-luettelo-sta.*
 24 Look-PST-1SG number-2SG.ACC phone-book-ELA
 25 ‘I looked up your number in [“from”] the phone book.’
 26

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

40 An interesting difference between the experience vs. activity verbs of vi-
 41 sion is that examples like (25) (with the person hiding behind the curtain)
 42 do not have a counterpart with the activity verb *katsoa*. An example like

1 (35) can only mean that it is the experiencer (not the stimulus) who is be-
2 hind the curtain.

3
4 (35) *Katso-i-n sinu-a verho-n takaa.*
5 Watch-PST-1SG you-PAR curtain-GEN from.behind
6 'I watched ~ was watching you from behind the curtain.'

7
8 Exactly like the experience verb *nähdä* 'see', the activity verb *katsoa*
9 'look; watch' does not allow a 'to' case to indicate the position of a con-
10 crete stimulus. The 'to' case can be used, however, to indicate the general
11 direction of vision (36; cf. with 27)

12
13 (36) *Katso-n ikkuna-sta-ni järve-lle.*
14 Look-PRES.1SG window-ELA-1PX lake-ALL
15 'I am looking at the [in direction of the] lake from my window.'

16
17 However, there are some crucial differences between (27) and (36) that
18 concern the directionality and extension of the perceptive relationship.
19 First of all, (36) expresses actual, ongoing visual perception, whereas
20 (27) may merely express the general ability or possibility to see all the
21 way to the lake. When uttering (27), the speaker may thus be merely de-
22 scribing the view from his or her window, but by using 36 s/he means
23 that s/he is actually watching the lake.

24 Another interesting difference between the two examples is that *nähdä*
25 'see' foregrounds the distance of vision ('how far can you see?') whereas
26 the agentive *katsoa* 'look; watch' foregrounds its direction ('which way
27 are you looking?'). Thus example (27) (*nähdä*) emphasizes the speaker's
28 ability to see as far as the lake, whereas (36) (*katsoa*) foregrounds the di-
29 rection of the experiencer's gaze towards the lake. Such a difference is
30 compatible with the argument of Kirsner and Thompson (1976: 226,
31 230) that agentive perception involves not only perceiving but also the
32 direction of attention. They give the pair of examples *Turning his head,*
33 *Tom saw* ('noticed') *Joan crossing the street* vs. *Turning his head,*
34 *John watched* ('followed visually by changing the direction of his gaze') *Joan*
35 *crossing the street*, which neatly illustrates the difference. Miller and
36 Johnson-Laird (1976: 603) point out that there is "a similarity between
37 looking at something and pointing at something: looking is directing an
38 eye, pointing is directing a finger". In Finnish, the difference can be
39 made clearer by adding to the examples different kinds of particles that
40 foreground distance vs. direction. In the following examples, the termina-
41 tive particle *asti* 'as far as / all the way to' foregrounds distance, whereas
42 the particle *päin* 'towards / in the direction of' foregrounds direction.

- 1 (37) *Näe-n ikkuna-sta-ni järve-lle*
 2 See-PRES.1SG window.ELA-1PX lake-ALL
 3 {*asti* / *päin*}.
 4 all.the.way.to / towards
 5 ‘I [can] see {all the way to / towards} the lake from my window.’
- 6 (38) *Katso-n ikkuna-sta-ni järve-lle*
 7 Look-PRES.1SG window-ELA-1PX lake-ALL
 8 {*päin* / *asti*}.
 9 towards / all the way to
 10 ‘I am looking {at the [in the direction of the] / as far as} lake
 11 from my window.’

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

31 Another use of the ‘from’ case-marked locative with *katsoa* (but not
 32 with *nähdä*) that has not yet been discussed is the meaning ‘(visually)
 33 search for something’. Consider (39).
 34

- 35 (39) *Katso-i-n jo komero-sta.*
 36 Look-PST-1SG already closet-ELA
 37 ‘I already looked in the closet [to find something].’
 38

39 Example (39) means that the experiencer-agent is searching for something
 40 in the closet. The motivation for the ‘from’ case is the intended transference
 41 of a mental content, i.e., knowledge about the location of the entity
 42 being searched. Such examples bear a resemblance with examples like (8),

1 which showed that verbs indicating a cognitive change ('find', 'notice')
2 where the stimulus enters the cognitive dominion of a sentient reference-
3 point, often take a 'from' case-marked locative. The use of the 'from' case
4 in (39) may appear surprising from the viewpoint of the agentivity of
5 *katsoa* 'look; watch'; as argued above (Section 6.1.1), agentivity typically
6 favors the directionality *experiencer* \Rightarrow *stimulus*. In (39), however, the
7 agentive verb allows a case ending indicating the opposite directionality
8 (*stimulus* \Rightarrow *experiencer*).
9

11 6.3. Näkyä 'be visible'

12
13 6.3.1. *The position of the experiencer.* The intransitive perceptibility
14 verb *näkyä* 'be visible' differs from the other two verbs of visual percep-
15 tion discussed above with respect to its argument structure. It selects the
16 stimulus as its subject and leaves the experiencer out of its argument
17 structure. This causes a meaning where the perceiver is generic, unless
18 the context implies that the role of the implicit experiencer is actually ful-
19 filled by one or more specific individuals, most typically the speech act
20 participant(s). The nature of the perceptive relationship indicated by the
21 verb *näkyä* 'be visible' also differs from that indicated by the transitive
22 verbs discussed above. Above we have seen that *nähdä* 'see' can some-
23 times indicate the continuous ability or possibility of visually perceiving
24 something rather than actual seeing, i.e., POTENTIALITY rather than ACTU-
25 ALITY in the terminology of Panther and Thornburg (2003). With the
26 verb *näkyä* 'be visible', the interpretation involving mere potentiality of
27 perception is the primary one; in other words, this verb means that
28 the stimulus is visually perceptible, not that it is actually perceived by
29 someone — although the context may of course evoke such implications.
30 Consider (40).

31 (40) *Äkkiä horisonti-ssa näky-i laiva.*
32 Suddenly horizon-INE be.visible-PST.3SG ship
33 'Suddenly a ship appeared ["was visible"] in the horizon.'
34

35 Example (40) is easily understood as indicating that the ship was not only
36 visible (to anyone) but also that it was actually sighted (e.g., by the
37 speaker). Note, too, that in aspectual terms (40) is inchoative even though
38 the basic meaning of *näkyä* 'be visible' is to indicate the state of contin-
39 uous perceptibility.

40 It is interesting that even though the experiencer is generic and not
41 referred to by any nominal argument of *näkyä* 'be visible', its position
42 can be indicated by locative elements. The case marking of such locatives

1 resembles the case marking of similar locatives used with ‘*näkyä* ‘see’, in
2 the sense that both a ‘from’ case and a ‘to’ case are possible (41).

- 3 (41) *Laiva näky-i* {*ranna-lle / ranna-lta*}.
4 Ship be.visible-PST.3SG shore-ALL / -ABL
5 ‘The ship was visible from the shore.’
6

7 Since *näkyä* ‘be visible’ is an intransitive verb and selects the stimulus as
8 its subject, one might expect it to favor the directionality *stimulus* ⇒
9 *experiencer*. However, as (41) shows, both directionalities are possible.
10 In this respect, *näkyä* resembles the experience verb *nähdä* ‘see’. A subtle
11 difference between the two verbs is that the semantic markedness of the
12 ‘to’ case as opposed to the ‘from’ case observed with *nähdä* (see Section
13 6.1.1.) now disappears and the two alternatives are equal. Thus the
14 ‘from’ case does not carry similar implications about visibility being ob-
15 scured or about the consideration of other possible locations for percep-
16 tion, as it does with *nähdä* ‘see’.

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

- 25 (42) *Kukkula-lta näky-y* *mere-lle*.
26 Hill-ABL be.visible-PRES.3SG ocean-ALL
27 ‘From the hill one can see to the ocean.’
28

29 Note that even though example (42) structurally resembles the zero per-
30 son construction and could be classified as such on a purely formal basis,
31 its meaning is problematic for such an analysis. Since the overt subject of
32 *näkyä* designates the stimulus and not the experiencer, one would expect
33 the zero subject to take on this role as well; in other words, the zero-
34 subject construction would indicate the visibility of a generic stimulus. If
35 example (42) were a typical zero-subject construction, it would thus be
36 expected to mean ‘from the hill one is visible to the ocean’. This is indeed
37 a possible but a clearly marginal interpretation of the example; the inter-
38 pretation given in the English gloss of (42) is the primary one (Huumo
39 2006a). Thus in (42) it is most likely the generic experiencer who is
40 located on the hill, and the semantic role of the assumed zero subject is
41 not the one indicated by an overt subject. To see the difference more
42 clearly, consider (43), which has an overt subject NP:

- 1 (43) *Kukkula-lta patsas näky-y mere-lle.*
2 Hill-ABL statue be.visible-PRES.3SG sea-ALL
3 ‘On the hill the statue is visible at sea [i.e., to anyone at sea].’

4 What these examples show is that in spite of the basic meaning of *näkyä*
5 ‘be visible’, the preferred role occupying the zero subject in such construc-
6 tions is the implicit experiencer. Another possibility, suggested by Huomo
7 (2006a), is to interpret (42) not as a zero subject construction at all but
8 as a (properly) subjectless expression, indicating the condition of visi-
9 bility in a particular location. In this case, its structure corresponds to
10 subjectless weather expressions, such as (*Tää-llä sata-a* [(here-ADE)
11 rain-PRES.3SG] ‘It is raining (here)’, or (*Tää-llä haise-e* [here-ADE
12 smell-PRES.3SG] ‘It smells in here’), where no generic zero subject can
13 be assumed, since the meaning of these examples is clearly not ‘One
14 rains/smells in here’.
15

16 6.3.2. *The position of the stimulus.* In very much the same way as in
17 examples with the experience verb *nähdä* ‘see’ (5.1.1.), the position of the
18 stimulus of *näkyä* ‘be visible’ can be indicated by either a static case or a
19 ‘from’ case. However, the general conditions for the use of the ‘from’
20 cases we observed with *nähdä* ‘see’ (i.e., that the stimulus consists of a
21 mental content or that the line of sight is endangered), are not met in ex-
22 amples with *näkyä* ‘be visible’. The latter verb allows the ‘from’ cases to
23 be used more freely, including cases where the stimulus is a concrete en-
24 tity and no transference of a mental content is indicated, nor is the line of
25 sight obscured or the ability to perceive endangered.

26 The main difference between the static vs. ‘from’ cases is now that the
27 static case indicates purely the location of visibility of the stimulus and
28 gives rise to no implicatures as to the location of the implicit experiencer,
29 whereas the ‘from’ case implicates that visibility is being considered with
30 respect to the exterior of the location, i.e., whether the stimulus is visible
31 from other places. Thus example (44) below, with a static locative, allows
32 the interpretation where the implicit experiencer is also in the market-
33 place (sharing the same location with the stimulus), while 45 sets up an
34 external viewpoint and places the implicit experiencer outside the market-
35 place (note that another reading of (45) is the one where the marketplace
36 is the location of the experiencer and not the stimulus). Therefore only
37 (45) but not (44) allows another locative that indicates the position of
38 the experiencer explicitly.
39

- 40 (44) *Patsas näky-y tori-lla.*
41 Statue be.visible-PRES.3SG marketplace-ADE
42 ‘The statue can be seen in the marketplace.’

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

4 These examples show again how the static locative favors the interpreta-
 5 tion as a setting where both the stimulus and the implicit experiencer are
 6 situated, whereas the directional locative requires the two participants to
 7 be in separate locations.

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

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

21
 22 To sum up the differences between *näkyä* ‘be visible’ and the two other
 23 vision verbs considered above: *näkyä* favors the directionality *stimulus* ⇒
 24 *experiencer* to a greater extent than the other two verbs. This is not sur-
 25 prising if we take into account the fact that the stimulus is now indicated
 26 by the syntactic subject and thus also constitutes the semantic starting
 27 point for the whole predication (in the sense of Chafe 1994 or Langacker
 28 1991). Thus it is only to be expected that the directionality can be con-
 29 strued from the point of view of the stimulus more freely than in expres-
 30 sions with the other verbs of perception, which select the experiencer as
 31 their subject. However, we have also seen that even though the experi-
 32 encer remains implicit, it nevertheless has a relatively strong status in the
 33 meaning of *näkyä*: in the zero-subject-like construction exemplified by
 34 (42), it conquers the status of the assumed zero argument, and its position
 35 can also be referred to by many kinds of locative elements.

37 38 6.4. *Visual perception and existentiality*

39
 40 Above it has been suggested that expressions of visual perception often
 41 include a feature of existentiality, where the presence of the stimulus in
 42 the location is new information (to the experiencer) and the perception

1 of its presence amounts to the discovery of its existence. Thus the concept
2 of existentiality, the introduction of a discourse-new referent into a situa-
3 tion (i.e., a referent which is discourse-new to the addressee of the utter-
4 ance), may also be understood in a wider sense and from the point of
5 view of a participant of the designated relationship. In *John found a letter*
6 *on his table*, for instance, the letter is not only discourse-new to the ad-
7 dressee (as shown by the indefinite article), but is also “new” to John,
8 the referent of the subject, since the sentence designates a situation in
9 which John becomes aware of the letter (for a discussion on definiteness
10 in perceptive relationships, see Wierzbicka 1980: 102–105, 112). Such a
11 conception of existentiality is of course based on the assumption that ex-
12 istentiality is a semantic rather than a syntactic category.

13 In general, transitive verbs cannot be used in the Finnish syntactic exis-
14 tential construction (for details see e.g., Huumo 2003). Among the Finn-
15 ish verbs of visual perception it is only the intransitive *näkyä* ‘be visible’
16 that is available for the syntactic existential construction. The Finnish ex-
17 istential construction deviates from corresponding intransitive sentences
18 in three central features: inverse word order (XVS), lack of subject-verb
19 agreement in person and number, and, in many instances, case marking
20 of the subject with the partitive rather than the canonical nominative of
21 non-existential constructions (for a more detailed account see Huumo
22 2003). The partitive subject of existentials indicates an unbounded, indef-
23 inite quantity of the referent if the subject is a singular mass noun or a
24 plural form. In semantic terms, a central feature of the Finnish existential
25 construction is that even though it can take many kinds of intransitive
26 verbs, the holistic existential meaning of the construction suppresses the
27 dynamic meaning of the verb and foregrounds the existential relationship
28 (as first argued by Penttilä 1956 and Schlachter 1957; a more detailed
29 analysis in English is Vilkuna 1989).

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

- 36
37 (47) *Puisto-ssa näky-y laps-i-a.*
38 Park-INE be.visible-PRES.3SG child-PL-PAR
39 ‘There are [seem to be] children in the park.’
40 (48) *Lapse-t näky-vät puisto-ssa.*
41 Chil-PL.NOM be.visible-PRES.3PL park-INE
42 ‘The children can be seen ~ are visible [if they are] in the park.’

1 As pointed out by Penttilä (1956), *näkyä* ‘be visible’ in fact behaves ex-
 2 ceptionally as an existential verb, since it sometimes allows the parti-
 3 tive marking of even a singular count noun subject.⁸ Thus example (49)
 4 with the canonical existential verb *olla* ‘be; exist’ is ungrammatical with
 5 its partitive-marked count noun singular subject, but example (50) with
 6 *näkyä* is acceptable as it indicates partial visibility of the stimulus.

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

11 (50) *Nieme-n takaa näky-y jo vene-ttä.*
 12 Cape-GEN from.behind be.visible already boat-PAR
 13 ‘[Part of] the boat is already coming into sight from behind the
 14 cape.’
 15

16 Examples like (50) launched an intensive debate between Finnish syntac-
 17 ticians in the 1950s. It was argued that “divisibility” (i.e., the substance-
 18 like nature of the referent of the partitive subject) could be understood
 19 differently with different verbs, and that entities that were normally indi-
 20 visible could be understood as “divisible from the point of view of visibil-
 21 ity”, making possible such partitive subjects of *näkyä* (Penttilä 1956: 30;
 22 Ikola 1956: 336–337). From our present viewpoint, it is worth pointing
 23 out that the locatives in the relevant examples (such as [50]) are marked
 24 with the ‘from’ case and not a static case. The directional case marking
 25 seems to be a condition for the use of the count-noun partitive subject: if
 26 the static locative *nieme-n takana* [cape-GEN at.behind] ‘behind the cape’
 27 were used in (50), the example would be much less natural. To see the
 28 reason for this, compare (50) with our earlier example (25) with *nähdä*
 29 ‘see’ (‘I can see you [“from”] behind the curtain’), which showed that
 30 static locatives often indicate a location that is visible to the experiencer,
 31 whereas a ‘from’ case-marked locative indicates that visibility is endan-
 32 gered. In my view, it is specifically the meaning of the ‘from’ case that al-
 33 lows the partitive in the singular count noun subject. This is because the
 34 ‘from’ case foregrounds the line of sight and the implicit experiencer’s
 35 ability to see, but at the same time implies that the location itself is not
 36 visible to the experiencer. Example (50) also implies that the boat is grad-
 37 ually entering the field of vision of the experiencer. In my view, it is pre-
 38 cisely this incremental (in the sense of Dowty 1991) participation of the
 39 boat in the situation that makes the boat “divisible” in the example.

40 It may also be worth pointing out that among the scholars who studied
 41 Finnish existentials in the 1950s, Ikola (1956) suggested that the subject of
 42 such examples does not actually refer to the concrete boat but to a visual

1 image of the boat, which can be conceived as moving from the boat to-
2 wards the person who sees it. This interpretation resembles Panther and
3 Thornburg's (2003) analysis, based on metonymy, in suggesting that an
4 NP that literally indicates a concrete entity may actually refer to a signal
5 emitted by such an entity. This makes example (50) metonymic in the
6 same sense as many of the expressions of hearing and smell discussed in
7 Section 3. In such expressions the NP literally refers to a concrete entity
8 but is metonymically understood as referring to a signal emitted by such
9 an entity (e.g., in *I can hear the train* the object may actually refer to the
10 noise of the train).

11

12

13 **7. Our other remote senses: auditory and olfactory perception**

14

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

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

33

34

35 **7.1. *Kuulla* 'hear' and *haistaa* 'smell'**

36

37 **7.1.1. *The position of the experiencer.*** With the experience verbs of
38 hearing and smelling, the position of the experiencer is indicated in much
39 the same way as in the corresponding expressions of vision. Both a 'from'
40 case and a 'to' case are possible alternatives. However, the semantic
41 markedness of the 'to' case that we observed in expressions of vision
42 now vanishes: in expressions of hearing and smell, the 'to' case indicating

1 the position of the experiencer does not foreground his or her ability to
 2 perceive something but is a quite neutral way to refer to the position of
 3 the experiencer.

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

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

- 25 (51) *Haista-n* *roskapöntö-n*
 26 Smell-PRES.1SG garbage-bin-ACC
 27 {*makuuhuonee-sta-ni* / *makuuhuonee-see-ni*}.
 28 bedroom-ELA-1PX / -ILL-1PX
 29 ‘I can smell the garbage bin from my bedroom.’
 30 (52) *Haista-n* *roskapöntö-n* *löyhkä-n*
 31 Smell-PRES.1SG garbage-bin-GEN stink-ACC
 32 {*makuuhuonee-sta-ni* / *makuuhuonee-see-ni*}.
 33 bedroom-ELA-1PX / -ILL-1PX
 34 ‘I can smell the stink of the garbage bin from my bedroom.’
 35

36 In (51), the stimulus is a concrete entity, whereas in (52) it is a signal. In
 37 both cases the position of the experiencer can be indicated by either a
 38 ‘from’ case or a ‘to’ case. However, as pointed out above, the ‘from’ cases
 39 are often ambiguous: they can alternatively be understood as referring to
 40 the position of the stimulus (the garbage bin). This interpretation is most
 41 likely in (52) if the relative ‘from’ case is used, since the object refers to a
 42 signal. The example can also be understood as indicating that the stink is

1 coming out of the bedroom and sensed by the experiencer who is outside
 2 the bedroom. A speaker who wishes to avoid such ambiguities has the op-
 3 tion of using the ‘to’ cases to mark the position of the experiencer. Now
 4 consider similar examples of hearing, (53) and (54).

5
 6 (53) *Kuule-n radio-n*
 7 Hear-PRES.1SG radion-ACC
 8 {*makuuhuonee-sta-ni / makuuhuonee-see-ni*}.
 9 bedroom-ELA-1PX / -ILL-1PX
 10 ‘I can hear the radio from my bedroom.’

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

16 The interpretations of these examples resemble those of (51) and (52): the
 17 ‘from’ case is ambiguous as to whether it indicates the position of the ex-
 18 periencer or the stimulus, whereas the ‘to’ case can only indicate the posi-
 19 tion of the experiencer. In particular (54), where the object refers to a sig-
 20 nal, allows the alternative interpretation where the elative indicates the
 21 source of the music. With the illative, the locative unambiguously refers
 22 to the position of the experiencer.

23 In addition to such directional cases, it is also possible to use static
 24 cases to express the position of the experiencer. In such uses they have a
 25 similar setting-like function as in our earlier examples of visual perception
 26 (Section 6.1.1.). Consider (55) and (56) where the stimulus is a signal:
 27

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

31 (56) *Kadu-lla haisto-i-n paperi-tehtaa-n savu-n.*
 32 Street-ADE smell-PST-1SG paper-factory-GEN smoke-ACC
 33 ‘On the street I could smell the smoke of the paper factory.’
 34

35 Here the initial static locative indicates the position of the experiencer
 36 alone, in the sense that the entities emitting the signal (the cars and people
 37 on the street, the paper factory) are not situated in that location. How-
 38 ever, since the object refers to a signal and not to a concrete entity, it is
 39 also possible to understand the static locative as actually indicating a set-
 40 ting where both the experiencer and the stimulus (i.e., the noise of the
 41 traffic or the smoke of the paper factory) are situated. This is because
 42 the signal (noise or smoke) is a substance that fills the whole space

1 between its source and the experiencer, and some of it is thus also present
2 in the location of the experiencer.

3
4 7.1.2. *The position of the stimulus.* The question of whether the stimu-
5 lus is a concrete entity or a signal is even more relevant when we look at
6 locatives marking the position of the stimulus. The ‘from’ cases are now
7 the neutral option if the stimulus is a signal (examples [57] and [58] be-
8 low), but if it is a concrete entity, then the static cases are the neutral al-
9 ternative (see [59] and [60]). In addition, there are differences between the
10 two sensory domains (hearing and smell). In (57) (hearing), the use of a
11 static case instead of the ‘from’ case would change the interpretation of
12 the locative into a setting where the experiencer is also situated. The ex-
13 ample would then mean that the speaker was in the closet when s/he
14 heard the rustling of the mice. In (58) (smell), it is also possible to use
15 the static inessive (*kaapi-ssa* [closet-INE]), without changing the scope in-
16 terpretation where it is only the stink (or the entity emitting the stink) and
17 not the experiencer that is inside the closet.

18 (57) *Kuul-i-n kaapi-sta hiir-ten rapina-a.*
19 Hear-PST-1SG closet-ELA mouse-PL.GEN rustling-PAR
20 ‘I heard the rustling of mice in [“from”] the closet.’

21 (58) *Haisto-i-n kaapi-sta [~kaapi-ssa] tunkkaise-n löyhkä-n.*
22 Smell-PST-1SG closet-ELA[~INE] fusty-ACC stink-ACC
23 ‘I smelt a fusty stink in [“from”] the closet.’
24

25 This difference hints at the possibility that hearing is understood as a
26 more dynamic and motional sensory relationship than smelling, which
27 amounts to the observation of the presence of the stimulus in a location
28 (roughly the same way as vision). This hypothesis may be supported by
29 the fact that sound waves move relatively rapidly, whereas smells (gases)
30 are slow to move; therefore they are typically not understood as moving
31 but as either being present in a location or not. The situation is different if
32 the stimulus is a concrete entity. In that case even expressions of hearing
33 allow static locatives to indicate the position of the stimulus only. How-
34 ever, the ‘from’ cases are also an option for expressing this meaning. Con-
35 sider (59) and (60).
36

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

40 (60) *Haisto-i-n {komo-ssa / komero-ssa} kuollee-n rota-n.*
41 Smell-PST-1SG {closet-ELA / -INE} dead-ACC rat-ACC
42 ‘I smelt a dead rat in the closet.’

1 With the static cases these examples resemble the expressions of visual
2 perception discussed in Section 6.1.2: the experiencer senses that the stim-
3 ulus is in a location. The difference lies in the range of use of the ‘from’
4 cases: these can be used more freely in expressions of hearing and smell
5 than in expressions of vision. However, in the same way as in expressions
6 of vision, the ‘from’ case may bring to the examples an emphasis on the
7 experiencer’s ability to perceive or distinguish the presence of the stimulus
8 by a sense, as if the experiencer were fictively “picking up” the stimulus
9 from its location by perceiving it. Furthermore, in the same way as with
10 visual perception, the static cases may cause an existential-like meaning
11 ‘to perceive by a sense that there is an X in Y’. The distinction is subtle
12 but may show up in examples like 61, where the static inessive and the
13 ‘from’ case elative indicate a semantic opposition.

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

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

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

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

37
38
39 7.2. *Kuulua ‘be audible’ and haista ‘[emit] smell’*

40
41 In the same way as visual perception, the domains of auditory and olfac-
42 tory perception can also be designated by perceptibility verbs that code

1 the stimulus as their subject and leave the experiencer out of their argu-
 2 ment structure. The alternation in the nature of the stimulus between a
 3 concrete entity and a signal also shows up in the subject of these verbs;
 4 in other words, the subject can refer either to a concrete entity emitting a
 5 signal or to the signal itself. The neutral way of indicating the position of
 6 the implicit experiencer is to use a ‘to’ case, though a ‘from’ case and a
 7 static case are sometimes possible alternatives at least in the domain of
 8 hearing (less so in the domain of smell). In this respect these verbs differ
 9 from the corresponding verb of vision, *näkyä* ‘be visible’, which allows
 10 both directionalities relatively freely. With the verbs *kuulua* ‘be audible’
 11 and *haista* ‘[emit] smell’, however, the preferred interpretation of a
 12 ‘from’ case is clearly the one where it indicates the position of the stimu-
 13 lus and not the experiencer. Therefore other means (such as deictic ele-
 14 ments) need to be used to disambiguate the interpretation of the ‘from’
 15 case, if the speaker specifically wants to use a ‘from’ case to express the
 16 position of the experiencer. Consider the following examples, where (63)
 17 and (65) have subjects that refer to concrete entities and (64) and (66)
 18 ones that refer to signals:

- 19
 20 (63) Radio-si kuulu-u yläkerta-an.
 21 Radio-2PX be.audible-PRES.3SG upstairs-ILL
 22 ‘Your radio can be heard upstairs.’
 23 (64) Laulu-si kuulu-u kadu-lle.
 24 Singing-2PX be.audible-PRES.3SG street-ALL
 25 ‘Your singing can be heard on the street.’
 26 (65) Roskapönttö haise-e yläkerta-an (asti)
 27 Garbage.bin smell-PRES.3SG upstairs-ILL (all.the.way.to)
 28 ‘The garbage bin smells (all the way) upstairs.’
 29 (66) Viemäri-n löyhkä haise-e makuuhuonee-seen
 30 Sewer-GEN stink smell-PRES.3SG bedroom-ILL
 31 *asti*.
 32 all.the.way.to
 33 ‘The stink of the sewer smells all the way to the bedroom.’
 34

35 Note that especially examples (65) and (66) are more natural if they in-
 36 clude the terminative particle *asti* ‘all the way to / from’ (discussed briefly
 37 in Section 6.2.2.), which foregrounds the distance and extension of the
 38 perceptive path. These examples are also possible without such particles,
 39 but in that case the distance between the participants is not foregrounded,
 40 and for instance example (66) can be interpreted as meaning that the
 41 sewer is spreading a smell in the bedroom, as if the bedroom were a set-
 42 ting where the sewer itself was also situated.

1 If the ‘from’ cases are used in such examples, they prefer the interpre-
2 tation where they indicate the position of the stimulus. This is true es-
3 pecially in the domain of olfactory perception. Compared with the expe-
4 rience verbs of hearing and smell discussed above, and also with the
5 perceptibility verb of vision *näkyä* ‘be visible’, the perceptibility verbs
6 of hearing and smell thus strongly prefer the directionality *stimulus* ⇒
7 *experiencer*. In some contexts, however, even the ‘from’ case can be inter-
8 preted as referring to the position of the experiencer. As in (65) and (66)
9 above, this interpretation is more natural if the terminative particle *asti*
10 ‘all the way to / from’ is used. Consider (67) and (68).

- 11
12 (67) *Riitely-nne kuulu-u piha-lta*
13 Quarreling-2PX be.audible-PRES.3SG yard-ABL
14 (*asti*).
15 all.the.way.from
16 ‘One can hear your quarreling as far as from/in the yard.’ [Unless
17 *asti* is present, it is the quarreling persons that are understood to
18 be in the yard].
19 (68) *Tuo kala haise-e olohuonee-sta asti.*
20 That fish smell-PRES.3SG living.room-ELA all.the.way.from
21 ‘One can smell that fish all the way from the living room.’ [Unless
22 *asti* is present, it must be the fish that is in the living room.]
23

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

33 An interesting question is why the terminative particle *asti* can change
34 the interpretation so dramatically. A possible explanation is that the typ-
35 ical function of such a terminative particle is to demote the locative se-
36 mantically to a secondary status, as argued by Päiviö (2007). This is seen
37 most clearly in expressions including two locatives, only one of which is
38 modified by the terminative particle. In such examples, the bare locative
39 is understood as constituting a more fixed sort of landmark than the one
40 modified by the terminative particle. The latter can therefore be charac-
41 terized as a *relative landmark*, and its function is to measure a distance
42 from the *fixed landmark*. Consider (69) and (70).

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

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

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

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

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

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

41 In (71) the locative ‘sauna’ is marked with a ‘to’ case and indicates the
 42 location of the implicit experiencer irrespective of whether the terminative

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

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

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

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

39
 40 One reason for the differences between the sensory domains (vision vs.
 41 hearing-smell) is that compared with ‘being visible’, the states of ‘being
 42 audible’ and especially that of ‘smelling’ can be understood as more

1 autonomous processes where an entity is emitting a signal. Thus the
 2 status of an implicit experiencer is weaker in such expressions than it is
 3 in expressions of vision: a stimulus can emit a smell or a sound auton-
 4 omously, without being observed by an experiencer. ‘Being visible’, on the
 5 other hand, is a relationship between a stimulus and an experiencer; it
 6 cannot be conceived as an autonomous process of emitting a sensory sig-
 7 nal. Thus the perceptibility verb of vision is semantically different from
 8 the perceptibility verbs of hearing and smell in that the role and status of
 9 the implicit experiencer is stronger. As we saw in Section 2 (example [3]),
 10 in particular the perceptibility verb for smell, *haista*, has the autonomous
 11 meaning ‘emit a smell’, and does not necessarily imply an experiencer at
 12 all. [Emitting] smell’ is thus conceptualized as the most autonomous pro-
 13 cess of the three; ‘being audible’ (in the sense ‘emitting a sound’) has an
 14 intermediary status between the two other domains; ‘being visible’ has
 15 the weakest status as an autonomous process.

17 18 7.3. Kuunnella ‘listen’ and haistella ‘smell’

19
20 The perceptive activity verbs *kuunnella* ‘listen’ and *haistella* ‘smell’ are
 21 agentive verbs, like their visual counterpart *katsoa* ‘look; watch’. It is
 22 thus not surprising that they favor the ‘from’ case marking of the locative
 23 that indicates the position of the experiencer. It can be argued that this
 24 reflects the conceptualization of agentive perception as an energy stream
 25 directed from the experiencer towards the stimulus. A static case is often
 26 a possible alternative, conceptualizing the perceptive relationship more as
 27 an internal activity of the experiencer than as interaction between the ex-
 28 perience and the stimulus (cf. our earlier visual examples [30] and [31] in
 29 Section 6.2.1). In the following examples the ‘from’ case is therefore more
 30 natural in (75) than in (76): in (75), ‘listening to the speaker’ is a relation-
 31 ship of interaction, while in (76) ‘listening to the radio’ is conceived as an
 32 internal activity of the father rather than as interaction between him and
 33 the radio. In spite of such preferences, both examples allow both kinds of
 34 case marking. Example (77) indicates olfactory perception, and it also al-
 35 lows both the static case and the ‘from’ case in the locative expression
 36 that indicates the position of the agentive experiencer.

- 37
38 (75) *Pormestari kuuntel-i puhuja-a*
 39 Mayor listen-PST.3SG speaker-PAR
 40 {*parvekkee-lla-an* ~ *parvekkee-lta-an*}
 41 {balcony-ADE-3PX / -ABL-3PX}
 42 ‘The mayor listened to the speaker on [~from] his balcony.’

1 (76) *Isä kuuntel-i radio-ta {sohva-lla / sohva-lta}*.
2 Father listen-PST.3SG radio-PAR {sofa-ADE / -ABL}
3 ‘Father listened to the radio on the sofa.’

4 (77) *Lapsi haistel-i ruok-i-a*
5 Child smell-PST.3SG food-PL-PAR
6 {*syöttötuoli-ssa-an / syöttötuoli-sta-an*}.
7 {highchair-INE-3PX / -ELA-3PX}
8 ‘The child smelt the foods in [~from] its highchair.’

9
10 It is worth pointing out that at least in expressions of auditory perception,
11 even a ‘to’ case can marginally be used to indicate the position of the
12 experiencer. In example (78) the ‘to’ case of the locative is motivated by
13 the conceptualization of the perceptive relationship as involving the trans-
14 ference of a mental content (the sports results) to the awareness of the
15 athlete:

16 (78) *Urheilija kuuntel-i tulokse-t takahuonee-seen*.⁹
17 Athlete listen-PST.3SG result-PL.NOM backroom-ILL
18 ‘The athlete listened to the results in [“into”] the back room.’
19

20 If we look at locatives that indicate the position of the stimulus, we can
21 again observe some crucial differences between the sensory domains, on
22 the one hand auditory / olfactory perception, on the other vision. Consid-
23 ering that the verbs *haistella* ‘smell [agentive]’ and *kuunnella* ‘listen’
24 strongly favor the ‘from’ case marking of the position of the experiencer,
25 it may be surprising that they also favor the ‘from’ cases in the coding of
26 the position of the stimulus. This is especially clear in expressions that
27 convey the meaning of ‘searching’ (by a sense). Consider 79 and 80, and
28 compare them with the visual example (39).
29

30 (79) *Huumekoira haistel-i matkalauku-sta*
31 Drug.dog smell-PST.3SG suitcase-ELA
32 *amfetamiini-a*.
33 amphetamine-PAR
34 ‘The drug dog sniffed the suitcase for amphetamine.’

35 (80) *Kuuntel-i-n välikato-sta hiir-ten*
36 Listen-PST-1SG ceiling-ELA mouse-PL.GEN
37 *rapina-a*.
38 scratching-PAR
39 ‘I was listening for the scratching of mice in the roof.’
40

41 In the same way as in (39), these examples mean that the agentive experi-
42 encer is attempting to find something by actively observing a location. It

1 is thus this attempted transfer of a mental content from the location to
 2 the experiencer that motivates the ‘from’ case marking in these examples,
 3 just as in example (39) indicating vision. However, the use of the ‘from’
 4 cases is not limited to such instances. Especially if the stimulus is a signal,
 5 the ‘from’ case is a quite productive and neutral way of indicating its
 6 location.

7

8

9 **8. Conclusions**

10

11 This analysis of the locative modifiers of Finnish verbs of perception has
 12 revealed substantial differences on one hand between the different verbs in
 13 each domain, on the other between the different sensory domains as a
 14 whole. Within each sensory domain there are differences between the
 15 verbs of perceptibility, perceptive experience and perceptive activity. A
 16 general tendency is that the agentive activity verbs favor the directionality
 17 *experiencer* \Rightarrow *stimulus* to a greater extent than the other verb types. This
 18 is easy to explain by the nature of agentive perception as involving a fic-
 19 tive energy stream directed by the experiencer-agent towards the stimulus.
 20 There are also differences between the two remaining groups of verbs:
 21 intransitive perceptibility verbs (which select the stimulus as the subject)
 22 favor the directionality *stimulus* \Rightarrow *experiencer* to a greater extent than
 23 transitive verbs of perceptive experience. This difference is much stronger
 24 in the domains of auditory and olfactory perception than it is in vision.
 25 However, in all three domains the conceptualization of the perception as
 26 involving the transference of a mental content from the stimulus to the
 27 experiencer strengthens the tendency to use locatives marking the direc-
 28 tionality as *stimulus* \Rightarrow *experiencer*.

29 In general, vision differs from the two other domains in that static loca-
 30 tives may be used more productively to indicate the position of the stimu-
 31 lus alone. Expressions of vision also favor the directionality *experiencer*
 32 \Rightarrow *stimulus* over the directionality *stimulus* \Rightarrow *experiencer* to a greater ex-
 33 tent than the other domains. Static cases are the basic means for indicat-
 34 ing the position of the stimulus (the referent of the object) with the ex-
 35 perience verb *nähdä* ‘see’, unless the transference of a mental content is
 36 indicated or the clarity of the line of sight is endangered. In those cases,
 37 a ‘from’ case is the most typical means of marking the position of the
 38 stimulus. The situation is different in the other sensory domains. With
 39 the experience verbs *kuulla* ‘hear’ and *haistaa* ‘smell’, the ‘from’ cases are
 40 a neutral means of indicating the position of all kinds of stimuli, includ-
 41 ing concrete entities that do not constitute a mental content. In these do-
 42 mains there are thus no similar restrictions for the use of the ‘from’ cases

1 as there are in the domain of vision. Within the group of intransitive per-
2 ceptibility verbs, the vision verb *näkyä* ‘be visible’ is more neutral with re-
3 spect to directionality and allows both codings, whereas the verbs *kuulua*
4 ‘be audible’ and *haista* ‘[emit] smell’ show a strong preference for the di-
5 rectionality *stimulus* ⇒ *experiencer*.

6 A fundamental difference that may explain such differences between vi-
7 sion and the other two domains is that in vision the stimulus is canoni-
8 cally conceived as a concrete object, whereas in the domains of hearing
9 and smell it can also be conceived as a signal. Even if the NP indicating
10 the stimulus literally refers to a concrete object, there are reasons for ar-
11 guing that the interpretation should be understood as metonymic and that
12 the actual referent of the expression is a signal, not a concrete entity emit-
13 ting the signal (Panther and Thornburg 2003). Furthermore, as has been
14 argued above, the motion of auditory and olfactory signals (sounds and
15 smells) can be more directly detected by human beings than the motion
16 of a visual signal, which is based on the invisible motion of light. It is
17 thus possible that this different nature of the stimuli plays a central role
18 in the determination of directionality in the different sensory domains,
19 strengthening the likelihood of the directional conceptualization *stimulus*
20 ⇒ *experiencer* in the domains of auditory and olfactory perception.

21 Expressions of perception can also be studied from the point of view of
22 existentiality, i.e., as indicators of the existence of the stimulus, which is
23 introduced as new information. Above we have seen that the perceptibil-
24 ity verb of vision, *näkyä* ‘be visible’, can be productively used in the Finn-
25 ish existential construction. In this construction, the lexical meaning of
26 the verb (perceptibility) is backgrounded and partly replaced with the ho-
27 listic existential meaning of the construction. If we now consider the per-
28 ceptibility verbs of hearing and smell from the viewpoint of existentiality,
29 we find that these verbs differ from the visual verb in their ability to be
30 used in the existential construction. The verb *kuulua* ‘be audible’ allows
31 the existential use if its subject refers to a sound signal which is continu-
32 ous and thus quantitatively unbounded. Consider (81).

33
34 (81) *Metsä-ssä kuulu-i lintu-jen laulu-a*
35 woods-INE be.audible-PST.3SG bird-PL.GEN singing-PAR
36 ‘In the woods one could hear birdsong.’ / ‘Birdsong sounded in
37 the woods.’
38

39 This verb also has an idiomatic use in negated existentials, where it can
40 indicate the subject’s failure to appear in a location (also implying that
41 someone is expecting it there). In this usage, the subject normally refers
42 to an animate entity, and auditory perception is not involved at all:

- 1 (82) *Poika-a ei kuulu-mut koti-in*
 2 boy-PAR NEG.3SG be.audible-PRTC home-ILL
 3 ‘The boy did not come home [though someone was waiting for
 4 him].’

5
 6 In contrast, the perceptibility verb *haista* ‘[emit] smell’ does not allow the
 7 partitive subject even if the word order is XVS and the subject is a mass
 8 noun. For instance, (83) can only take the nominative subject, and the
 9 partitive *kahvi-a* [coffee-PAR] is impossible

- 10 (83) *Tää-llä haise-e kahvi*
 11 here-ADE smell-PRES.3SG coffee.NOM
 12 ‘Coffee smells in here.’ / ‘It smells of coffee in here.’
 13

14 Finally, let us return to the opposition between static vs. directional cases
 15 in expressions designating the position of the stimulus. Above it has been
 16 argued that the selection of a ‘from’ case, as opposed to a static case,
 17 often reflects the construal of the perceptive relationship as involving the
 18 transference of a mental content from the stimulus to the experiencer.
 19 This is the case especially in the domain of vision. However, other seman-
 20 tic factors may also be involved that have not been thoroughly discussed
 21 above. Such a factor is the degree of subjectivity and the difference in per-
 22 spective of the speaker on the designated situation. When using a static
 23 expression to indicate the position of the stimulus, the speaker conceptu-
 24 alizes the perceptive relationship in a subjective manner, “from inside”,
 25 identifying his or her perspective with that of the experiencer. In such a
 26 case the speaker “only senses what the experiencer senses”: either that
 27 the stimulus is sensed in the location (in affirmative sentences) or that it
 28 is not sensed there (in negated sentences). When using a ‘from’ case, on
 29 the other hand, the speaker selects an external, objective and “omni-
 30 scient” perspective on the situation and is also able to “sense what the ex-
 31 periencer cannot sense”, i.e., that the stimulus may be in the location even
 32 if the experiencer cannot sense it. The difference shows up in examples
 33 where the perceptive relationship involves the factor of a subjective inter-
 34 pretation, i.e., where the stimulus is not a concrete entity but an abstract
 35 quality of such a nature that people may disagree on whether it is there or
 36 not. Consider (84) and (85).

- 37
 38 (84) *Liisa kuul-i musiiki-ssa säveltäjä-n*
 39 Name hear-PST.3SG music-INE composer-GEN
 40 *ahdistukse-n.*
 41 anguish-ACC
 42 ‘Liisa could hear the composer’s anguish in the music.’

- 1 (85) *Liisa kuul-i musiiki-sta säveltäjä-n*
2 Name hear-PST.3SG music-ELA composer-GEN
3 *ahdistukse-n.*
4 anguish-ACC
5 ‘Liisa could hear the composer’s anguish from [= by listening to]
6 the music.’
7

8 In (84), the ‘composer’s anguish’ is understood as a feature of the music,
9 whereas in (85) the music is merely a channel or medium through which
10 Liisa can detect the anguish of the actual composer (Viinämäki 2006).
11 There is also a difference in the degree of the speaker’s commitment to
12 the existence of the anguish: in (84) it is possible that the anguish is
13 merely Liisa’s subjective interpretation of the music, but in (85) the
14 speaker is committed to the actual existence of the anguish. This differ-
15 ence is also related to the more general question of whether verbs of
16 perception are implicative or not (see Kirsner and Thompson [1976:
17 212–213] and Miller and Johnson-Laird [1976: 586–586] for arguments
18 against such a view). In Finnish, the selection of a static vs. a dynamic
19 case may thus contribute to the conceived implicativity of the perceptive
20 expression. The following are semantically more concrete examples which
21 display the same difference.
22

- 23 (86) *Pekka maisto-i keito-ssa valkosipuli-n*
24 Name taste-PST.3SG soup-INE garlic-ACC
25 ‘Pekka [thought he] tasted garlic in the soup’
26 (87) *Pekka maisto-i keito-sta valkosipuli-n*
27 Name taste-PST.3SG soup-ELA garlic-ACC
28 ‘Pekka [was able to] taste the garlic in the soup’
29

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

36 In negated sentences this difference is even clearer: the static case
37 amounts to a denial of the presence of the stimulus in the location, where-
38 as the ‘from’ case may implicate that the stimulus is in the location but
39 the experiencer is not able to detect it. Thus the negated (88), with the
40 static inessive, leaves it open whether there was garlic in the soup at all,
41 whereas (89), with the ‘from’ case elative, implies that there was garlic in
42 the soup but Pekka was unable to detect it.

- 1 (88) *Pekka ei maista-nut keito-ssa valkosipuli-a.*
 2 Name NEG.3P taste-PRTC soup-INE garlic-PAR
 3 ‘Pekka did not taste garlic in the soup.’
 4 (89) *Pekka ei maista-nut keito-sta valkosipuli-a.*
 5 Name NEG.3P taste-PST.3SG soup-ELA garlic-PAR
 6 ‘Pekka [was unable to] taste the garlic in the soup.’

7 This phenomenon is also related to the existential meaning often associ-
 8 ated with the static cases: the negation of existence amounts to the denial
 9 of the presence of the stimulus in its location (in the perceptive dominion
 10 of the experiencer), whereas the negation of the predication indicated by
 11 the ‘from’ case amounts to the denial of a (fictive or factive) motion by a
 12 signal towards the experiencer. Such differences clearly show how the
 13 speaker can manipulate not only the conceived directionality of percep-
 14 tion and interpretations based on this, but also implications concerning
 15 his or her degree of commitment to the successfulness and validity of the
 16 perceptive relationship.
 17

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23 **Notes**

- 24
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 27 18, 51014 Tartu, Estonia. E-mail: tuomas.huumo@ut.ee.
 28 2. The technical definition for the trajector is “the figure within a relational profile”, and
 29 for the landmark, “a salient substructure other than the trajector of a relational predica-
 30 tion or the profile of a nominal predication” (Langacker 1987: 490, 494). Thus in a rela-
 31 tional predication, such as the one indicated by a verb, an adposition, or a semantic case
 32 ending, the trajector is the more prominent entity, the primary focus of attention, and
 33 often the entity to be located with respect to a landmark. For instance, in the NP *the*
 34 *book on the table* there is a relational locative predication indicated by the preposition
 35 *on*, which selects ‘the book’ as its trajector and ‘the table’ as its landmark. This distinc-
 36 tion exemplifies the more general cognitive phenomenon of figure / ground organization
 37 (see Talmy 2000: Chapter 5).
 38 3. For detailed introductions to the Finnish case marking and adposition systems, see Sul-
 39 kala and Karjalainen 1992, Helasvuo 2001, and Huumo and Ojutkangas 2006.
 40 4. The following abbreviations are used in the glosses: ABL = ablative, ACC = accusative,
 41 ALL = allative, ELA = elative, CONNEG = connegative verb form, ESS = essive,
 42 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.

- 1 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.
- 2
- 3 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.
- 4
- 5
- 6
- 7 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 'fictive' is used "for its reference to the imaginal capacity of cognition, not to suggest that a representation is somehow objectively unreal".
- 8
- 9
- 10
- 11 8. Recall that normally only mass nouns and plural forms take the partitive in affirmative existentials.
- 12
- 13 9. I am grateful to Krista Ojutkangas for this example.
- 14

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