

WAYS TO SEEM IN KOREAN: *POTA* AND *POITA* *

Duk-Ho An
Konkuk University

1. Introduction

Rhee (2001) notes, attributing to Sweetser (1990: 33), that cross-linguistically, ‘see’ is the most prominent and most frequently used verb of perception and presents several instances from different languages where verbs with the meaning ‘see’ are grammaticalized to take on various extended meanings or grammatical functions. In a similar vein, Sohn (2012) discusses many different uses of the verb *pota*¹ ‘see’ in Korean, arguing that they arose as a result of grammaticalization. In fact, much of the previous discussions on *pota* examine it from the perspectives of grammaticalization and its historical development based on its semantico-pragmatic properties (Ho 1999, 2003, Kim 2020, Kwon 2012, Kwon 2018, Rhee 2001, Sohn 2012, among others).

In An (2020, 2021), I discuss three main uses of *pota*, i.e., as a lexical verb, as an auxiliary verb, and as an evidential marker, from a syntactic point of view—especially, from the perspectives of the cartographic approach à la Rizzi 1997 and Cinque 2004, 2006 and argue that the three varieties of *pota* occupy distinct positions in clause structure. The three uses of *pota* in question are illustrated below.²

- (1) a. Toto-ka chayk-ul po-ass-ta.
T.-Nom book-Acc see-Past-Dec³

‘Toto read a book.’

* I would like to express my deepest gratitude to Mamoru Saito, Keiko Murasugi, and other members of the Center for Linguistics at Nanzan University for their help, support, and generosity. It has been a great privilege to be a part of their research community.

¹ Note that *pota* consists of the verb root *po* ‘see’ and the declarative marker *ta*, where the latter can be replaced by other clause type markers in other types of sentences. It is common in Korean to present the declarative form of verbs when presenting their base form, because verb roots cannot stand alone without appropriate endings. Regarding this, Kang (1988) suggests that verb roots (or [+V] roots, more generally) are subject to the requirement of “morphological closure.”

² In (1) and other examples below, I ignore certain details that are not crucial for the current discussion.

³ List of abbreviations in the glosses: Acc (accusative), Cog (cognitive), Comp (complementizer), Dat (dative), Dec (declarative), Eps (epistemic), Evid (evidential), Gen (genitive), Ins (instrumental), Nom (nominative), Pass (passive), Pres (present), Prn (prenominal), Top (topic).

- b. Toto-ka chayk-ul ilk-e po-ass-ta.
 T.-Nom book-Acc read-E PO_{aux}-Past-Dec

‘Toto tried reading a book.’

- c. Toto-ka cip-ey ka-ss-na po-ta.
 T.-Nom home-to go-Past-Eps PO_{evid}-Dec

‘It seems that Toto went home.’

The relevant portions of the structures of these sentences can be represented schematically as below.⁴

- (2) a. [VP ... PO] (main verb *pota*)
 b. [VP [VP ... V] PO_{aux}] (auxiliary verb *pota*)
 c. [MoodPevidential [TP ...] PO_{evid}] (evidential *pota*)

Against this background, I examine below two forms that involve the verb root *po* (see note 1). One of these elements is what I called “evidential *pota*” in (1c, 2c) above, whose properties will be discussed in more detail in Section 2 and below. The other element is *poita*, as shown in (3).

- (3) Toto-ka cip-ey ka-n kes-ulo poi-n-ta.
 T.-Nom home-to go-Prn Comp-Ins POI-Pres-Dec

‘It seems that Toto went home.’

One of the initial motivations for examining these elements together is the apparent similarity in their meaning (Cf. (1c), (3)). That is, they both roughly mean ‘seem’ in the sense that they signal some degree of uncertainty toward the truth of the proposition and express a kind of conjecture.⁵ There are of course some differences in their precise interpretation, to which I turn below. More importantly, *pota* and *poita* exhibit systematic differences in their syntactic behavior, which has implications for the cartographic approach to clause structure in Korean.

This paper is organized as follows: in Section 2, I discuss the basic properties of evidential *pota*; in Section 3, I show that despite the apparent similarity in their interpretations, there are several differences between evidential *pota* and *poita*; in Section 4, I discuss the properties of *poita* and argue that it is not a mere passive counterpart of *pota*, a verb of visual perception; in Section 5, I discuss the properties of another verb of perception, i.e., *tutta* ‘hear’; in Section 6, I conclude.

⁴ In my 2020 and 2021 papers, I adopt slightly different category labels for evidential *pota* and other elements that occur with it. But the main intuition in these works remains the same.

⁵ To avoid confusion, when I say that *pota* and *poita* are similar to ‘seem’, I do not mean that they are raising predicates. It just means that their meaning roughly corresponds to the meaning of *seem*. As discussed below, the syntactic behavior of *pota* and *poita* are very different from that of *seem*.

2. Evidential *Pota*

In this section, I illustrate some important interpretative and syntactic properties of evidential *pota* based on the discussion in An 2020, 2021.

2.1. Evidential *Pota* is not a Verb of Visual Perception

While the basic lexical meaning of *pota* is ‘see’, evidential *pota* does not express visual perception. Rather, as the name indicates, it is grammaticalized to function as an evidential marker (An 2020, 2021, Kwon 2012, Kwon 2018, Sohn 2012). Significantly, the type of evidence that is required for evidential *pota* to be used is not direct evidence, but “circumstantial” (or indirect) evidence, based on which the speaker makes an inference (or conjecture) about the situation.⁶ As discussed in An 2020: 490, a sentence like (4) can be used when the speaker can only hear the sound of Toto’s car while being unable to see Toto directly. Imagine that Toto’s car, which only Toto drives, is very old and makes a distinctive sound when it runs, so that the speaker can easily recognize it even without seeing it (or Toto for that matter). To mention just one more possibility, (4) can be uttered in a situation where the speaker simply sees Toto’s car parked in front of the house. These situations all offer circumstantial evidence for the speaker to naturally infer Toto’s arrival.

- (4) Toto-ka wa-ss-na po-ta.
 T.-Nom come-Past-Eps PO_{evid}-Dec

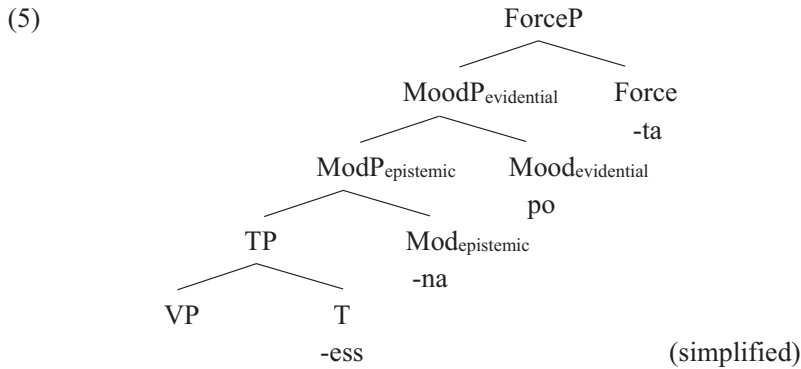
‘It seems that Toto has arrived.’

It is also important that (4) is infelicitous when the speaker has direct evidence for the truth of the proposition. For instance, if the speaker actually sees Toto in person, uttering (4) would be very strange. This makes it clear that evidential *pota* does not retain its original lexical meaning as a verb of visual perception. In fact, even a blind person can use sentences involving evidential *pota* without any contradiction.

2.2. Evidential *Pota* as a High Functional Head

In An 2020, 2021, I argue that evidential *pota* is a functional head occupying a high position in the clause structure. More specifically, I argue that the root *po-* is the head of MoodP_{evidential} in Cinque’s (2004, 2006) cartographic hierarchy of functional projections, as shown in (5).

⁶ In the literature, the term “inferential evidential” seems to be used often, given that the speaker’s inference is necessarily involved in evidential *pota* sentences. In An 2020, 2021, I focus more on the nature of evidence involved in evidential *pota* sentences and use the term “circumstantial evidential,” obviously because the evidence should be circumstantial, not direct, which naturally induces certain inferences. I believe the two terms are essentially equivalent.



This analysis straightforwardly captures the fact that evidential *pota* cannot be marked with regular tense markers, which are standardly assumed to be in T, as shown in (6).^{7, 8}

- (6) *Toto-ka wa-(ss)-na po-ass-ta. (Cf. (4))
 T.-Nom come-Past-Eps PO_{evid}-Past-Dec

This is because the tense marker is lower than evidential *pota*, as (5) shows. Given the suffixal nature of the tense marker, it is attached to the lexical verb that precedes it.

Under this analysis, the incompatibility between regular tense markers and evidential *pota* is syntactic in nature. The prediction is that if a time-related element shows up in some higher syntactic position where it can attach to evidential *pota*, there should not be a problem. Though further research is required, this seems to be indeed the case. That is, another evidential marker *-te*, which indicates that the speaker made an observation about a situation at a point of time prior to the utterance time, can actually attach to evidential *pota*, as shown below.

- (7) Toto-ka cip-ey wa-ss-na po-te-la.
 T.-Nom home-to come-Past-Eps PO_{evid}-Evid-Dec

‘It seemed that Toto had come home.’

Note that the additional evidential marker *-te* comes between evidential *pota* and the clause

⁷ As indicated, (6) is ungrammatical regardless of whether the lexical verb is tense-marked or not.

⁸ In light of this, the following remark by Kwon (2018:328) seems relevant: “The formal defectiveness [of evidential *pota* (An)] may be attributed to the deictic nature of the expression, by which the inference is set to the speaker’s here-and-now perspective.” Though I generally agree with Kwon, I should note that in some cases, evidential *pota* is not exactly tied to the speaker’s inferences about “here-and-now.” See the discussion below.

type marker.⁹ This suggests that *-te* should be placed in a position between MoodP_{evidential} and ForceP in (5). More importantly, (7) indicates that the speaker's inference about Toto's coming home was made at some point of time earlier than now. Although *-te* is not a regular tense marker, the compatibility between *-te* and evidential *pota* can be seen as an alternative strategy to describe a past inference, an option that is not possible with regular tense markers. (See note 8.)

It is also noteworthy that lexical verbs can be followed by auxiliary verbs like *issta* 'be' or *pelita* 'end up', which encode various aspectual or modal properties, as shown in (8).

- (8) a. Toto-ka chayk-ul ilk-ko iss-ess-ta.
T.-Nom book-Acc read-Comp be-Past-Dec

'Toto was reading the book.'

- b. Toto-ka chayk-ul phal-a peli-ess-ta.
T.-Nom book-Acc sell-E end.up-Past-Dec

'Toto ended up selling the book.'

Note that it is the auxiliary verb, not the lexical verb, that is tense-marked in such contexts. In fact, tense-marking the lexical verb here makes the sentence ungrammatical, regardless of whether the auxiliary verb is tense-marked or not. I propose in An 2020 that auxiliary verbs and lexical verbs form a layered VP structure under T, with the auxiliary verb occurring above the lexical verb (see (2b)). If this is on the right track, the distribution of the tense marker in (8) follows. Crucially, it is predicted that unlike lexical verbs, evidential *pota* should not allow an auxiliary verb to follow it. This is indeed the case, as (9) shows. Rather, as expected, evidential *pota* must follow auxiliary verbs, as (10) shows.

- (9) a. *Toto-ka chayk-ul ilk-na po-ko iss-ta.¹⁰
T.-Nom book-Acc read-Eps PO_{evid}-Comp be-Dec

'(roughly) It is seeming that Toto reads a book.'

⁹ Evidential *pota* is not required for *-te* to show up, i.e., the latter can be used independently of the former, as shown in (i). Note that the past tense marker must precede *-te*, confirming that the latter occupies a high position outside TP.

- (i) Toto-ka wa-ss-te-la.
T.-Nom come-Past-Evid-Dec

'(I saw that) Toto had arrived.'

¹⁰ Incidentally, (9a) is grammatical under an irrelevant reading where *pota* functions as a lexical verb meaning 'check', 'observe'. In that case, the sentence means something like 'I am checking if Toto reads a book'.

- b. *Toto-ka chayk-ul ilk-na po-a peli-ess-ta.
 T.-Nom book-Acc read-Eps PO_{evid}-E end.up-Past-Dec
 ‘(roughly) Toto ended up seeming that he read a book.’
- (10) a. Toto-ka chayk-ul ilk-ko iss-ess-na po-ta.
 T.-Nom book-Acc read-Comp be-Past-Eps PO_{evid}-Dec
 ‘It seems that Toto was reading a book.’
- b. Toto-ka chayk-ul ilk-e peli-ess-na po-ta.
 T.-Nom book-Acc read-E end.up-Past-Eps PO_{evid}-Dec
 ‘It seems that Toto ended up reading a book.’

3. Evidential *Pota* vs. *Poita*

I pointed out at the outset that evidential *pota* and *poita* are similar in the sense that they both contain the verb root *po* and that they also roughly translate as ‘seem’. In this section, I illustrate some differences between them.

3.1. Structural Height

I showed in Section 2.2 that evidential *pota* cannot be tense-marked (by regular tense markers). Nor can it be followed by an auxiliary verb. These properties are attributed to the structural height of evidential *pota*. That is, evidential *pota* is located in the higher functional domain above TP as the head of MoodP_{evidential} à la Cinque 2004, 2006.

Unlike evidential *pota*, *poita* allows tense-markers to attach to it, as shown below. This indicates that the position of *poita* is lower than T.

- (11) Toto-ka cip-ey ka-n kes-ulo poi-ess-ta.
 T.-Nom home-to go-Prn Comp-Ins POI-Past-Dec
 ‘It seemed that Toto went home.’

Regarding the possibility of combining *poita* with auxiliary verbs like those in (8), the auxiliary verbs do not seem easily compatible with *poita* presumably due to their aspectual properties.¹¹ However, though the sentences in (12) sound marginal to me, to the extent they

¹¹ The auxiliary verbs in question can sometimes be combined with certain types of stative verbs as well, while it is true that they are more commonly used with action verbs. However, it has also been proposed in the literature that the dividing line does not exactly align with the distinction between action verbs and stative verbs, though the details do not really concern us much. In any case, discussing the behavior of auxiliary verbs in Korean goes well beyond the boundary of this paper. See Hong 2013, Lee 2015, Park 2016, H. Sohn 1999, S. Sohn 1996, Song 2012, Suh 1994, Yang 2004, among many others, for relevant discussion and references.

are possible at all, the auxiliary verbs have to follow *poita*, indicating that the latter occupies a lower position in the lexical domain of the clause.

- (12) a. ??Toto-ka cip-ey ka-n kes-ulo poi-ko iss-ess-ta.
 T.-Nom home-to go-Prn Comp-Ins POI-Comp be-Past-Dec

‘It continued to seem that Toto went home.’

- b. ??Toto-ka cip-ey ka-n kes-ulo poi-e peli-ess-ta.
 T.-Nom home-to go-Prn Comp-Ins POI-E end.up-Past-Dec

‘It continued to seem that Toto went home.’

Significantly, *poita* can co-occur with evidential *pota* itself. In that case, the former has to precede the latter, not vice versa, as shown below.

- (13) Toto-nun Momo-ka chinkwu-lo poi-na po-ta.
 T.-Top M.-Nom friend-Ins POI-Eps PO_{evid}-Dec

‘It seems that Toto considers Momo a friend.’

This state of affairs is consistent with the proposal that evidential *pota* occupies a position in the higher functional domain above TP, while *poita* occupies a position in the lower lexical domain below TP.

3.2. Person Restriction

Evidential *pota* signals that what is uttered is the speaker’s inference, essentially a conjecture, about the situation based on circumstantial evidence. In other words, the perceiver is always the speaker in evidential *pota* sentences. Moreover, it is interesting that the perceiver is not overtly realized. In fact, overtly realizing the perceiver leads to ungrammaticality in evidential *pota* sentences. In contrast, *poita* allows the perceiver to be overtly realized as a topic phrase, which is optionally marked dative as well. This is illustrated by the contrast between (14) and (15).

- (14) *Na-(eykey)-nun Toto-ka cip-ey wa-ss-na po-ta.
 I-Dat-Top T.-Nom home-to come-Past-Eps PO_{evid}-Dec

‘It seems to me that Toto came home.’

- (15) Na-(eykey)-nun Toto-ka minam-ulo poi-n-ta.
 I-Dat-Top T.-Nom handsome.man-Ins POI-Pres-Dec

‘Toto seems to me to be a handsome man.’

Another important difference is that in *poita* sentences, the topic phrase, i.e., the perceiver, is not limited to first person. In other words, *poita* sentences can describe other

person's perception as well.

- (16) Momo-(eykey)-nun Toto-ka minam-ulo poi-n-ta.
 M.-Dat-Top T.-Nom handsome.man-Ins POI-Pres-Dec
 'Toto seems to Momo to be a handsome man.'

Given this, the availability of a sentence like (13), where *poita* and *pota* are combined, is also interesting. I repeat the example below for convenience.

- (17) Toto-(eykey)-nun Momo-ka chinkwu-lo poi-na po-ta.
 T.-Dat-Top M.-Nom friend-Ins POI-Eps PO_{evid}-Dec
 '(In my opinion) Momo seems to Toto to be a friend.'

Here, the topic phrase is associated with *poita*, so that *poita* indicates Toto's perception. But, the content of the whole sentence is the speaker's inference based on some circumstantial evidence, e.g., the speaker notices that Toto treats Momo nicely (though Toto never explicitly said that Momo is his friend). Thus, in (17), the speaker makes an inference about Toto's perception of Momo.

3.3. Clause Type Restriction

Another characteristic property of evidential *pota* is that it can only be used in sentences that are marked declarative. For instance, it is unacceptable in sentences that contain an interrogative clause type marker, as shown below.

- (18) *Toto-ka wa-ss-na po-ni?
 T.-Nom come-Past-Eps PO_{evid}-Int
 'Does Toto seem to have arrived?'

In contrast, *poita* can be used in interrogative sentence.

- (19) Ne-nun Toto-ka minam-ulo poi-ni?
 you-Top T.-Nom handsome.man-Ins POI-Int
 'Does Toto seem to you to be a handsome man?'

This is understandable, considering that evidential *pota* is exclusively used with the first person perceiver, i.e., the speaker, and signals that the perceiver has made an inference based on his/her interpretation of the circumstantial evidence. Thus, it does not seem to make sense to ask whether that is the case or not. This way, the contrast between (18) and (19) is consistent with the difference between evidential *pota* and *poita* with respect to the person restriction discussed in the previous section.

4. Properties of *Poita*

Let us turn to the properties of *poita*. While *poita* and *pota* are apparently similar in that they share the verb root *po* and have similar meanings that roughly translate as ‘seem’, there are also clear differences between them, as shown in the previous section. Furthermore, *poita* contains an additional element following the verb root, namely, *-i*, which some researchers argue to be a passive morpheme (Kwon 2018, Sohn 1999, 2012). Though it may be true that *poita* has some properties of a passive verb, it also differs from typical passive verbs, which is one of the main issues to be discussed below. More specifically, I argue below that while it may be true that *poita* contains the passive morpheme *-i*, one should be careful in treating *poita* simply as the passive counterpart of *pota*, which is why I have glossed it simply as POI so far.

4.1. Cognitive *Pota*

The first thing to make sure is whether *poita* is a genuine passive counterpart of *pota*. Note that when *pota* is used in its basic meaning ‘see’ as a verb of visual perception, it behaves as a stereotypical transitive verb. Thus, in (20), there are two DP arguments that are marked nominative and accusative, respectively. (For ease of exposition, I will henceforth refer to this basic use of *pota* as “visual *pota*.”)

- (20) Toto-ka Momo-lul po-ass-ta.
 T.-Nom M.-Acc see-Past-Dec
 ‘Toto saw Momo.’

Now, recall that *pota* has undergone grammaticalization in many ways taking on various extended meanings and functions. One of its variants expresses the notion of non-visual perception which roughly translates as ‘have an opinion’, ‘consider’, ‘believe’, and the like. (Following Sohn (2012), I will refer to this use of *pota* as “cognitive *pota*”.) Crucially, cognitive *pota* behaves differently from when it is used as a verb of visual perception, as in (20). More specifically, its argument structure and case frame change much. For instance, in addition to having two DPs¹², cognitive *pota* takes a third element that has the instrumental case marker *-(u)lo*.¹³ This third element is in fact obligatory.

- (21) Na-nun Toto-lul *(chinkwu-lo) po-n-ta.
 I-Top T.-Acc friend-Ins PO_{cog}-Pres-Dec
 ‘I consider Toto to be a friend.’

¹² In fact, the status of the accusative DP is also different between visual *pota* and cognitive *pota*. I turn to this shortly.

¹³ There is much variation among researchers concerning the precise inventory and terminology regarding various case markers in Korean. In this paper, I follow Sohn (1999) and refer to *-(u)lo* as an instrumental case marker. It is noteworthy that according to Sohn (1999: 338), instrumental case is extremely polysemic.

Moreover, (21) is not the only possibility for cognitive *pota*. A few other configurations are also available, as shown below.

- (22) a. Na-nun Toto-lul coh-key po-n-ta.
 I-Top T.-Acc good-Comp PO_{cog}-Pres-Dec
 ‘I consider Toto to be good.’
- b. Na-nun Momo-ka kyuchik-ul eki-n kes-ulo po-n-ta.
 I-Top M.-Nom rule-Acc break-Prn Comp-Ins PO_{cog}-Pres-Dec
 ‘I believe that Momo broke the rules.’
- c. Na-nun Momo-ka kyuchik-ul eki-ess-ta-ko po-n-ta.
 I-Top M.-Nom rule-Acc break-Past-Dec-Comp PO_{cog}-Pres-Dec
 ‘I believe that Momo broke the rules.’

Given this, I propose that unlike visual *pota*, cognitive *pota* takes a clause as its complement, where the complement clause can be either a small clause, as in (21) and (22a), or a full clause, as in (22b) and (22c). When the small clause option is taken, I assume that the small clause subject is case-marked by ECM, putting aside the question of how ECM should be implemented formally. While there are many details that need be worked out further¹⁴, I propose the following structures for clausal complements of cognitive *pota*.

- (23) a. Small clause complement
- ```

 graph TD
 VP --> FP
 VP --> V[POcog]
 FP --> Sub
 FP --> Fp[F']
 Fp --> Pred
 Fp --> F

```
- b. Full clause complement
- ```

      graph TD
      VP --> CP
      VP --> V[POcog]
      CP --> TP
      CP --> C[kes/ko]
    
```

4.2. Cognitive *Pota* and *Poita*

So far, I have been glossing the verb root of *pota* simply as POI, ignoring its internal structure. Let us look into it in this section. Basically, I assume with Kwon (2018) and Sohn (1999, 2012) that *pota* is a passive form. What is crucial is that *pota* is the passive counterpart not of visual *pota*, but of cognitive *pota*. Consider the *pota* sentences below that

¹⁴ Further investigation is necessary regarding how or whether the instrumental case marker *-(u)lo* and the complementizer (or “adverbializer” in traditional terms) *-key* should be represented structurally. In particular, the fact that the nominal predicate in the small clause complement, as in (21), and the nominal complementizer *kes*, as in (22b), bear the instrumental case marker seems to indicate that nominal categories in the domain of cognitive *pota* are somehow marked instrumental, though the precise details need further research.

are based on the cognitive *pota* sentences in (21) and (22).

- (24) a. Na-nun Toto-ka chinkwu-lo po-i-n-ta.
 I-Top T.-Nom friend-Ins PO_{cog}-Pass-Pres-Dec
 ‘To me, Toto seems to be a friend.’
- b. Na-nun Toto-ka coh-key po-i-n-ta.
 I-Top T.-Nom good-Comp PO_{cog}-Pass-Pres-Dec
 ‘To me, Toto seems to be good.’
- c. Na-nun Momo-ka kyuchik-ul eki-n kes-ulo po-i-n-ta.
 I-Top M.-Nom rule-Acc break-Prn Comp-Ins PO_{cog}-Pass-Pres-Dec
 ‘To me, Momo seems to have broken the rules.’
- d. Na-nun Momo-ka kyuchik-ul eki-ess-ta-ko po-i-n-ta.
 I-Top M.-Nom rule-Acc break-Past-Dec-Comp PO_{cog}-Pass-Pres-Dec
 ‘To me, Momo seems to have broken the rules.’

Note that in (24a) and (24b), which I argue to involve small clauses, the small clause subject *Toto* must be marked nominative, when the passive morpheme *-i* occurs attached to the root of cognitive *pota*.

The obligatoriness of nominative marking is confirmed by the ungrammaticality of the examples in (25).

- (25) a. *Na-nun Toto-lul chinkwu-lo po-i-n-ta.
 I-Top T.-Acc friend-Ins PO_{cog}-Pass-Pres-Dec
- b. *Na-nun Toto-lul coh-key po-i-n-ta.
 I-Top T.-Acc good-Comp PO_{cog}-Pass-Pres-Dec

This also sharply contrasts with the obligatoriness of accusative marking on the small clause subjects in (21, 22a) involving the active form of cognitive *pota*. If the small clause subjects in (21, 22a) are marked nominative, the result is ungrammatical, as shown in (26). Note also the contrast between (24a, b) and (26a, b) in this regard.

- (26) a. *Na-nun Toto-ka chinkwu-lo po-n-ta.
 I-Top T.-Nom friend-Ins PO_{cog}-Pres-Dec
- b. *Na-nun Toto-ka coh-key po-n-ta.
 I-Top T.-Nom good-Comp PO_{cog}-Pres-Dec

Thus, the case pattern in the examples above provides strong support for the view that *poita* is the passive counterpart of cognitive *pota*.

In the case of (24c, d), there is no difference in the case form of the relevant elements compared to their active counterparts in (22b, c). This is because the clausal complements are full clauses without ECM in both cases.

Given this, the question arises if there is any actual difference between (22b, c) and (24c, d). Intuitively, there is not such a big difference between them. But, it should be noted that although both cognitive *pota* and *poita* can be considered perception verbs, cognitive *pota* feels more agentive than *poita*, which is not entirely unexpected given that the latter is a passive form. So, the topic marked perceiver is interpreted as one who “holds” an opinion in the case of cognitive *pota*, while it is interpreted as one who “experiences” an opinion in the case of *poita*. The contrast in (27) indicates that this is indeed the case. In (27a), with the active form of cognitive *pota*, the topic marked perceiver is understood to have some control over the opinion that he/she holds. Therefore, an adjunct phrase like ‘unlike self’s anticipation/intention’ is incompatible with it.¹⁵ In (27b), with the passive form *poita*, the perceiver does not have control of the perception and simply experiences it, causing no problem with respect to the adjunct phrase.

- (27) a. #Toto-nun caki-uy yeysang/uyto-wa-nun talli
 T.-Top self-Gen anticipation/intention-with-Top differently
 Momo-lul chinkwu-lo po-ass-ta.
 M.-Acc friend-Ins PO_{cog}-Past-Dec
 ‘Unlike his anticipation/intention, Toto considered Momo to be a friend.’
- b. Toto-nun caki-uy yeysang/uyto-wa-nun talli
 T.-Top self-Gen anticipation/intention-with-Top differently
 Momo-ka chinkwu-lo po-i-ass-ta.
 M.-Nom friend-Ins PO_{cog}-Pass-Past-Dec
 ‘Unlike his anticipation/intention, Momo seemed to Toto to be a friend.’

Furthermore, cognitive *pota* and *poita* behave differently with respect to their compatibility with certain aspectual auxiliary verbs.

- (28) a. Toto-nun Momo-lul chinkwu-lo po-ko iss-ta.
 T.-Top M.-Acc friend-Ins PO_{cog}-Comp be-Dec
 ‘Toto continues to consider Momo to be a friend.’
- b. *Toto-nun Momo-lul chinkwu-lo po-i-ko iss-ta.
 T.-Top M.-Acc friend-Ins PO_{cog}-Pass-Comp be-Dec

Given that the auxiliary verb above normally combines with agentive action verbs, the contrast between (28a) and (28b) is in line with the observation made above.

¹⁵ Other similar expressions like *caki-ka wenha-n kes-kwa-nun talli* ‘unlike what self wanted’, *caki-uy sayngkak-ka-nun talli* ‘unlike what self thought’ can also be used in (27) to the same effect.

5. Another Perception Verb

As mentioned above, visual *pota*, as the most fundamental perception verb, underwent grammaticalization in several ways, taking on various meanings and functions. Interestingly, there is another perception verb that behaves in a similar way, namely, *tutta* ‘hear’, a verb of auditory perception. (For ease of exposition, I will refer to *tutta* as “auditory *tutta*.”) In what follows, I discuss the properties of auditory *tutta* in comparison with visual *pota*.

5.1. Similarities between *Tutta* and *Pota*

First, in its basic use as a verb of auditory perception, *tutta* behaves like a typical transitive verb. One thing to note here is that *tutta* is ambiguous between ‘listen’ and ‘hear’, depending on which the role of the subject alternates between an agent and an experiencer.

- (29) Toto-ka umak-ul tul-ess-ta.¹⁶
 T.-Nom music-Acc listen-Past-Dec

‘Toto listened to music.’ / ‘Toto heard music.’

In fact, visual *pota* is ambiguous in the same way. That is, the subject perceiver can be interpreted as an agent or an experiencer, which is accordingly accompanied by a slight change in its meaning.

- (30) Toto-ka chayk-ul po-ass-ta.
 T.-Nom book-Acc see-Past-Dec

‘Toto read a book.’ / ‘Toto saw a book.’

Second, when these verbs are passivized, the perceiver is realized as a dative phrase. Notably, it then allows only an experiencer reading. This is the same for both auditory *tutta* and visual *pota*.

- (31) a. Toto-eykey umak-i tul-i-ess-ta.
 T.-Dat music-Nom hear-Pass-Past-Dec

‘Toto heard music.’

- b. Toto-eykey chayk-i po-i-ess-ta.
 T.-Dat book-Nom see-Pass-Past-Dec

‘Toto saw a book.’

Third, just like *pota*, *tutta* also has a cognitive counterpart that roughly translates as ‘consider’ depending on context. (Henceforth, I will refer to this use of *tutta* as “cognitive *tutta*.”) Moreover, the argument structure and case frame of cognitive *tutta* also become

¹⁶ For phonological reasons, the verb root *tut* changes into *tul* before a vowel. This is irrelevant to our discussion.

different from those of auditory *tutta* in the same way as the difference between visual *pota* and cognitive *pota*. That is, just like cognitive *pota*, cognitive *tutta* also takes a small clause complement with an ECM subject and a predicate that is marked instrumental, as shown in (33).¹⁷

- (32) a. Na-nun Toto-lul chinkwu-lo po-n-ta. (= (21))
 I-Top T.-Acc friend-Ins PO_{cog}-Pres-Dec

‘I consider Toto to be a friend.’

- b. Na-nun Toto-lul coh-key po-n-ta. (= (22a))
 I-Top T.-Acc good-Comp PO_{cog}-Pres-Dec

‘I consider Toto to be good.’

- (33) a. Toto-nun nay mal-ul nongtam-ulo tut-nun-ta.
 T.-Top my word-Acc joke-Ins TUT_{cog}-Pres-Dec

‘Toto considers my words to be jokes.’

- b. Toto-nun nay mal-ul cwungyoha-key tut-nun-ta.
 T.-Top my word-Acc important-Comp TUT_{cog}-Pres-Dec

‘Toto considers my words to be important.’

Fourth, just like cognitive *pota*, cognitive *tutta* can be passivized, where its meaning roughly translates as ‘sound like’, which is not so different from the meaning of *poita*.

- (34) Toto-(eykey)-nun Momo-uy mal-i nongtam-ulo tul-i-ess-ta.
 T.-Dat-Top M.-Gen word-Nom joke-Ins TUT_{cog}-Pass-Past-Dec

‘To Toto, Momo’s words sounded like a joke.’

¹⁷ On the other hand, it seems that *tutta* sounds much less acceptable with full clausal complements.

- (i) ??Toto-nun nay mal-i thulli-n kes-ulo tut-nun-ta.
 T.-Top my word-Nom wrong-Prn Comp-Ins TUT_{cog}-Pres-Dec

‘Toto considers my words to be wrong.’

- (ii) ??Toto-nun nay mal-i thulli-ess-ta-ko tut-nun-ta.
 T.-Top my word-Nom wrong-Past-Dec-Comp TUT_{cog}-Pres-Dec

‘Toto considers my words to be wrong.’

Incidentally, these sentences sound better with the past tense marker *-ess* on the verb root *tut* instead of the present tense marker *-nun*. In that case, for some reason, the verb has to be interpreted as a lexical verb rather than as cognitive *tutta*. It is not so clear what the nature of this is, but it is clearly an independent issue.

5.2. Differences between *Tutta* and *Pota*

I have shown above that *tutta* behaves similarly to *pota*. In particular, both of them are not limited to their original lexical meanings that express direct sensory perception. Rather, their meanings are extended in several ways along with changes in other formal properties such as their argument structure, case frame, structural position, and so on.

Although *tutta* seems to have undergone grammaticalization in a similar way to *pota*, the extent to which the former is grammaticalized is more limited than the latter. I suspect that this is because visual perception is the most fundamental mode of our perception and is thus involved in a huge array of activities that we do, naturally leading to various extensions of its meaning and function, as Rhee (2001) and Sohn (2012) also note. Crucially, *tutta* did not go so far as to become an evidential marker, a functional head in the higher domain outside TP, so that its distribution seems to be limited to the lower lexical domain.

Note that just like evidential *pota*, the passive counterpart of cognitive *pota*, i.e., *poita*, also does not require visual perception per se. Rather, what is crucial for its use is the perceiver's inference, which does not have to be based on direct perception of visual evidence. For instance, (35) can be uttered perfectly naturally when the speaker only hears a loud booming sound accompanied by a severe trembling of the building without actually seeing the explosion.¹⁸ Note here that *poita* (as well as evidential *pota*, as shown in note 18) can be used even though the evidence (or perception) involved is auditory, not visual, reflecting the high degree of extension of its meaning.

- (35) Kunche-eyse phokthan-i theci-n kes-ulo po-i-n-ta.
 vicinity-at bomb-Nom explode-Prn Comp-Ins PO_{cog}-Pass-Pres-Dec

‘It seems that a bomb went off nearby.’

In the case of *tutta*, the role of auditory perception does not seem to disappear entirely even when it is used as cognitive *tutta* (or its passive counterpart *tulita* for that matter). In this regard, it is noteworthy that in (33), *tutta* can be replaced by *pota* without any significant difference in meaning, as (36) shows, while *tutta* cannot replace *pota* in (32), as (37) shows.

- (36) Toto-nun nay mal-ul nongtam-ulo po-n-ta. (Cf. (33))
 T.-Top my word-Acc joke-Ins PO_{cog}-Pres-Dec

‘Toto considers my words to be jokes.’

¹⁸ In the same context, evidential *pota* can be used too.

- (i) Kunche-eyse phokthan-i theci-ess-na po-ta.
 vicinity-at bomb-Nom explode-Past-Eps PO_{evid}-Dec

‘It seems that a bomb went off nearby.’

- (37) *Na-nun Toto-lul chinkwu-lo tut-nun-ta. (Cf. (32))
 I-Top T.-Acc friend-Ins TUT_{cog}-Pres-Dec

‘I consider Toto to be a friend.’

In conclusion, although the perception verbs *pota* and *tutta* both underwent grammaticalization, altering their meanings and other grammatical properties, *pota* has been grammaticalized to a greater extent than *tutta*, presumably because it involves the most fundamental mode of our perception and is thus used more frequently and in a wider range of situations.

6. Concluding Remarks

This paper began with the observation that two verb forms in Korean, i.e., what I call “evidential *pota*” and “*poita*”, the passive form of cognitive *pota*, are similar in that they both contain the root of the visual perception verb *po* and that they roughly translate as ‘seem’, expressing inferences about the situation. I have also shown that there are differences between them to the effect that they occupy different positions in clause structure. More specifically, while evidential *pota* occupies right peripheral position in the higher functional domain as the head of MoodP_{evidential} à la Cinque 2004, 2006, as argued in An 2020, 2021, *poita* occurs in the lower lexical domain under TP.

While comparing evidential *pota* and *poita*, I also explored the properties of visual *pota*, cognitive *pota*, and *poita*. The important point is that the relation among visual *pota*, cognitive *pota*, *poita*, and evidential *pota* can be understood to be a gradient of the degree of grammaticalization, where visual *pota* and evidential *pota* occupy two opposite ends, while cognitive *pota* and *poita* fall somewhere in-between.

I also discussed properties of the auditory perception verb *tutta* and pointed out that it behaves similarly to *pota* in the sense that it underwent grammaticalization and behave as a cognitive verb. There is also a difference between them to the effect that *tutta* did not go through a full degree of grammaticalization to become a functional element unlike *pota*, which may be attributable at least in part to the fact that *pota* is the most fundamental perception verb and is used more frequently in various situations.

As noted at the outset, researchers like Rhee (2001), Sohn (2012) state that grammaticalization of perception verbs is common in many languages. It seems worthwhile to explore further the extent to which such verbs (and others) are grammaticalized, what properties they show, and whether they reveal any deeper properties of human language.

References

- An, D. (2020) “Three Ways to See in Korean: Sentence Final Endings, Clause Structure, and the Subjunctive Circumstantial Evidence Construction,” *Linguistic Research* 37, 477-498.
- An, D. (2021) “A Cartographic Approach to the Right Periphery: The Dual Status of Italian *Sembrare* and Its Korean Counterpart,” unpublished ms., Konkuk University.
- Cinque, G. (2004) “‘Restructuring’ and Functional Structure,” in A. Belletti, ed., *Structures and Beyond: The Cartography of Syntactic Structures, Volume 3*, Oxford University Press, Oxford, 132-191.
- Cinque, G. (2006) *Restructuring and Functional Heads: The Cartography of Syntactic Structures, Volume 4*, Oxford University Press, Oxford.
- Ho, G. (1999) “Pocoyongen ‘pota’ Kwusenguy Yeksacek Pyenchen [The Historical Change of the Auxiliary Verb ‘pota’ Construction],” *Kwukemwunhak [The Journal of Korean Language and Literature]* 34, 151-178.
- Ho, G. (2003) *Kwuke Pocoyongen Kwuseng Yenkwu [A Study of Korean Auxiliary Verb Constructions]*, Youkrack, Seoul.
- Hong, K. (2013) “The Progressive in English and Korean,” *Korean Journal of Linguistics* 38, 1049-1092.
- Kang, M. (1988) *Topics in Korean Syntax: Phrase Structure, Variable Binding, and Movement*. Ph.D. dissertation, MIT.
- Kim, G. (2020) “The Grammaticalization of a Verb Stem ‘po-’,” *Gaesin Language and Literature Research* 45, 5-33.
- Kwon, I. (2012) “Please Confirm What I Inferred: On the Korean Inferential-Evidential Marker -*napo-*.” *Journal of Pragmatics* 44, 958-969.
- Kwon, K. (2018) “A Bias-driven Modal Development of Evidentiality: The Korean Inferential Evidential -*po*,” *Journal of East Asian Linguistics* 27, 311-346.
- Lee, H. (2015) “Tense and Aspect,” in L. Brown and J. Yeon, eds., *The Handbook of Korean Linguistics*, Wiley Blackwell, Oxford, 232-248.
- Park, K. (2016) “A Study on the Interaction between the Progressive Marker ‘-*ko iss*’ in Korean and the Lexical Aspect,” *Studies in Linguistics* 41, 183-197.
- Rhee, S. (2001) “Grammaticalization of Verbs of Cognition and Perception,” *Studies in Modern Grammar* 24, 111-135.
- Rizzi, L. (1997) “The Fine Structure of the Left Periphery,” in L. Haegeman, ed., *Elements of Grammar*, Kluwer Academic Publishers, Dordrecht, 281-337.
- Sohn, H. (1999) *The Korean Language*, Cambridge University Press, New York.
- Sohn, H. (2012) “A Grammar of *Po-* ‘see’ in Korean: A Panchronic Approach,” *Language Information* 14, 83-117.
- Sohn, S. (1996) *Kwukepocoyongen Yenkwu [A Study of Korean Auxiliary Verbs]*, Hankuk Munwha, Seoul.
- Song, C. (2012) “A Study on the Function and Meaning of -*go iss-*, -*e iss-*,” *The Journal of Linguistics Science* 62, 179-204.
- Suh, C. (1994) *A Korean Grammar*, Cipmwundang, Seoul.
- Sweetset, E. (1990) *From Etymology to Pragmatics*, Cambridge University Press, Cambridge.
- Yang, J. (2004) “Against the Complementarity of -*go iss-* and -*es iss-*,” *Han-Geul* 266, 105-137.