

**On the pragmatic nature of empty nominal *pro*
in Korean null object constructions:
A Relevance account***

Euiyon Cho
(Dongguk University, Seoul)

Cho, Euiyon. 2013. On the pragmatic nature of empty nominal *pro* in Korean null object constructions: A Relevance account. *Linguistic Research* 30(1), 51-66. In this paper I argue that the empty nominal *pro* used in the Korean null object constructions is semantically indeterminate and its content, being controlled in discourse, is recovered through inferential processes called enrichment. It will be shown within the framework of Relevance Theory which draws a distinction between what is coded and what is inferred. By reanalyzing Ahn and Cho's (2012a) previous explicature analysis of a null object construction whose pair of the construction contains the NPI *amwuto* 'anybody,' this paper argues that there is nothing semantically encoded in the *pro* used in the null object constructions. It also gives a Relevance account of how such sloppy-like and strict readings are inferentially derived. (Dongguk University)

Keywords null arguments, *pro*, sloppy-like reading, discourse controlled, explicature, inference

1. Introduction

Recent syntactic studies over the nature of the null object category in Korean have been centered on whether it is *pro* or derived as a result of ellipsis. Arguments against an ellipsis analysis have been made by claiming that the sloppy reading that ellipsis proponents have discussed is not in fact a genuine one but a sloppy-like reading. The sloppy-like reading is only possible with a *pro* hypothesis, as Hoji (1998), Ahn and Cho (2012a, b), Park (2012) have argued. As illustrated in (1)

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below, for example, the null object construction (1B) could be interpreted in two ways when it is uttered after (1A).

- (1) A: Chelswu-nun caki-uy cha-lul takk-ass-e.
 Top self-Gen car-Acc wash-Pst-Dec
 ‘Chelswu_i washed his_i car.’
 B: Younghi-to takk-ass-e.
 also wash-Pst-Dec
 (logical meaning) ‘Younghi washed *pro*, too.’
 ‘Younghi washed his car (Chelswu’s car), too.’
 ‘Younghi washed her car (Younghi’s car), too.’

If the second reading was made via an ellipsis, it should not be cancelled because it assumes the linguistic representation (2) for (1B).

- (2) Younghi-to caki-uy cha-lul ttak-ass-e.

However, the two readings are cancellable as has been attested by Hoji and Ahn and Cho.¹

- (3) A: Chelswu-nun caki-uy cha-lul takk-ass-e.
 Top self-Gen car-Acc wash-Pst-Dec
 ‘John_i washed his_i car.’
 B: Younghi-to takk-ass-e. kulentey nwukwu cha-inc
 also wash-Pst-Dec but who car-Neg
 molu-kess-e
 not know-Mod-Dec
 ‘Younghi washed *pro* too. But I don’t know whose car.’

With regard to how the empty category *pro* in the null object constructions is interpreted, Hoji (1998: 142) has suggested with Japanese examples that “the content of the N head of the null argument is supplied by the context of discourse.” With

¹ The cancellability property of the null object construction has been also observed with regard to constructions whose object contains quantifiers, NPIs, etc. (see Ahn & Cho 2012a, b).

the nature of such sloppy-like readings of the Korean null object construction, along the line of Hoji, Ahn and Cho have argued that it is an implied meaning called explicature within the framework of Relevance theory (Sperber and Wilson 1986, Carston 2002). Though their explicature analysis of the sloppy-like readings seems to be on the right track, their wording or the way they present their explicature analysis of how the *pro* is interpreted is very likely to cause confusion when seen in detail from the perspective of Relevance theory (see section 2). In this paper the explicature analysis of the empty pronominal *pro* in the Korean null object constructions will be elaborated and it will shed a light on the discourse context controlled nature of *pro*. In section 3, in order to argue that the *pro* under discussion is discourse controlled empty nominal I will show how the empty nominal *pro* in the null object constructions is interpreted through inferential processes within the framework of Relevance theory.

2. *Pro* as discourse controlled empty nominal

In discussing their *pro* analysis of the null object construction in (4B), Ahn and Cho (2012a: 5) say “the null argument is closer to the indefinite *pro*” by quoting their previous work (Ahn and Cho 2011).

- (4) A: na-nun amwuto an manna-ss-e.²
I-Top anyone neg meet-Pst-Dec
'I did not meet anyone.'
B: na-to an manna-ss-e.
I-too neg meet-Pst-Dec
'I did not meet anyone, either.'

With the semantic assumption that the negative polarity item *amwuto* ‘anybody’ in (4B) “can be paraphrased as *salam-tul-ul amwuto* ‘people-Pl-Acc anybody,’” the interpretation of (4B), they say, “can be semantically similar to ‘I didn’t meet anyone, either,’” arising from “(the) indefinite counterpart of *salam-tul-ul* ‘people-Pl-Acc.’” What can be induced from the wordings ‘X can be a paraphrase of Y’ and ‘X can be semantically similar to Y’ is their position on the linguistic status

² This is their example (6) in Ahn & Cho (2012a).

of *pro* in (4B). They seem to take the *pro* used in (4) as a lexically given indefinite *pro*, being different from an arbitrary *pro* as if there exist various types of *pros* to be used in the Korean null object constructions. In the least, their wordings imbue a semantic status into the indefinite interpretation of *pro* in (4B). Under their analysis, therefore, the semantic interpretation of (4B) is taken to be as (5) and the explicature of (4B) as (6) which is the result of the pragmatic process of enrichment.

(5) I did not meet people, either.³

(6) I did not meet anyone, either.

In what follows, contrary to Ahn and Cho's position which takes (5) as a semantic reading for (4B), I will argue that it must be taken as an explicature of (4B) under their analysis if they adopt Relevance theory to explicate the sloppy-like readings of the Korean null object constructions.

Within the framework of Relevance theory, explicature is defined as follows:

An assumption communicated by an utterance U is EXPLICIT [hence an "explicature"] if and only if it is a development of a logical form encoded

³ In their paper, (5) and (6) are not explicitly given as they are. But to argue that the meaning (6) is an explicature developed from (5), they present a semantico-pragmatic analysis of a universal quantifier *mwukwuna* 'everybody' in a subject null construction in a pair of the following:

(i) A: *nwukwuna Cheli-lul cohaha-y.*
 everyone Cheli-Acc like-Dec
 'Everyone likes Cheli.'

B: ____ *Tongswu-to cohaha-y.*
 -also like-Dec
 'Everyone likes Tongswu, too.'

They give the following representation for (1B) and present the two readings (A) and (B),

(ii) *pro(=salamtul-i) Tongswu-to cohaha-y.*(Ahn & Cho's (10B))
 -also like-Dec

(A) People like Tongswu, too.

(B) Everyone likes Tongswu, too.

saying "the reading (B) is equivalent to the "explicature" of (A)" in the conversational context of (1). Therefore, it is presumed that the two readings (5) and (6) presented for (4B) is what Ahn and Cho presumed for their explicature analysis of the sloppy-like reading for (4B) in their paper.

by U.

[*Note:* in cases of ambiguity, a surface form encodes more than one logical form, hence the use of the indefinite here, “a logical form encoded by U.”] (Sperber and Wilson 1986: 182)

Within the modular theory of meanings in Relevance theory, there is a divide between semantics and pragmatics.⁴ The logical form encoded by an utterance is a semantic representation in the theory and what is pragmatically developed from the logical form, being enriched freely or obligatorily through inferential processes, gives a birth to explicature, the explicit content of an utterance. Explicature has a combinatory characteristics of both semantics and pragmatics, that is, code vs. inference in the sense of Ariel (2008).

Since Ahn and Cho explicitly takes the position that the meaning of the existential NPI *amwuto* ‘anyone’ is semantically equivalent to the nominal complex *salam-tul amwuto* ‘people-PI *amwuto*’ the logical form of (4A), cited below again, would be (7) whose literal meaning is therefore (8) as illustrated below:

- (4) A: na-nun amwuto an manna-ss-e.
I-Top anyone neg meet-Pst-Dec
‘I did not meet anyone.’
B: na-to an manna-ss-e.
I-too neg meet-Pst-Dec
‘I did not meet anyone, either.’
(7) na-nun salam-tul-ul amwuto an manna-ss-e.⁵
I-Top people-PI-Acc anyone neg meet-Pst-Dec
(8) I did not meet people, either.

When the null object construction (4B) is uttered after (4A), if the phonetically empty *pro* is not assigned an appropriate contextual information, there is no propositional content, that is, there is nothing that can be understood as the explicit

⁴ Though Relevance theory makes a distinction between semantics and pragmatics, truth conditional meanings or propositional meanings are taken to be context dependent, being pragmatically enriched. For some utterances, pragmatically enriched explicature becomes a propositional meaning. See Carston (1988 and 2002) for this.

⁵ This is their example (6) in Ahn and Cho (2012a).

content of the utterance (4B) as in the following.

(10) I did not meet *pro*, either

In other words, I claim, the logical form of the utterance (4B) is the one in (10) if represented in the form of English translation. Since the empty nominal *pro* in the object argument position is a grammatically selected constituent, it must be obligatorily saturated in the context in which it is uttered. Otherwise, no propositional form will be induced. In this context, ‘*samal-tul amwuto* in (7) which is the logical form of the utterance (4A) under Ahn and Cho’s analysis will serve as an antecedent for the resolution of the *pro* for the utterance (4B) to be explicitly understood or communicated. Under the assumption that the lexical meaning of *amwuto* is the same with or similar to the complex nominal *salamtul amwuto* ‘people-Pl anyone,’ as in Ahn & Cho, then, the representation in (11) becomes the explicature of (4B) because (11) is what is developed from the logical form (10) of the utterance (4B) through the obligatory enrichment process taken place in the context of (4).

(11) I did not meet people, either.

As said earlier, Ahn and Cho take (11) as the literal meaning of the null object construction (4B). But under Relevance theory which draws a line between logical form and what is explicated, (11) is not the logical/literal meaning of (4B), but an intermediate explicit content enriched through the saturation of the empty nominal *pro* by an inferential process in the context of (4).⁶

To recapitulate, the logical form of the utterance (4B) is (10) since the phonetically empty *pro* has no semantic content other than being a nominal whose “content of the head N of the null argument (*pro*) is supplied by the context of discourse,” as suggested in Hoji (1998: 142). Therefore, the content of the *pro* in

⁶ My position about how the utterance (4B) gets enriched is different from Ahn and Cho’s. With the assumption that the lexical meaning of *amwuto* ‘anybody’ is something like *salam-tul amwuto* ‘people *amwuto*,’ there is no linguistically motivated reason to develop the explicit content of (4B) ‘I did not meet anyone, too’ through the intermediate step ‘I did not meet people, too’ from the logical form of ‘I did not meet *pro*, too.’ I suggest that the explicit content of (4B) is directly developed from the logical meaning of the utterance, ‘I did not meet *pro*, too.’

(4B), left unfilled in a discourse context, is pragmatically enriched, being supplied from the preceding linguistic context, giving rise to the explicature ‘I did not meet anyone, too.’ Within the framework of Relevance theory, the logical form of the null argument in the object null construction is the empty nominal *pro* itself and its content is pragmatically saturated from the context in which it is used. The resulting explicit content would be interpreted either definite or indefinite depending on the referential property of what is being construed as the content of the *pro*. It means that there is only one *pro* to be used in the Korean null object constructions. Since the *pro* gets its content in the discourse context, it is discourse controlled *pro*.

3. A Relevance account of discourse controlled *pro*

In this section we will discuss how the content of the *pro* in the object null construction gets enriched by contexts in detail and see that the full-fledged interpretation of *pro* is purely inferential, thus called discourse controlled *pro* in this paper. What supports the inferential property of the readings is the empirical fact that those meanings assigned to the *pro* in context are cancellable because semantic meanings should not be cancelled. This paper gives a Relevance account of the purely inferential nature for sloppy-like and strict readings to show that the content of *pro* is determined in context via inferential processes.

Seen from the perspective of how the content of the *pro* in the object argument position is supplied and get enriched, listeners are guided to use a pragmatic strategy to recover the content of an anaphoric element intended by the speaker. They search a possible antecedent of an anaphor through a discourse model that includes information from many things never said in the discourse or mutually known between the interlocutors in the speech situation as well as from a preceding linguistic context.

In the following we will see how the strict, sloppy identity, and sloppy-like readings are constructed or comprehended. In Relevance theory, verbally expressed linguistic forms, that is, utterances encode logical forms (conceptual representation) since logical forms are what is linguistically encoded. They might be incomplete if they lack obligatory arguments selected by a predicate. The null object constructions under discussion are such cases whose logical forms are incomplete. For example,

the logical representation of the utterance (12B) is ‘Younghi was washing *pro*, too’

- (12) A: Chelswu-nun caki-(uy) cha-lul takk-ass-e.
 Top self Gen car-Acc wash-Pst-Dec
 ‘Chelswu_i washed his_i car.’
 B: Younghi-to takk-koiss-ess-e.
 also wash-Prog-Pst-Dec
 (logical meaning) ‘Younghi was washing *pro* too.’

The conceptual representation (12B) itself is incomplete to yield a propositional meaning. Since there is no syntactic constraint on the use of the discourse controlled *pro*, a possible antecedent of the discourse variable varies depending on the context in which it is used.⁷ What governs the speaker’s appropriate use of the discourse controlled *pro* is her estimation of the hearer’s mental model. If she believes that the hearer is able to recover the antecedent or get the explicit content of the *pro* by her estimation of his mental model, the speaker leaves the object argument position verbally unsaid, by filling it with *pro* whose content is inferred from the context in which it is used.

In other words, the discourse situation which licenses the speaker’s appropriate use of the null object is where Grice’s maxim of Quantity or Horn’s R-principle (Say no more than you must) governs.⁸ In fact, as argued in Carston (1995), speakers are driven “to derive as great a range of contextual effects as possible for the least expending effort” (231). The speaker leaves the linguistic content of the object argument implicit or unuttered because she believes that the hearer could recover the content of the *pro* as is intended by her in the communicative context. This is possible because the speaker’s use of *pro* in the object position creates a presumption of optimal relevance.⁹ That is, the zero form in the object position used

⁷ As has been proposed by many Korean syntacticians (Ahn & Cho 2012a,b, Bae and Kim 2012 to cite a few), the Korean null *pro* in the object position has the property of being pragmatically controlled for its antecedent, being characterized as a deep anaphora in the sense of Hankamer and Sag (1976).

⁸ It is also known as the Law of Least Effort dictating the minimization of form.

⁹ According to Relevance theory, every ostensive stimulus, no matter whether it is verbal or nonverbal, conveys a presumption of its own optimal relevance. It is known as communicative principle of relevance. Presumption of optimal relevance consists of two parts as in the following:

molu.kkess-e.
 not know-Dec
 (logical meaning) ‘Younghi was washing *pro*, too. But I don’t know
 whose car it was’

The sloppy identity reading appears to be cancelled because the referential interpretation for the *pro* takes place through inferential processes. According to Hoji, as was introduced earlier in this paper, the *pro* gets the content of its head from the preceding linguistic context *cha* ‘car,’ turning the incomplete logical form into a propositional content ‘Younghi was washing a car, too.’¹² This propositional content gets further enriched into ‘Younghi was washing her (Younghi’s) car’ in the speech situation in which A and B know that Chelswu and Younghi own their car to be washed by themselves. The reason why the sloppy-like reading is cancellable is due to the fact that the reading is developed from the logical form ‘Younghi was washing *pro*, too’ to the explicature ‘Younghi was washing her car’ through inferentially enriched processes.¹³

On the other hand, though it is a less preferred reading compared with the sloppy-like reading, the *pro* in the utterance (12B) is likely to be also interpreted as referring to Chelswu’s car, yielding its strict reading ‘Younghi was washing Chelswu’s car, too’ in (12). The speaker B knows that her use of the null object construction in this speech context could also imply ‘Younghi was washing Chelswu’s car, too.’ But since the sloppy-like reading ‘Younghi was washing her car, too’ is what is most likely to be interpreted by the hearer A in the aforementioned context, she should not leave her use of the null object construction which is pragmatically ambiguous if she intends to achieve her communicative goal of informing A that Younghi was washing Chelswu’s car, too. Therefore, B should add a piece of rectifying information after uttering the null object construction in order to cancel the unintended pragmatic meaning ‘Younghi was washing her

¹² This is called ‘an obligatory saturation inferential process.’ See Recanati (2004) for the process of saturation.

¹³ From the perspective of language processing, the way the *pro* gets its referential meaning in this context would be different. The hearer would search the antecedent of the *pro* in his mental model in which Younghi’s car exists. With the belief that it is common that each person washes his or her car by himself or herself unless other situations which would erase this belief are markedly given, the hearer would resolve the antecedent of the *pro* as Younghi’s car in his mental model.

(Younghi's) car.'¹⁴ This is illustrated below:

- (14) A: Chelswu-nun caki-(uy) cha-lul takk-ass-e.
 Top self Gen ccar-Acc wash-Pst-Dec
 'John_i washed his_i car.'
- B: Younghi-to takk-koiss-ess-e. kulendey ku cha-nun
 also wash-Prog-Pst-Dec but that car-Top
 Younghi cha-ka ani-ya.
 car-Nom not Dec
 (logical meaning) 'Mary was washing *pro* too. But that car was not
 Younghi's'

This also shows how the sloppy-like reading can be cancelled and at the same time how the strict reading intended by the speaker B with her use of the *pro* could be strengthened.

Now let us move to see how the strict reading arises in a different context and can be cancelled. Suppose that Younghi does not own a car but Chelswu does. Younghi is an auto mechanic and she went to his house to help him repair his car. After finishing repairing his car, she also helped him wash his car. In this situation, what the speaker B said in (15B) *Younghi-to takk-koiss-ess-e* 'Younghi was washing *pro*, too' could be interpreted to imply 'Younghi was washing his (Chelswu's) car' in this speech situation when uttered after what A said as in the following:

- (15) A: Chelswu-nun cha-lul takk-ass-e.
 Top car-Acc wash-Pst-Dec

¹⁴ If what B knows about the world is the state of affairs that Younghi washed Chelswu's car in the aforementioned speech context, the utterance (12B) would not be the most relevant form 'compatible with the speaker B's linguistic abilities and preferences' to inform A that Younghi also washed Chelswu's car in this context. With her use of the *pro* in the object argument position if the speaker B wanted to inform A that Younghi was washing Chelswu's car, too, the most relevant utterance form she is able to produce would be the following with the adverb *kathi* 'together' which prevents the null object construction (12B) from inducing pragmatic ambiguity.

- (a) Younghi-to kathi takk-koiss-ess-e.
 also together wash-Prog-Pst-Dec
 (logical meaning) 'Younghi was also washing *pro* together.'

‘Chelswu washed a car.’

B: *Younghi-to takk-koiss-ess-e.*

also wash-Prog-Pst-Dec

(logical meaning) ‘Younghi was washing *pro* too.’

A’s use of the bare NP *cha* is the most relevant one compatible with the speaker’s linguistic and pragmatic abilities when A intends to refer to Chelswu’s car in this context since A knows that Korean bare nouns can be used to refer to a definite entity. To put differently, with the least effort,¹⁵ the speaker A believes that the hearer B is able to enrich its meaning to ‘Chelswu’s car’ because A assumes that in the hearer’s discourse model constructed at the speech situation, there exists only one car owned by Chelswu. After hearing what A said, for B as a speaker, it is also in her interest to make her utterance as easy as possible to be understood by the hearer A to achieve her communicative goal of informing him that Younghi washed Chelswu’s car, too. Since Chelswu’s car has become the topic of the conversation and it is in their mental discourse model, with the linguistic pragmatic knowledge that the discourse controlled null *pro* is used when its full fledged content is recoverable from the discourse context, her use of the null object construction is the most relevant form to be uttered to achieve her communicative goal. If B had not wanted to inform A the propositional content ‘Younghi was washing Chelswu’s car, too,’ for instance, if she had intended to inform A that Younghi was washing someone else’s car, then she should have uttered a different linguistic form because the null object construction *Younghi-to takk-koiss-ess-e* ‘Younghi was washing *pro*, too’ was not considered to be the most relevant one to be produced under the speaker’s linguistic and pragmatic abilities in this speech situation.

With a different contextual assumption such as that Chelswu’s family has many cars including his, if B intended to focus on Younghi’s action of washing a car, after hearing what A said, that is, *Chelswu-nun cha-lul takkasse* ‘Chelswu washed a car’ as in (15A), she would utter the null object construction (15B).¹⁶ But, since A’s

¹⁵ Uttering a bare noun *cha* ‘car’ takes less effort than using a longer form such as ‘Chelswu’s car’ in the context that the speaker knows that the bare noun *cha* can be interpreted to refer to Chelswu’s car.

¹⁶ When the speaker intends to emphasize the action by de-emphasizing the object of the action (i.e., the patient argument), the null object construction is used. The following conversation could be easily observed in our daily life:

utterance (15A) implies that the car Chelswu washed would be either his or one of his family member's in this new speech context, B's utterance (15B) after (15A) also evokes the same explicature that Younghi washed a car; it might be Chelswu's or one of his family's. Suppose that B got the explicature 'Chelswu washed his (Chelswu's) car' from A's utterance in (14) but did not want her utterance *Younghi-to takk-koiss-ess-e* 'Younghi was washing *pro*, too' to be interpreted as implying that Younghi was washing Chelswu's, too. Then she would not leave her utterance as it is. To emphasize Younghi's action of washing a car, B could use the null object construction with a focal stress on the predicate *takk-koiss-ess-e* 'washing' as in (15B). But in order to cancel an unintended explicature, the strict reading, to be produced by her use of the null object construction, she will add any rectifying information after her use of the construction. This is illustrated below:

- (16) A: Chelswu-nun cha-lul takk-ass-e.
 Top car-Acc wash-Pst-Dec
 'John washed a car.'
- B: Younghi-to takk-koiss-ess-e. kulentey ku cha-nun Chelswu
 also wash-Prog-Pst-Dec but that car-Top
 cha-nun ani-ya.
 car-Top not-Dec
 (logical meaning) 'Younghi was washing *pro*, too. But that car is not
 Chelswu's.

If explained in terms of Hoji's idea of the structure of *pro*, the hearer A supplies the content of the *pro*'s head by the linguistic antecedent uttered by himself. It turns the

-
- Mother: ne mwu ha-ess-ni cip-ey iss-umyense?
 you what do-Pst-Que house-Loc be-while
 'What did you do at home?'
 Daughter: takk-ko chiwu-ko kulay-ss-eyo.
 wash-and clean-and do-Pst-Dec
 'I washed *pro* and cleaned *pro*'

Even in English this phenomenon has been reported in Goldberg (2004 :435) as shown below:

- (a) The chef-in-training chopped and diced all afternoon.
 (b) Pat gave and gave, but Chris just took and took.

incomplete logical form ‘Younghi was washing *pro*, too’ into a propositional content ‘Younghi was washing a car.’ It is then further enriched to the explicature ‘Younghi was washing Chelswu’s car’ as the explicit content of the logical form of the null object construction in the aforementioned speech situation. In this way, the explicit content is a byproduct of combining the logical meaning of the null object construction with the inferred meaning of the *pro* construed in the speech situation or in the hearer’s discourse mental model. Since any inferred meaning is pragmatic in nature, what is expected is the possibility of cancelling the inferred meaning of the *pro* in the null object construction of (15B). In fact, (16B) attests that this is true. That is, the strict reading for the *pro* in (15B) is the result of inference and is cancellable.

4. Concluding remarks

In this paper I have tried to show how the discourse controlled empty nominal *pro* in the Korean null object constructions gets interpreted through inferential processes within the framework of Relevance theory. Under the theory which draws a demarcation between what is decoded (semantics) and what is inferred (pragmatics), the logical form of the null object construction appears to contain a discourse controlled variable (*pro*) whose value or content is determined through the hearer’s inferential processes, called obligatory saturation in the speech situation. To be specific, by reanalyzing Ahn and Cho’s explicature analysis of the null object constructions, I have argued that there is only one *pro* to be used in the null object constructions whose explicit content is recovered by the hearer through his inferential processes in the given speech situation. Given that the semantic content of *pro* is indeterminate, its various interpretations such as strict and sloppy-like readings for the null object constructions have been shown to be discourse controlled, getting enriched in the speech situation. Therefore, whether the *pro* gets interpreted definite, indefinite or arbitrary is a pragmatic property of the empty nominal derived or inferred from contexts.

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Euiyon Cho

Department of English
Dongguk University
3-26 Phil-dong, Chung-ku
Seoul 100-715, Korea
E-mail: choey@dongguk.edu

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