# On Free Choice and Subtrigging in Korean\*

# Minpyo Hong (Myongji University)

Hong, Minpyo. 2011. On Free Choice and Subtrigging in Korean. Linguistic Research 28(3), 543-567. A few issues regarding the subtrigging phenomenon are critically reviewed in this paper. Based on a critical review of two major accounts of subtrigging in English any-constructions, namely that of Dayal (1998, 2004) and Aloni (2007), the paper describes data from Korean to see if Korean free choice words also display the subtrigging effects. While doing so, the paper argues for a closer, more careful look at the relevant data, which reveals that those apparently episodic contexts that have been known to allow free choice anwu-na are not episodic in a strict sense. Instead, it is argued that they are habitual, inducing an iterative interpretation of the eventuality denoted by the predicate, in line with the observation made by Quer (2000). The issues of volition or agentivity as well as referentiality as part of the meaning of Korean free choice constructions noted by Kim & Kaufmann (2006) and Choi (2007) are critically reviewed, too, alluding to some evidence against their claim. (Myongji University)

**Key Words** free choice, subtrigging, episodicity, habituality, repetitive reading, volition, agentivity, referentiality

## 1. Introduction

English *any* is not allowed in an episodic sentence as attested in (1) while it is allowed in negative contexts (2a), generic contexts (2b) or modal contexts (2c):

- (1) a. \*John talked to any woman.
  - b. \*Any woman contributed to the fund.
  - c. \*Any woman didn't eat dinner.
- (2) a. John didn't talk to any woman.
  - b. Any owl hunts mice.

<sup>\*</sup> My warm and sincere thanks go to the referees of Linguistic Research, who provided invaluable comments and suggestions about the details of the paper, which greatly helped to improve the quality and readability of the paper. The usual disclaimers apply here.

c. Any owl can hunt mice.

However, when the *any*-NP is restricted by a relative clause, it suddenly becomes acceptable in episodic contexts too, as illustrated below:

- (3) a. John talked to any woman who came up to him.
  - b. Any woman who heard the news contributed to the fund.
  - c. Any woman who saw the fly in the food didn't eat dinner.

Such a shift in acceptability in which the otherwise unlicensed *any* is rescued by a relative clause modifying the *any*-phrase is called subtrigging, first noted by LeGrand (1975) and discussed extensively in Dayal (1998).<sup>1</sup>

It is interesting that English is not the only language that shows such subtrigging effects. Italian, Spanish, and many other European languages are reported to show similar behaviors with their free choice items:<sup>2</sup>

- (4) Italian
- a. Tutti le persone contribuirono al fondo.

"Everyone contributed to the fund."

- b. \*Qualsiasi persona contribui al fondo.
  - "\*Anyone contributed to the fund."
- c. Qualsiasi persona che senti la notizia contribui al fondo.
  - "Anyone who heard the news contributed to the fund."
- (5) Spanish
- a. Toda persona contribuyó en recolecta.

"Everyone contributed to the fund."

b. \*Cualquier persona contribuyó en recolecta.

"\*Anyone contributed to the fund."

Subtrigging occurs not only with a relative clause but also with a post-nominal prepositional phrase or a phrase that introduces a temporal location into the interpretation as illustrated below (Dayal 1998:445-446):

<sup>(</sup>i) John talked to any woman at the party.

<sup>(</sup>ii) After the dinner, we threw away any leftovers.

<sup>&</sup>lt;sup>2</sup> The Italian and Spanish examples are from Choi (2007: 96).

c. ?Cualquier persona are hubiese escuchado las noticias contribuyó en recolecta.

"Anyone who heard the news contributed to the fund."

We see that the regular universal quantifiers in the (a) examples are allowed while the free choice words are not, shown in the (b) examples above. But when the free choice phrases are modified by a relative clause as in the (c) examples, their grammaticality is reversed. It apparently seems that subtrigging is a universal phenomenon.

Subtrigging is an interesting phenomenon because any serious attempts to explain the semantics and pragmatics of polarity sensitivity and free choice have to account for it. In this paper, a few issues regarding the subtrigging phenomenon will be critically reviewed. First, two major accounts of subtrigging in English any-constructions, namely that of Dayal (1998, 2004) and Aloni (2007), will be critically reviewed. Second, it will present data from Korean to see if Korean free choice words also display the subtrigging effects. While doing so, the paper critically reviews Choi's (2007) claim that Korean shows subtrigging, based on earlier observations (Lee et. al. 2000, Yoon 2000) that episodic affirmative sentences often host free choice words in Korean. It also argues for a closer, more careful look at the relevant data, which reveals that those apparently episodic contexts are not episodic in a strict sense. Instead, it will be argued that they are in fact habitual, inducing an iterative interpretation of the eventuality denoted by the predicate, in line with the observation made by Quer (2000) based on a few English and Catalan free choice constructions. Third, the issue of volition or agentivity as part of the meaning of Korean free choice constructions noted by Kim & Kaufmann (2006) and Choi (2007) will be critically reviewed, alluding to some evidence against their claim. Finally, the issue of referentiality in Korean free choice constructions will be discussed, against Kim & Kaufmann (2006), who argue that Korean amwu-na is counterfactual and thus cannot introduce a discourse referent.

## 2. Subtrigging in English

## 2.1 Universal Quantifier Approach: Dayal (1998, 2004)

Dayal (1998, 2004) views English *any* as lexically ambiguous between polarity-sensitive (PS) *any* and free choice (FC) *any* and treats the occurrences of *any* in subtrigged sentences as a kind of FC *any*, identified as "universal quantifiers whose domain of quantification is the set of possible individuals of the relevant kind, rather than a set of particular individuals." (Dayal 1998: 447) That is, an *any*-phrase in an episodic sentence is seen as involving a quantification over all the possible individuals one can imagine. While implementing the idea, Dayal (1998) introduces a situation variable into the semantic representation of noun phrases, following Eng's (1986) idea that a noun phrase can carry a temporal index, distinct from the temporal index of a verbal predicate. The following is from Dayal (1998: 452):

- (6) a. \*Yesterday John talked to any woman.
  - b.  $\forall$  s,x [woman(x,s) & C(s)]  $\exists$  s'[s<s' & yesterday(s') & talk(j,x,s')]

Any, being a universal quantifier according to Dayal as mentioned previously, introduces a tripartite structure in (6) whose domain is provided by the common noun and whose nuclear scope is provided by the rest of the sentence. The idea of inherent modality in any, namely that any quantifies over every possible individual one can imagine, is captured via the situation variable s above, in line with Enç (1986). The universal quantifier quantifies over every possible situation (s) and individual (x), restricted by the common noun woman and the context (C). Note also that the nuclear scope above involves an existential quantification over a situation variable independently introduced by the main predicate. Now, the whole representation (b) above is read as "for every possible woman situation, there is an extension of that situation that happened yesterday in which John talked to that

<sup>&</sup>lt;sup>3</sup> Dayal (1998) notes in passing that *any* is a special quantifier that can bind a free situation variable in the denotation of a noun phrase: "it universally binds the free situation variable in its scope and yields a statement, not about a particular set of individuals, but about all possible individuals with the relevant property." (p. 452)

woman." Note, however, that it is very easy to see that it can be falsified: there are a lot of woman situations that do not overlap with John's existence, not to mention John's talking to those women who existed yesterday. For those women who lived ten thousand years ago, for example, it is impossible for them to be talked to by John within the time span of yesterday. Dayal sees it as a kind of presupposition failure: it is infelicitous to make a statement about every possible woman such that those women were talked to by John yesterday. So much is Dayal's explanation about why unsubtrigged FC any in (6a) is not allowed in episodic sentences.

A subtrigged sentence, however, can be saved according to Dayal (1998) because it is accompanied by a relative clause, which introduces another situation variable from the tense aspect marker of the verbal predicate, which further restricts the domain of quantification for any. To see how it works, let's consider the following, from Dayal (1998: 452):

```
(7) a. Yesterday John talked to any woman he saw.
    b. \forall s,x \text{ [woman(x,s) \& C(s) \& } \exists s"[s \le s" \& P(s") \& see(j,x,s")]]
         \exists s'[s<s' & yesterday(s') & talk(j,x,s')]
```

We see that the domain of quantification for the universal quantifier is further restricted to those situations (s") extended from the woman situation (s) because of the tense-aspect of the relative clause. Note that the domain of quantification is drastically reduced and there is nothing that prohibits the reduced domain to be universally quantified: it is a statement about the restricted domain of woman situations in which there is a situation in the past in which John saw the woman, and for all those restricted situations, there is a woman situation that existed in the time span denoted by "yesterday" in which John talked to the woman. There is no clash in meaning or presupposition failure, in contrast to the unacceptable case we saw above in (6a) in which it was stated that John talked to every possible woman one can imagine. In short, subtrigging rescues the otherwise impossible universal quantification because it shrinks down the quantificational domain into a reasonable size.

To sum up, Dayal's (1998) account of subtrigging crucially relies on the assumption that FC any is a universal quantifier, distinct from its polarity sensitive counterpart, and that the nominal phrases as well as verbal predicates carry a situation variable. Note also that her account of subtrigging is made possible because the quantificational domain for the universal quantifier *any* is further reduced by the meaning of the relative clause. Without the relative clause, the universal quantification would result in a presupposition failure, and thus an infelicitous statement about every possible individual introduced by the inherently modal determiner. When the *any*-phrase is modified by a post-nominal relative clause, the presupposition failure is remedied as the domain is further reduced to a reasonable size.

What would happen in Korean if Dayal's (1998, 2004) account of subtrigging is right? It would mean that the Korean counterpart to (6a) would have to be ruled out by the presupposition failure, too: the domain of quantification for the Korean free choice word would have to be too big to make sense at all. As we will see in section 3, however, the Korean counterpart to (6a) is perfectly acceptable, and thus, the subtrigging has no effect on the acceptability of Korean free choice constructions.

# 2.2 Exhaustification Approach: Men ndez-Benito (2005, 2010) and Aloni (2007)

One of the recent discussions on the subtrigging phenomenon within Kratzer and Shimoyama's (2002) framework of indeterminate semantics is that of Aloni (2007), based on Menéndez-Benito (2005), in which she argues that the subtrigging effects can be explained in terms of her exhaustification operator and the type-shifting rules. Aloni (2007) shares the essential components of Menéndez-Benito's original proposal in her 2005 dissertation. Both Aloni and Menéndez-Benito follow Kratzer and Shimoyama's (2002) idea that the indeterminate phrases, an example of which is English *any*, introduce individual alternatives, essentially similar to Hamblin's (1973) account of question words. These alternatives will expand to propositional alternatives, which will then be utilized by relevant operators.

For example, English *any* is treated as a kind of alternative-inducers (i.e.,  $[[any]]=\{x|human(x)\}$ ) in their analysis and the alternatives grow up till they are associated with an operator of a relevant kind. Thus, an episodic sentence with *any* in (8a) below will be given a schematic representation as in (8b). Note that both Aloni (2007) and Menéndez-Benito (2005, 2010) treat FC *any* as an element that has

to be associated with a universal propositional quantifier (e.g.,  $\forall$  below) although they treat any itself as an indefinite.

```
(8) a. *Anyone fell.
    b. \forall ({that x fell, that y fell, that z fell, ...})
```

According to them, the universal propositional quantifier  $\forall$  is defined as a generalized conjunction on the set of alternative propositions generated from the indeterminate phrase.<sup>4</sup> Thus (8b) above requires that all the propositional alternatives (e.g., that x fell, that y fell, that z fell, ...) hold true, which amounts to the meaning of "Everyone fell." This is not welcomed as (8a) is not acceptable in English.

To solve this problem, Aloni (2007) introduces two semantic operations, namely exhaustification (exh) and type-shifting.<sup>5</sup> The exh operator applies at relevant levels (at the IP and the DP level in her account), ultimately producing sets of mutually exclusive propositions. With the help of type-shifting operations Aloni proposes to fix the type mis-match between the exhaustified argument and the relevant functor in any-constructions. Consequently, (8a) above will ultimately have the following representation:

(9)  $\forall$  ({that nobody fell, that only x fell, that only y fell, that only z fell, ...})

Note that each propositional alternative is mutually exclusive to one another here and thus the alternative propositions cannot be associated with the universal quantifier due to semantic contradiction to one another, and that's why (8a) is ruled

<sup>&</sup>lt;sup>4</sup> Definitions of relevant operators exploiting the propositional alternatives are give below, where W is the set of all possible worlds, and A⊆POW(W) is a set of propositions: (cf. Aloni (2007: 17))

<sup>(</sup>i)  $\exists (A) = \cup (A)$ 

<sup>(</sup>ii)  $\forall (A) = \cap (A)$ 

<sup>(</sup>iii)  $Neg(A) = W- \cup (A)$ 

<sup>(</sup>iv) Q(A) = A

<sup>&</sup>lt;sup>5</sup> To be precise, the essential ingredients of Aloni's (2007) exhaustification operator come from Menéndez-Benito's (2005) exclusivity operator, which was originally designed to capture the unrestricted freedom of choice found in the now famous Spanish Canasta example (Menéndez-Benito (2005: 60-63)). So in a sense, Aloni's (2007) contribution to the analysis of subtrigged sentences is the type-shifting rules.

out in Aloni's analysis.

When the *any*-phrase is modified by a relative clause, it gets the following representation (assuming that there are two individuals x and y who actually tried to jump), after applying the exhaustification and type-shifting operations again, details of which I suppress here for the sake of simplicity:

- (10) a. Anyone who tried to jump fell.
  - b.  $\forall$  ( $\downarrow$  SHIFT (exh [anyone who tried to jump]) fell)
  - c.  $\forall$  (that x fell, that y fell)

Note that in (10c) the universal quantifier can be interpreted without creating any contradictions here as the indefinite is further restricted by the relative clause and underwent the type-shifting operation, resulting in a kind of universal reading that everyone who tried to jump fell.

Thus far is what Aloni (2007) argues about the subtrigging phenomenon in English. However, her approach is based on an unnecessary manipulation of formal apparatus available in the logico-semantic literature. That is, she does not provide any semantic or syntactic motivations for her claim that the exhaustification operator sometimes applies at the DP level and sometimes at the IP level and that the exhaustified meanings are then shifted up and down with the type-shifting rules. Furthermore, she cannot capture the free choice effect found in the construction. She can account for the quantificational effect, of course. But the pragmatic effect of indiscriminativeness or indifference to the identity of the person who actually tried to jump is not captured at all.

#### 3. Free Choice and Subtrigging in Korean

#### 3.1 An Initial Observation

Free choice items in Korean are based on two sources: indeterminate phrases like wh-(N) words and *amwu*-(N)-based words plus the disjunctive morpheme -*na* as shown below:

- (11) a. Nwukwu-na ku mwuncey-lul phwul-swuissta. who-OR the problem-Acc solve-can "Anyone can solve the problem."
  - b. Amwu-na ku mwuncey-lul phwul-swuissta. IND-OR the problem-Acc solve-can "Anyone can solve the problem."
- etten umsik-ina mekul-swuissta. (12) a. John-un John-Top what food-OR eat-can "John can eat any food."
  - b. John-un amwu umsik-ina mekul-swuissta. John-Top IND food-OR eat-can "John can eat any food."

When a wh-phrase is suffixed by the disjunctive morpheme -na/ina, it gives a free choice reading under the possibility modal as shown in the (a) examples above. Similarly, an indeterminate phrase based on amwu- creates a free choice effect.<sup>6</sup> It would be interesting to see if Korean free choice words show subtrigging effects in episodic sentences.

Unfortunately, however, judgements regarding the subtrigging operation in Korean vary depending on researchers. In their dynamic semantic account of the subtle meaning difference between the wh-based free choice word nwukwu-na and the indeterminate-based amwu-na in Korean, Kim & Kaufmann (2006) cites the following contrast and argues that the free choice indeterminate constructions involving amwu-na do not show subtrigging effects:7

(13) a. \*Amwu-na Seoul-tay-ey iphakhay-ss-ta. IND-OR Seoul-University-Goal enter-Pst-Decl "Anybody entered Seoul National University."

<sup>&</sup>lt;sup>6</sup> For a recent discussion on the semantic and pragmatic differences between the wh-based and amwu-based free choice items in Korean, see Kim & Kaufmann (2006) and Choi (2007). Kim & Kaufmann argue that the former is extensional while the latter is intensional (and/or counterfactual). Choi argues that the latter induces a domain widening in Kadmon & Landman's (1993) sense while the former does not. As I am not interested in the distinction between the two, I will not go further into details on the issue.

The judgements below are Kim & Kaufmann's, not mine.

b. \*Yelshimhi kongpwuha-n amwu-na
 hard study-Comp IND-OR
 Seoul-tay-ey iphakhay-ss-ta.
 Seoul-University-Goal enter-Pst-Decl
 "Anybody who worked hard entered Seoul National University."

They claim that both (a) and (b) are unacceptable, stating that "*nwukwu-na* can occur anywhere but *amwu-na* cannot... Subtrigging does not improve upon (a)." (Kim & Kaufmann 2006: 379)

Yoon (2000), however, claims that the *amwu*-based free choice word is acceptable in episodic sentences regardless of whether it is modified by a relative clause or not. She presents the following sentences (Yoon 2000: 460):

(14) a. Minswu-nun amwu kes-ina mekessta.

Minswu-Top IND thing-or ate

"(Lit.) \*Minswu ate anything."
b. Minswu-nun amwu sayngil senmwul-ina patassta.

Minswu-Top IND birthday present-or received

"(Lit.) \*Minswu got any birthday present."

In fact, judgements on the acceptability of Korean free choice word *amwu-na* in episodic contexts is as diverse as the number of researchers. It is essential that we clarify the judgements on relevant data before moving any further into a detailed discussion of the constructions.

In her recent dissertation, Choi (2007) argues that Korean shows the subtrigging effect, just like English, Spanish and Italian do, namely that a Korean free choice phrase without a relative clause is not allowed in an affirmative episodic sentence while those modified by a relative clause are rescued and that their grammaticality improves greatly. (Choi 2007: 94-97) The following are from Choi (2007: 91):8

(15) a. \*Amwu-namca-na se-iss-ta.

IND-guy-or stand-Prog-Dec

<sup>8</sup> Again, the judgements on the acceptability below are Choi's, not mine.

```
"(Lit.) Any guy is standing."
b. *Etten-namca-na
                      se-iss-ta.
   what-guy-or
                      stand-Prog-Dec
  "(Lit.) Any guy is standing."
```

She claims that the two sentences above are not acceptable in Korean and goes on to "present a novel observation regarding the licensing conditions for wh-(N)-na, which has never been reported in Korean literature," namely that "adding a relative can rescue wh-(N)-na in its non-licensing environments, e.g. episodic sentences." (p. 95) The following example is from Choi (2007: 95):

(16) Pa-ese chwukkwu-lul po-ko-iss-nun etten-namca-na se-iss-ta. bar-Loc soccer-Acc watch-Prog-Rel what-guy-or "(Lit.) Any guy who is watching the soccer game in the bar is standing."

She claims that the relative clause above rescues the otherwise unacceptable wh-based free choice sentence (15b). Her observation is based on the contrast between the wh-free choice word (etten 'what' or 'which') and the amwu-based free choice item: wh-based free choice words are rescued by the subtrigging relative clause while amwu-based ones are not.9 However, her claim raises a few questions. She does not mention the possibility of rescuing the amwu-based free choice construction in (15a). In addition, her judgements are not reliable as we'll see below.

First of all, if we change the temporal span in (15b) into a specific time in the past to force it to describe a single event that happened in the past (i.e. to reinforce the episodicity), it suddenly sounds natural regardless of whether it has a relative clause or not. Assume that the following sentence is uttered by a speaker who walked into a bar where a big soccer match was being broadcast on TV:

(17) Eceypam yelsi-ey etten-namca-na se-iss-ess-ta. last night ten-at what-guy-or stand-Prog-Past-Dec "(Lit.) \*Any guy was standing at ten last night."

She does not mention it explicitly, but this is what she seems to have intended in her discussion of relevant constructions.

This sentence becomes more natural in the same context when it is followed by an adverbial universal quantifier *cenpwu* or *ta* 'all' as in the following:

(18) Eceypam yelsi-ey etten-namca-na *cenpwu/ta* se-iss-ess-ta.

last night ten-at what-guy-or *all* stand-Prog-Past-Dec

"All the guys were standing at ten last night."

It is not only the wh-based free choice word that obliterates the rescue operation by a relative clause. The other kind of free choice word in Korean, based on the indeterminate *amwu*- and the disjunctive particle *-na* 'or,' which has long been recognized as a typical free choice item in the literature (Lee et. al. 2000, Yoon 2000), can be used freely in an episodic sentence without any modification by a relative clause. The following examples are from Kim & Kaufmann (2006: 375) and Lee et. al. (2000: 112):

(19) a. Mina-nun amwu-na mannassta.

Mina-Top IND-or met "(Lit.) \*Mina met anybody."

b. Mina-nun nwukwu-na mannassta.

Mina-Top who-or met

"(Lit.) \*Mina met anybody."

c. Amwu-na ta hapkyekha-ass-e.

IND-or all passed

"Everyone passed (the exam)."

Given these observations, it seems harmless to assume that the Korean free choice words do not require modification by a relative clause to be rescued in an episodic sentence regardless of whether they are based on a wh-word or *amwu*: they are allowed rather freely even without a relative clause. The following pair further illustrates this observation:

(20) a. John-un etten/amwu umsiki-na mek-essta.

John-Top. what/IND food-OR eat-Pst.

"(Lit) \*John ate any food."

b. John-un iss-ten etten/amwu umsiki-na mek-essta. sang-ey John-Top. table-Loc. be-Rel. what/IND food-OR eat-Pst. "John ate any food that was on the table."

Free choice items based on both wh-phrases and amwu- are allowed in a simple episodic sentence as we see in (20a), contra Choi (2007). Notice also that adding a floating universal quantifier (cenpwu, motwu or ta 'all') to these examples strengthens the quantificational force and the free choice or indiscriminacy reading. The relative clause 'that was on the table' in (20b) does not seem to have any effect on the acceptability. Thus, Choi's (2007) claim that Korean shows the subtrigging effect is questionable. An emerging question at this point is why.

#### 3.2 Episodic vs. Habitual/Iterative Interpretation

As discussed above, judgements on Korean subtrigging seem to vary among researchers. It seems that such variegated judgements are caused partly because of a murky distinction between episodic vs. non-episodic reading of a given sentence. Thus, before discussing why Korean free choice words do not exhibit the subtrigging effects, what is in order would be to see if the relevant constructions are indeed interpreted as truly episodic. Quer's (2000) observation on episodicity based on Catalan and some English examples is a good starting point in this regard. He argues that a few examples exhibiting the subtrigging effects in English are in fact habitual (thus, modal), and goes on to claim that truly episodic constructions do resist subtrigging. The following are from Quer (2000):

(21) a. \*John slipped in front of anyone who was there. b. \*At 4 p.m. I saw John lecturing to anyone who was near him.

Notice that the main verb in (21a) slip denotes a single eventuality, and the sentence is not acceptable despite the presence of the relative clauses, unlike those so-called episodic sentences we saw in (3), repeated below:

(3) a. John talked to any woman who came up to him. b. Any woman who heard the news contributed to the fund. c. Any woman who saw the fly in the food didn't eat dinner.

The simple past tense in the main verbs of these examples can in fact denote multiple events while those in (21) cannot. In a sense, the sentences in (3) are likely to give a tendency or disposition reading involving several repetitions of the eventuality denoted by the main verbs. For example, John's talking took place a multitude of times in (3a). In contrast, those in (21) do not display such readings, indicating that they are truly episodic sentences.<sup>10</sup> Those true episodic sentences do not show subtrigging effects in English or Catalan, according to Quer (2000). What kind of reading will we get if we considered the Korean counterparts?<sup>11</sup>

- (22) a. (?)John-un keki iss-ten amwu saram
  John-Top there be-Comp IND person
  aph-eyse-na nemecyessta.
  front-at-OR slipped
  - "\*John slipped in front of anyone who was there."
  - b. Neysi cengkak-ey na-nun John-i caki kakkai iss-ten amwu four o'clock-at I-Top John-Nom self near be-Comp IND saram-eykey-na kangui hanun kes-ul poassta.

    person-to-OR lecture do thing-Acc saw

    "\*At 4 o'clock, I saw John lecturing to anyone who was near him."

Compare these with the following, in which there is no relative clause modifier: 12

Such a contrast seems to have led Quer (2000) to regroup those in (3) into a kind of modal (or conditional-like, past habitual) sentences and argue that free choice items are interpreted attributively in the worlds or situations quantified over by the operator heading a tripartite structure of quantification. See Quer (2000) for details. Note, however, that the slipping-event in (21a) can often denote a repetition of the same slipping behavior in front of successive beholders, in which case it can be interpreted as habitual. See below for further discussion on this.

There is a morpho-syntactic difference between the English sentences and the Korean counterpart, too, which may somehow contribute to the different readings. That is, the disjunctive morpheme -na is added to the prepositional phrase, not to the noun. If it is attached to the noun, the sentence is unacceptable, as we see below:

<sup>(</sup>i) \*John-un amwu saram-ina ap-eyse nemecyessta.John-Top IND person-OR front-at slipped"\*John slipped in front of anyone."

<sup>12</sup> I put (?) in (22a) and (23a) as my judgements on the acceptability of these sentences seem to vary

- (23) a. (?)John-un amwu saram aph-eyse-na nemecyessta. John-Top IND person front-at-OR slipped "\*John slipped in front of anyone."
  - b. Neysi cengkak-ey na-nun John-i amwu saram-eykey-na o'clock-at I-Top John-Nom IND four person-to-OR kangui hanun kes-ul poassta. lecture do thing-Acc saw "\*At 4 o'clock, I saw John lecturing to anyone."

It is clear that there is no subtrigging effect here. That is, the relative clause modifying the head noun does not seem to have any effect on the acceptability in Korean. We saw above that a true episodic sentence containing the free choice any in English defies rescue efforts by a relative clause: regardless of whether the any-phrase is modified by a relative clause or not, the sentence is not acceptable. In Korean, however, the free choice indefinite is often allowed in an episodic context regardless of whether the free choice NP is modified by a relative clause or not. It is similar to English in that subtrigging does not play any role.

There is a subtle difference here, however, between the meanings of these Korean examples and the English counterparts. In the Korean examples, relevant sentences containing the free choice indefinite have lost their original episodic reading and a habitual or iterative interpretation arises with the free choice items. For example, in (23a) above, the nuances we get from the sentence include such a reading in which the 'slipping' event was deliberately intended by the agent, i.e., John's deliberate intention behind the slipping behavior, say, to attract attention from the people around, thus generating the iterative reading of the slipping activity, whereas such an intention is not detected in the English examples. This is further illustrated in the following:

(24) John-un aph-eyse-na nemecyessta. amwu yeja John-Top IND woman front-at-OR slipped

depending on the reading of the sentence. That is, I find both of them unacceptable in a purely episodic reading while they are perfectly acceptable in a habitual/iterative reading. What matters in the judgement seems to be agentivity or volition in the meaning of the predicate. See below and the following section for more on the distinction.

"\*John slipped in front of any woman."

Here, John's deliberate intention of slipping can be more clearly detected, probably to attract attention from the women around, and the repetition of the same slipping event is implied. Though it does not have a relative clause, the sentence sounds natural. Adding a relative clause does not affect the acceptability, as shown below:

(25) John-un caki cwupyen-ey iss-ten amwu yeja John-Top self vicinity-Loc be-Comp IND woman aph-eyse-na nemecyessta. front-at-OR slipped "\*John slipped in front of any women who were around him."

As pointed out earlier, however, there is a subtle difference in the interpretation, namely, the iterability of the event denoted by the main verb: the Korean examples generates a habitual reading, rather than an episodic reading. That is, the sentences are about John's disposition or a series of repetitive events that happened within in the time span provided by the main predicate tense. The sentence is not about a single event. Thus, it is not an episodic sentence, in a strict sense. A contrast is clearly observed in the following in which the beholder is the speaker:

(26) John-un ecey nay aph-eyse nemecyessta. John-Top yesterday me front-Loc slipped "John slipped in front of me yesterday."

Here, there is no repetitive occurrence of the main predicate event: John's slipping event happened once. It gives a truly episodic reading. However, such a one-time only reading disappears when we add a frequency adverb to (26). Consider (27a) below:

(27) a. John-un ecey nay aph-eyse cacwu nemecyessta.

John-Top yesterday me front-Loc often slipped

"John often slipped in front of me yesterday."

b. John-un amwu yeja aph-eyse-na cacwu nemecyessta. John-Top IND woman front-at-OR often slipped "\*John often slipped in front of any woman."

Similarly, if the frequency adverb is added to (24), repetition of the slipping event is further strengthened. It implies that Korean predicates are not lexically specified regarding episodicity (or habituality) and that's why the meaning shift from episodic to habitual/iterative interpretation is readily allowed with the presence of the free choice indefinite. Lexical underspecification seems to be the main reason for the apparent free occurrence of amwu-na in seemingly episodic contexts.

Such a shift in reading from episodic to habitual/repetitive interpretations can be observed in many other sentences containing the free choice indefinite in Korean.

- (28) a. John-un ecey pam kyengki-ese (Tom-i pass ha-n) John-Top yesterday night game-at (Tom-Nom pass did-Comp) kong-ul koltay an-ulo cha nehessta. ball-Acc goal inside-Goal kick put "John kicked the ball (passed by Tom) into the goal in the game last night."
  - b. John-un ecey pam kyengki-ese (Tom-i pass ha-n) John-Top yesterday night game-at (Tom-Nom pass did-Comp) amwu kong-ina koltay an-ulo cha nehessta. IND ball-OR goal inside-Goal kick put "John kicked any ball (passed by Tom) into the goal in the game last night."

Here again, (28a) is understood as an episodic sentence: the eventuality of John's kicking the ball is a single event while in (28b) such a one-time-only reading suddenly disappears and the repetition of the same or similar kicking behavior appears due to the free choice item amwu-na. Note that the relative clause modifying the head noun in parenthesis above does not have any influence on the acceptability. Similar observations are made in the following sentences, too.13

As pointed out by one of the referees of this journal, the amwu-phrases below display a slightly different reading from those in the preceding discussion in the sense that the amwu-CN tends to

(29) a. Mary-nun nuccam-ul amwu lipstick-ina ca-se Mary-Top oversleep-Acc sleep-as IND lipstick-OR palu-ko cip-ul nasessta. apply-and house-Acc left "\*As Mary overslept, she applied any lipstick and left home." b. John-un pay-ka kopha-se amwu umsik-ina John-Top stomach-Nom empty-as IND food-OR mek-ko cam tulessta. eat-and sleep went "\*As John was hungry, he ate any food and went to bed."

There is no relative clause modifying the *amwu*-phrase here, but the sentences are all perfectly acceptable.

To sum up the discussion so far, Korean free choice constructions based on *amwu*-indefinites do not display subtrigging effects, and thus, the presence or absence of a relative clause does not influence the acceptability of relevant constructions. In terms of their distribution, free choice words are often readily allowed in the seemingly episodic contexts. However, when the free choice *amwu-na* appears in such episodic sentences, it often suppress the episodicity and turns the otherwise episodic sentence into a habitual one.<sup>14</sup> In a sense, the presence of free choice words overrules the episodic reading and generates a habitual interpretation. This means that the observations made in the past literature that *amwu-na* is freely allowed in episodic contexts should be modified. To be precise, the contexts allowing the free choice word are not episodic in a rigid sense of the term. They are in fact habitual in essence.

denote a single entity picked up by the agent who does not care about the identity or quality of the entity referred to by the common noun. The eventuality involved in them is also a single event rather than a multitude of repetitive/habitual events. Such a reading is typical of so-called 'indiscriminative' interpretation of *amwu-na* in Korean. I leave the issue for future work though.

A referee points out that this claim can be made only after defining in a rigorous manner what 'episodicity' is. However, it's not easy to find one in the literature, nor is it easy to define one in my own way. The term 'episodicity' in this paper is used mostly in its intuitive sense: whether it denotes a single event or many. I admit that a further investigation into this matter is needed.

### 3.3 Agentivity and Free Choice

We've seen that in a purely episodic context, the amwu-na phrase does not allow a free choice reading, but its presence within an apparently episodic sentence produces a habitual/iterative interpretation. There is another series of tricky constructions that have been noted in the Korean free choice literature that similarly display a hostile environment to free choice items, Kim & Kaufmann (2006) notes that amwu-na has to be licensed by a volitional predicate when it occurs in an object position. The following is their example (Kim & Kaufmann 2006: 379):

(30) \*John-un amwu-na macwuchi-ess-ta. John-Top IND-OR run.into-Pst-Decl. "\*John ran into anybody."

Choi (2007: 145-146) also mentions Kim & Kaufmann's observation and claims that "in order for amwu-(N)-na to be able to occur in episodic contexts, a volitional agent is necessary," based on the contrast below:

(31) a. \*John-un amwu-hako-na macwuchi-ess-ta. John-Top IND-with-OR run.into-Pst-Decl. "\*John ran into anybody." b. John-un amwu-hako-na date ha-ess-ta. John-Top IND-with-OR date do-Pst-Decl. "\*John dated anybody."

The contrast is very clear with the predicate 'run into' here and (31a) is not acceptable while (31b) sounds perfect as the predicate 'run into' does not carry the agent's volition but dating is John's volitional action. It seems pretty obvious that agentivity or volition is a crucial factor in licensing a free choice item in episodic contexts.

However, those predicates that apparently lack a volitional agent often do allow a free choice indefinite in Korean. A case in point is a set of stative predicates. Consider the following:

- (32) a. Mary-nun amwu kkoch-ina yepp-essta.

  Mary-Top IND flower-OR beautiful-Pst

  "\*Mary liked any flower."
  - b. John-un amwu ton-ina philyo hayssta.John-Top IND money-OR need did"\*John needed any money."
  - c. Amwu namwu-ey-na tanphung iph-i nolay-ssta.
     IND tree-at-OR fall leaf-Nom yellow-Pst
     "\*On any tree, the leaves were yellow."
  - d. Ku mwulken-un amwu kakey-ey-na iss-essta. the thing-Top IND store-at-OR be-Pst "\*The thing was (available) at any store."

What these examples imply is that volition or agentivity is not an essential component in licensing the free choice items in Korean.<sup>15</sup>

In case of non-stative predicates involving dynamicity, judgements seem to vary depending on speakers, but when a rich contextual information is available, acceptability ratings seem to improve to a great extent. Consider the following:

- (33) a. Nay atul-un amwu yeca kanhosa aph-eyse-na nemecyessta.

  my son-Top IND female nurse front-at-OR slipped

  "My son slipped in front of any female nurse."
  - b. ?Ku kasu-ka high C-lul nayca (cayngpan-ey iss-ten) the singer-Nom high C-Acc utter (tray-Loc be-Comp) amwu can-ina kkaycyessta.

IND glass-OR broke

"\*As soon as the singer sang a high C, any glasses (on the tray) shattered."

 c. ?Ku-ka cangphung-ul palsaha-ca amwu namu-na he-Nom palm wind-Acc shoot-as IND tree-OR huntullyessta.

<sup>15</sup> It is regrettable that Choi (2007, ch. 3 in particular) did not notice this when she attempted so arduously to capture the "essential link" between the denotation of the NP headed by the amwu-na phrase and the remainder of the sentence in von Fintel's (2000) framework.

swayed

- "\*As soon as he shot the palm wind, any tree swayed."
- d. Ku-ka sengnyang pul-ul kactatay-ca amwu iph-ina he-Nom match fire-Acc touched-as IND leaf-OR burned "\*As soon as he placed the match fire, any leaf burned."
- e. Ku mapepsa-ka phili-lul pul-ca amwu the magician-Nom pipe-Acc blow-as IND ssulecyessta. ai-na child-OR fell/fainted
  - "\*As soon as the magician blew the pipe, any child fell/fainted."
- hakkyo-eyse amwu-hanthey-na macko tanyessta. f. John-un John-Top school-at IND-from-OR be-hit went "\*John was hit by anyone in school."

With the exception of (33b) and (33c), whose acceptability judgements vary depending on dialectal/idiolectal backgrounds of Korean speakers, all the other sentences above sound natural. These examples show that volition or agentivity is not the sole feature in licensing the Korean indefinite free choice word amwu-na. Both Kim & Kaufmann (2006) and Choi (2007) will have to come up with a finer distinction among relevant predicates to account for the acceptability of these examples.16

#### 3.4 Referentiality and Discourse Effects

In the free choice literature so far, discussions on the referential properties of Korean free choice words have not attracted much attention. In their dynamic treatment of Korean free choice constructions, however, Kim & Kaufmann (2006) claim that Korean free choice items (both nwukwu and amwu) do not have a "discourse effect" and that "no new discourse referent remains after the sentence has been processed." (p. 381) Unfortunately, however, they made the claim without presenting any evidence, and in this section, we will see if their claim is tenable.

Unfortunately, however, I do not have an explanation at this point about why this is so, partly because of the tricky judgements about the acceptability made by my informants including myself. I leave this issue for future research.

It is not difficult to see examples that go against their claim. Suppose there was a party last night where a few boys including John and a few other girls showed up. In such a context, the following sequence of utterances sound perfectly acceptable:

- (34) a. John-un amwu yeca-eykey-na takaka akswu-lul hayssta.

  John-Top IND girl-to-OR approach hand-shake-Acc did.

  "\*John approached and shook hands with any girl."
  - b. Swul-to ttala-cwuessta.wine-also pour-gave"He poured wine to her, too."
  - c. Nolay-to pwulle-cwuessta.song-also sing-gave"He sang a song to her, too."
  - d. Simjie kiss-to hayssta.

    even kiss-also did

    "He even kissed her."

Here, utterances in (34b-d) can be understood in two ways depending on how their syntactic structures are analyzed. One way would be treating them as a case of ellipsis. For example, (34b) can be understood as follows:

(34b') (John-un amwu yeca-eykey-na takaka) swul-to ttala-cwuessta. (John-Top IND girl-to-OR approach) wine-also pour-gave "\*John approached and poured wine to any girl, too."

In such an analysis, all the utterances in (34b-d) can be about different girls. Such a reading is not the primary interpretation we get from the utterances. The primary reading comes from a different syntactic analysis in which zero pronouns occupy the relevant argument positions as required by the predicates. For example (34b) will have the following representation:

(34b") Pro<sub>i</sub> pro<sub>j</sub> Swul-to ttala-cwuessta. wine-also pour-gave

"He<sub>i</sub> poured wine to her<sub>i</sub>, too."

Utterances (34c) and (34d) can be given similar syntactic structures involving zero pronouns. Surprisingly, then, the zero pronouns (pro<sub>i</sub>) in (34b-d) can refer to the girl John approached in (34a).<sup>17</sup> That is, the discourse referent introduced by the free choice indefinite amwu- in (34a) can be picked up as an antecedent to the dative zero pronoun in (34b) and then referred to again by the zero pronoun in the indirect object position in (34c), and again by the direct object zero pronoun in (34d). The girl referred to by amwu yeja (any girl) in the first utterance (34a) still remains the same in (34b-d), and further utterances about the girl could have been made if one wanted to. It shows that the free choice amwu- can in fact introduce a discourse referent in an episodic sentence, which goes against Kim & Kaufmann's (2006) claim.

## 4. Concluding Remarks

Two major accounts of subtrigging in English free choice constructions were critically reviewed. It was also shown that, unlike English, the Korean free choice constructions do not show subtrigging effects since most of the so-called episodic contexts are in fact habitual, allowing for an iterative interpretation in relevant constructions. It was also pointed out that volition and agentivity are not a crucial feature in allowing free choice words in Korean as stative predicates and a few non-volitional predicates do license the indeterminate-based free choice word amwu-na. Referential properties of amwu-na were discussed, too.

It is regrettable that a formal account is not given about all the observations made in this paper, partly due to space as well as the lack of uniform judgements on the acceptability of relevant constructions and, more importantly, the author's position to remain neutral and objective before attempting any formal treatment. However, I would like to conclude the paper by discussing a possible way of capturing them in a formalized theory. It was noted in section 3 that native speakers' judgements vary in many examples, which calls for some attention. What I have in mind is the optimality theoretic approach, which has proven effective in many areas where speaker judgements vary in a graded fashion. To deal with the observations

<sup>&</sup>lt;sup>17</sup> Interestingly, the zero pronouns can be replaced by an overt pronominal element kunye (the woman) in (b~d) above.

made about the referential properties of *amwu-na* in discourse, in particular, a dynamic version of the optimality theory will be needed. <sup>18</sup> But I leave the attempt for future work.

# References

- Aloni, M. 2007. Free Choice and Exhaustification: An Account of Subtrigging Effects. E. Puig-Waldmüller ed. *Proceedings of Sinn and Bedeutung 11*. Barcelona: Universitat Pompeu Fabra, 16-30.
- Choi, J. 2007. Free Choice and Negative Polarity: A Compositional Analysis of Korean Polarity Sensitive Items. Ph.D. Dissertation, University of Pennsylvania.
- Dayal, V. 1998. Any as Inherently Modal. Linguistics and Philosophy 21: 433-476.
- Dayal, V. 2004. The Universal Force of Free Choice Any. Linguistic Variation Yearbook. vol. 4. John Benjamins Publishing Co. 5-40.
- Enç, M. 1986. Tense Without Scope: An Analysis of Nouns as Indexicals. Ph.D. Dissertation, University of Southern California.
- von Fintel, K. 2000. Whatever. SALT 10: 27-39. Ithaca, NY: Cornell University.
- Hamblin, C.L. 1973. Questions in Montague English. Foundations of Language 10: 41-53.
- Kadmon, N. & F. Landman 1993. Any. Linguistics and Philosophy 16: 353-422.
- Kim, M. & S. Kaufmann 2006. Domain Restriction in Freedom of Choice: Korean 'INDET-NA' Items. In Puig-Waldmüller (ed.) *Proceedings of Sinn and Bedeutung* 11. Univ. of Pompeu Fabra, Barcelona, Spain. 375-389.
- Kratzer, A. 2005. Indefinites and the Operators They Depend On: From Japanese to Salish. In G.N. Carlson & F.J. Pelletier (eds.) Reference and Quantification: The Partee Effect. CSLI. 113-142.
- Kratzer, A. & J. Shimoyama. 2002. Indeterminate Pronouns: The View from Japanese. In Y. Otsu (ed.) The Proceedings of the Third Tokyo Conference on Psycholinguistics. Tokyo. 1-25.
- Lee, C., D. Chung & S. Nam 2000. The Semantics of *amwu* N-to/-irato/-ina in Korean: Arbitrary Choice and Concession. *Language and Information* 4(2): 107-123.
- LeGrand, J. 1975. Or and Any: The Syntax and Semantics of Two Logical Operators. Ph.D. Dissertation, University of Chicago, IL.
- Menéndez-Benito, P. 2005. The Grammar of Choice. Ph. D. Dissertation. Univ. of Mass., Amherst.

Zeevat (2004), for example, proposes to deal with the semantic and pragmatic properties of some particles (too, indeed, again, etc.) in an optimality theoretic framework.

- Menéndez-Benito, P. 2010. On Universal Free Choice Items. Natural Language Semantics 18: 33-64.
- Quer, J. 2000. Licensing Free Choice Items in Hostile Environments: The Role of Aspect and Mood. SKY Journal of Linguistics 13: 251-268.
- Yoon, Y. 2000. AMU and ANY. Korean Journal of Linguistics 25(3): 455-476.
- Zeevat, H. 2004. Particles: Presupposition Triggers, Context Markers or Speech Act Markers. In E. Blutner & H. Zeevat (eds.) Optimality Theory and Pragmatics. New York: Palgrave McMillan. 163-199.

#### Minpyo Hong

Department of English Language and Literature Myongji University 50-3 Namgajwa-dong, Seodaemun-gu Seoul 120-728, Korea E-mail: mphong@mju.ac.kr

Received: 2011. 11. 11 Revised: 2011. 12. 12 Accepted: 2011. 12. 16