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Rescuing Existential Free Choice Items in Episodic Sentences

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1 FCIs and episodic sentences

Free Choice Items (FCIs) are known to be ungrammatical in episodic sentences, whereas they can occur in generic sentences. For instance, English FCI *any* is not licensed in the episodic sentence (1), but is perfectly fine in the generic sentence (2).

(1) *Anyone contributed to the fund. (Dayal, 1998)

(2) Any bird flies.

Interestingly, if a relative clause is added, the grammaticality status of (1) is ameliorated, as shown in (3). This kind of amending strategy was dubbed SUBTRIGGING by LeGrand (1975) and received a full attention in Dayal (1998). Rescuing by subtrigging is considered as a typical characteristic of (some type of) FCIs in languages like English (see Dayal 1995, 1998).

(3) Anyone who heard the news contributed to the fund.

Note here that this subtrigging strategy does not work for all types of FCIs. Chierchia (2005) points out that, in Italian, subtrigging rescues the universal type of FCI *qualsiasi*, but not the existential counterpart *uno qualsiasi*. The same contrast holds for other Romance languages like Spanish: adding a relative clause improves the universal FCI *cualquier* in (4), but not the existential FCI *un N cualquiera* in (5).[1,2]

(4) a. *Ayer Juan tropezó con cualquier objeto.
Yesterday Juan stumbled with CUALQUIER object
'Yesterday Juan stumbled against any object.'

[1] As we will see (section 6), the rescuing effect of subtrigging consists of turning the episodic sentence into a semi-generic one, which in Spanish is typically accompanied by switching from perfective to imperfective aspect in the verb (Quer 2000, Menéndez-Benito 2005). The point we want to make here is that subtrigging and the concomitant verbal aspect change rescue the universal FCI in (4b) but not the existential FCI in (5b).

[2] The following abbreviations are used in this paper: NOM (nominative), ACC (accusative), LOC (locative), TOP (topic), GEN (generic), NEG (negation), PAST (past tense), REL (relative clause marker), DEC (declarative ending), PERF (perfective), IMPERF (imperfective), SUBJ (subjunctive), and IND (indicative).

b. Ayer Juan ??tropezó / tropezaba con cualquier objeto que
Yesterday Juan stumbled $_{\text{PERF}}$ / stumbled $_{\text{IMPERF}}$ with CUALQUIER object that
no estuviese en su sitio.
not was $_{\text{SUBJ}}$ in its place
'Yesterday Juan stumbled against any object that wasn't in its place.'

(5) a. ??? Ayer Juan tropezó con un objeto cualquiera.
Yesterday Juan stumbled with AN object CUALQUIERA
'Yesterday Juan stumbled against any $_{\exists}$ / a random object.'

b. ???Ayer Juan tropezó / tropezaba con un objeto
Yesterday Juan stumbled $_{\text{PERF}}$ / stumbled $_{\text{IMPERF}}$ with AN object
cualquier que no estuviese (/estaba) en su sitio.
CUALQUIERA that not was $_{\text{SUBJ}}$ (/was $_{\text{IND}}$) in its place
'Yesterday Juan stumbled against any $_{\exists}$ / a random object that wasn't in its place.'

Choi (2007) makes a similar observation for Korean. An episodic sentence with a FC item with universal reading, which is very marginal if uttered out of the blue, is rescued by subtrigging. This is shown in (6) with FCI *wh*-(N)-*na* under its universal reading. In constrast, the existential FCI *amwu*-(N)-*na* in (7) as well as the existential reading of *wh*-(N)-*na* in (6) remain ungrammatical regardless of the presence of subtrigging.[3]

(6) a. *John–un nwukwu-hako-na macuchi-ess-ta.
J.-TOP WHO-with-OR run.into-PAST-DEC
'(Lit.) John ran into anyone.' (Choi, 2007)

b. John-un ke-ipkwu-lo tuleo-nun nwukwu-hako-na $_{\forall\,/\,*\exists}$
J.-TOP the-entrance-by enter-REL WHO-with-OR $_{\forall\,/\,*\exists}$
macuchi-ess-ta.
encountered
'(Lit.) John ran into anyone who was coming in by the entrance.'

(7) a. *John–un AMWU-HAKO-NA macuchi-ess-ta.
J.-TOP AMWU-with-OR run.into-PAST-DEC
'(Lit.) John ran into anyone $_{\exists}$ / a random person.' (Choi, 2007)

b. *John-un ke-ipkwu-lo tuleo-nun amwu-hako-na macuchi-ess-ta.
J.-TOP the-entrance-by enter-REL AMWU-with-OR encountered
'(Lit.) John ran into anyone $_{\exists}$ / a random person who was coming in by the entrance.'

In this paper, we present the novel observation that a strategy different from subtrigging is used to rescue the so-called existential type of FCIs such as Spanish *un N cualquiera* and Korean *amwu*-(N)-*na*. The new strategy is identified as "agentivity" (cf. Lee 1999, Choi 2005). Then we turn to Korean FCIs in more detail as a case study. Following Choi (2007), we will see that the transparent morphology of Korean FCIs identifies the particle –*na*, and not Domain Widening (Kadmon and Landman 1993), as the

[3]Though not essential to this paper, we will have something to say about why, unlike *amwu-(N)-na*, *wh-(N)-na* can have both a universal and an existential reading in rescued episodic sentences. See sections 4.2 and 6.2.

source of free choiceness in these items. Based on the semantic contribution of –*na*, we propose a unified analysis of the two rescuing strategies –subtrigging and agentivity– in connection with the licensing environments and quantificational force of the Korean FCIs. Finally, we briefly return to Spanish and apply the same analysis.

2 The new rescuing strategy: Agentivity

Consider sentence (8). Although (8) describes an episodic event, it allows *amwu*-(N)-*na* to occur in it. Recall that, in contrast to (8), *amwu*-(N)-*na* is deviant in (7a). The difference between (7a) and (8) is whether or not those sentences contain a volitional agent. That is, sentence (8), where the agent John is present, licenses *amwu*-(N)-*na*, while sentence (7a), where there is no agent, disallows *amwu*-(N)-*na*. A similar improvement is registered for *wh*-(N)-*na* in (9) under its existential reading.

(8) John-un amwu-chaek-ina cip-ese ku-uy-ey olienoh-ass-ta.
J.-TOP AMWU-book-OR take-and the-top-LOC put-PAST-DEC
'(Lit.) John took a random book and put it on the top (of the pile).'

(9) ?John-un enu-chayk-ina cip-ese congi-uy-ey noh-ass-ta.
J.-TOP WH-book-OR pick-and paper-top-LOC put-PAST-DEC
'(Lit.) John took a random book and put it on the pile of paper.'

The existential type of FCI in Spanish *un N cualquiera* displays the same behavior. In contrast to the ungrammaticality of (5a), *un N cualquiera* is grammatical in (10) with the help of agentivity in the sentence.

(10) Juan necesitaba un pisapapeles, de modo que cogió un libro cualquiera
Juan needed a paperweight, of way that he-took A book CUALQUIERA
de la estantería y lo puso encima de la pila.
from the shelf and it he-put on-top of the pile
'John needed a paperweight, so he took a random book from the shelf and put it on top of the pile.'

Note importantly that what plays a role here is not syntactic subject-hood but semantic agentivity of the sentence. According to the literature on argument structure (e.g., Pustejovsky 1995), not all subjects are agents, as illustrated in (4)-(7), and not all agents appear in the subject position, as shown in (11). Observe in (11) that *amwu*-(N)-*na* can be licensed by the agent in the postpositional phrase of (11). This sentence shows us that the crucial part in rescuing *amwu*-(N)-*na* is semantic agentivity, not syntactic subject-hood.

(11) amwu-na John-eykey mac-ass-ta.
AMWU-OR John-by hit-PAST-DEC
'(Lit.) Anyone was hit by John.

From this, we conclude that the so-called existential type of FCIs (i.e., Korean *amwu*-(N)-*na*, the existential reading of Korean *wh*-(N)-*na*, and Spanish *un N cualquiera*) can improve when they occur under the scope of a volitional agent.

3 Korean Free Choice Items: A Case Study

So far, we have seen that the so-called universal type of FCIs can be licensed in an episodic sentence with the help of subtrigging and that the so-called existential type of FCIs improve with the help of agentivity. In this paper, we will make a unified analysis of the two rescuing strategies by first investigating Korean FCIs as a case study. We will argue that the particle –*na* in *wh*-(N)-*na* and *amwu*-(N)-*na* triggers a presupposition of counterfactual variation parallel to –*ever* in –*ever* Free Relatives (FRs) in von Fintel (2000). This presupposition cannot be satisfied in an episodic sentence, and this renders both types of FCIs unacceptable in episodic environments. However, subtrigging and agentivity help make the presupposition of –*na* felicitous, albeit in different ways and with different results: substrigging rescues only FCIs with universal force (*wh*-(N)-*na*) and agentivity amends FCIs with existential force (*amwu*-(N)-*na* and *wh*-(N)-*na*).

Korean PSIs are composed of one of the two indefinite roots, *amwu*- and *wh*-, and one of the three particles, -*to* 'also/even', -*lato* 'even', and –*na* 'or'. A common noun can be inserted between the indefinite root and the particle. Thus, the possible ways of combination result in the following six items, all of which correspond to English *any*.

(12) Formation of Korean polarity sensitive items

Ind roots / Particles	-*to* 'also/even'	-*lato* 'even'	-*na* 'or'
Amwu-(N)	*Amwu*-(N)-*to*	*Amwu*-(N)-*lato*	*Amwu*-(N)-*na*
Wh-(N)	*Wh*-(N)-*to*	*Wh*-(N)-*lato*	*Wh*-(N)-*na*

The licensing environments of the PSIs are shown roughly in Table (13) and Table (14). The environments in the tables are divided into four sub-groups. The first group is episodic negation. The second group consists of downward entailing (DE) contexts such as the antecedent of a conditional and the restrictor of a universal quantifier. Episodic negation does not belong to this group although it is also downward-entailing. The third group includes so-called FC contexts where FCIs typically appear across languages, such as generic contexts, possibility modal and necessity modal contexts, and imperatives. The last group contains affirmative episodic sentences.

(13) Licensing environments of *amwu*-PSIs

Amwu-PSIs / Contexts	*amwu*-(N)-*na*	*amwu*-(N)-*to*	*amwu*-(N)-*lato*
Negative episodic	*/√	√	*
DE contexts other than neg.	√	*	√
FC contexts	√	*	√
Affirmative episodic	*/√	*	*

(14) Licensing environments of *wh*-PSIs

Wh-PSIs / Contexts	*wh*-(N)-*na*	*wh*-(N)-*to*	*wh*-(N)-*lato*
Negative episodic	*/√	√	*
DE contexts other than neg.	√	*	√
FC contexts	√	√	√
Affirmative episodic	*/√	*	*

The main interest of this paper lies in the *–na*-based FCIs: *amwu-*(N)*-na* and *wh-*(N)*-na*. As you see in the first column of each table, they cannot occur in negative or affirmative episodic sentences. But rather, they only appear in DE contexts and FC contexts. The "*/$\surd$" marks in the first and last rows indicate that the *–na* PSIs can be rescued in episodic sentences by the rescuing strategies that we will explore in this paper.

In order to give a unified analysis of the two rescuing strategies, we will first investigate the role of the two indefinite roots *amwu-* and *wh-* in section 4. Following Choi (2005, 2007), we show that Korean *wh-*(N) ranges over a regular domain that is explicitly stated or implicitly understood, whereas Korean *amwu-* induces domain-widening, as Kadmon and Landman (1993) proposed for English *any*. Given that both *amwu-*(N)*-na* and *wh-*(N)*-na* give rise to the same free choice effects, it is concluded that the common source of their free choiceness is not domain-widening. In section 5, we will be concerned with the contribution of the common particle *–na*. By applying and extending von Fintel's (2000) account of English *–ever* Free Relatives, it will be argued that the particle *–na* introduces the presupposition of counterfactual variation. This presupposition is the source of the free choiceness of the *–na*-based FCIs. Only when it is satisfied in the context can the sentence containing the FCIs be judged grammatical. Finally, in section 6, we will explain the two rescuing strategies as devices to make the presupposition of *–na* fulfilled. Section 7 summarizes the conclusions.

4 The Two Indefinite Roots: *amwu-* vs. *wh-*

In this section, we will show that *amwu-* is a domain-widening indefinite (Kadmon and Landman 1993). In contrast, the root *wh-* is argued to range over a regular or contextually salient domain. We will briefly summarize Kadmon and Landman's (1993) domain-widening effects of English *any*, and then present four sets of evidence from Choi (2007) which suggest that *amwu-* widens the domain maximally along some contextual dimension while *wh-* ranges over a regular or salient domain.

4.1 *Any* as domain-widening indefinite: Kadmon and Landman (1993)

Kadmon and Landman (1993) characterize "*any* CN (common noun)" as the domain-widening indefinite, as opposed to plain indefinites like "a CN". *Any* widens the interpretation of "a CN" maximally along a contextual dimension, whereas "a CN" ranges over a regular domain. For instance, the generic sentence (15a) that contains a plain indefinite is interpreted as (15b). *An owl* ranges over a regular domain, that is, a set consisting of owls with the regular/normal properties.

(15) a. An owl hunts mice.
b. Every owl, which is normal, hunts mice.

In contrast, sentence (16a) that contains *any owl* instead of *an owl* has a domain-widening effect applied to it. Then the normality is defined in a broader sense, as shown in (16b). As a result, the domain of *any owl* is larger than the domain of *an owl*.

(16) a. Any owl hunts mice.
b. Every owl, which is normal in a widened sense, hunts mice.

To see how to obtain the broader/widened definition of normality with domain-widening, imagine a "HEALTHY-SICK" dimension. Before widening as in (17a), the definition of the normality of an owl includes the property of being healthy, as represented in (17b).

(17) Before widening
a. An owl hunts mice.
b. $\forall \uparrow X_{\text{owl}}$ (Healthy owl) (Hunts mice)
c. Every owl that is "normal" – in a sense that includes being healthy - hunts mice.

After domain-widening is applied by *any* as in (18a), then the property of being healthy is eliminated from defining the domain, as in (18b). In their terms, *any* induces minimally changing the relevant domain X_{owl} so as to make both HEALTHY and SICK compatible with "normal". In the end, *any* ranges over a wider domain than plain indefinites. That is, the set denoted by "a CN" is replaced by a superset when "a CN" is replaced by "any CN". The choice of the superset is determined by contextual factors.

(18) After widening
a. Any owl hunts mice.
b. $\forall \uparrow X_{\text{owl, healthy or sick}}$ (Owl, healthy or sick) (Hunts mice)
c. Every owl that is "normal"- in a sense that it is compatible with being healthy or being sick - hunts mice.

4.2 *Amwu-* as a domain-widening indefinite

This section displays several pieces of evidence that strongly suggest that Korean *amwu-* is a domain-widening indefinite à la Kadmon and Landman (1993). In contrast to *amwu-*, *wh-* ranges over a normal or salient domain. The evidence to be presented combines the two roots with one of the three particles –*na* 'or', -*lato* 'even' and -*to* 'also, even' from (12), to show that the proposed semantic difference stems from the roots alone and cross-cuts the choice of suffixed particles.

First, the contrast between (19a) and (19b) indicates that the domain of *amwu*-(N)-*na* is wider than the domain of *wh*-(N)-*na*. While *wh*-(N)-*na* only includes normal people, i.e. people who received the appropriate education or have average I.Q., etc., *amwu*-(N)-*na* ranges over a larger domain that includes contextually marginal people as well, that is, people who have not received any education or are severely handicapped. If the positions for *wh*-(N)-*na* and *amwu*-(N)-*na* are switched as in (19b), the sentence does not make sense.

(19) a. Ku il-un nwukwu-na ha-l.swu.iss-ciman, amwu-na
The job-TOP WHO-OR do-can-but AMWU-OR
ha-l.swu-iss-ci.ahn-ta.
do-can-NEG-DEC
'(Lit.) As for the job, anyone can do it, but not just ANYone can do it.'

b. #Ku il-un amwu-na ha-l.swu.iss-ciman, nwukwu-na
The job-TOP AMWU-OR do-can-but WHO-OR
ha-l.swu-iss-ci.ahn-ta.
do-can-NEG-DEC
'(Lit.) As for the job, just ANYone can do it, but not everyone/anyone can do it.'

Second, *wh*-(N) is usually linked to a contextually salient domain while *amwu*-(N) is not restricted to such a salient domain. Consider the scenario in (20). Under this scenario, suppose the mother thinks being a doctor is better than any other job and says one of the sentences in (21) and (22). Note that in sentences (21), the particle *–na* 'or' is kept constant: it combines with *wh*-(N) in (21a), and with *amwu*-(N) in (21b). In sentences (22), the particle *–lato* 'even' is constant: it combines with *wh*-(N) in (22a), and with *amwu*-(N) in (22b).

(20) Mother: You've been having a lot of blind dates so far. Now is the time to decide.
John: Well, I met Ann and Betty who are doctors, and Cathy who is a nurse and Dianna and Fiona who are professors, but I haven't made up my mind.

(21) a. (ne-nun) etten/enu-uysa-hako-na kyelhonhay-to.kwaynchanh-e.
you-TOP WHAT/WHICH-doctor-with-OR marry-can-DEC
'You are allowed to marry any doctor (of those you have been dating).'

b. (ne-nun) amwu-uysa-hako-na kyelhonhay-to.kwaynchanh-e.
you-TOP AMWU-doctor-with-OR marry-can-DEC
'You are allowed to marry any doctor.'

(22) a. (ne-nun) etten/enu-uysa-hako-lato kyelhonhay-to.kwaynchanh-e.
you-TOP WHAT/WHICH-doctor-with-EVEN marry-can-DEC
'You are allowed to marry any doctor (of those you have been dating).'

b. (ne-nun) amwu-uysa-hako-lato kyelhonhay-to.kwaynchanh-e.
you-TOP AMWU-doctor-with-EVEN marry-can-DEC
'You are allowed to marry any doctor.'

Empirically, regardless of whether *wh*-(N) combines with *–na* 'or' (21a) or *–lato* 'even' (22a), *wh*-(N) conveys that the mother gives John permission to marry one out of the contextually salient doctors, i.e., out of the doctors that John has had a blind date with, namely, Ann and Betty. In contrast, in the cases where *amwu*-(N) combines with *–na* 'or' (21b) or *–lato* 'even' (22b), the mother is not committed to the two doctors but gives John the more general permission to marry a doctor and all possible doctors are a marriage option for John.

A third piece of evidence suggesting a difference in domain size between *amwu*-(N) and *wh*-(N) comes from (negative) existential sentences. When combined with the particle *–to* 'also, even', both roots are in principle possible in a negative episodic sentence, as illustrated in (23). But, if the negative sentence is existential, as in (24), a contrast between *amwu*-(N)-*to* and *wh*-(N)-*to* arises: *amwu*-(N)-*to* is grammatical in (24a), but *wh*-(N)-*to* is deviant in (24b):

(23) a. John-un amwu-koki-to mek-ci.anh-ass-ta.
J.-TOP AMWU-meat-EVEN eat-NEG-PAST-DEC
'John didn't eat any meat'.

b. John-un etten-koki-to mek-ci.anh-ass-ta.
J.-TOP WHAT-meat-EVEN eat-NEG-PAST-DEC
'John didn't eat any meat'.

(24) a. kyosil-ey amwu-to eps-e.
classroom-LOC AMWU-EVEN not.exist-DEC
'There isn't anyone in the classroom.'
b. *kyosil-ey nwukwu-to eps-e.
classroom-LOC WHO-EVEN not.exist-DEC

It is well-known that weak quantifiers are ambiguous between a proportional (partitive) reading and a cardinal (non-partitive) reading (Milsark 1974). For instance, the NP *many / some superheroes* in (25) can be given two interpretations, as in (26a) and (26b). On the so-called proportional reading, the NP is equivalent to the partitive *many / some of the superheroes*, as in (26a). On the cardinal reading, the NP means "many / some in number", as shown in (26b).

(25) Many / Some superheroes are playing in our neighbor's garden.

(26) a. Many / Some of the superheroes are playing in our neighbor's garden.
b. A high / Some number of superheroes are playing in our neighbor's garden.

Importantly, when an indefinite like *some superheroes* occurs in an existential sentence, it cannot take on the proportional or partitive reading, as shown in (27). It is only interpreted on the cardinal reading.

(27) There exist some superheroes.
≠ Some of the superheroes exist, as opposed to others.
= Some number of superheroes exist.

The fact that the partitive reading of a weak indefinite is blocked in an existential sentence is arguably the reason why *wh*-(N)-*to* is marginal in (24b). If we assume that *wh*-(N)-*to* in (24b) takes on the partitive reading while *amwu*-(N)-*to* in (24a) takes on the cardinal reading, the contrast in (24) can be accounted for on the same grounds as in (27). That is, the two sentences in (24) are paraphrased as in (28a) and (28b) below. Due to the conflict of the partitive reading of *wh*-(N)-*to* with the existentiality of the sentence, *wh*-(N)-*to* is judged marginal.

(28) a. There is not even one person in the classroom.
b. *There is not even one of the people in the classroom.

Assuming that partitivity can be treated as a form of familiarity or specificity, as proposed by Enç (1991), *wh*-(N)'s taking on a partitive reading indicates that *wh*-(N) selects a specific or contextually salient domain of individuals. By contrast, *amwu*-(N) does not pick such a specific domain, and is interpreted on a cardinal reading in an existential sentence.

Lastly, *wh*-(N) and *amwu*-(N) show different scope behavior, arguably due to their difference in the domain sizes. Choi (2005) notes the scope behavior of *wh*-(N)-*lato* and *amwu*-(N)-*lato* with respect to modality by presenting example (29) below.

(29) a. Jane-un nwukwu-hako-lato kyelhonha-yahan-ta.
J.-TOP WHO-with-EVEN marry-must-DEC
$\surd\Box > \exists$: 'Jane has to marry a/any man. The identity does not matter.
$\surd\exists > \Box$ 'Some person is such that Jane has to marry, the speaker doesn't care who it is.'

b. Jane-un amwu-hako-lato kyelhonha-yahan-ta.
J.-TOP AMWU-with-EVEN marry-must-DEC
$\surd\Box > \exists$: 'Jane has to marry a/any man. The identity does not matter.'
$*\exists > \Box$

While *wh*-(N)-*lato* can take either narrow scope under the necessity modal or wide scope over the modal as in (29a), *amwu*-(N)-*lato* can only be interpreted inside the scope of the modal, as shown in (29b). On the wide scope, *de re* reading in (29a), *wh*-(N)-*lato* indicates that there is a particular person that Jane has an obligation to marry. *Amwu*-(N)-*lato* lacks such a *de re* reading, and is only interpreted as *de dicto*: "Jane has an obligation to marry a man, any man can be a marriage option for her". This scope pattern of *wh*-(N) is reminiscent of Musolino and Gualmini's (2004) observation that NPs with a specific domain (e.g., partitives) can take wide scope more easily than NPs without a specific domain. For instance, the partitive indefinite *two of the birds* in (30a) is easily construed as taking wide scope over negation whereas the non-partitive indefinite *two birds* in (30b) is hard to be interpreted as taking wide scope.

(30) a. The Smurf didn't catch two of the birds. $\surd$ 2>¬
b. The Smurf caught all the cats but she didn't catch two birds. * 2>¬
(Musolino and Gualmini, 2004)

In conclusion, taken together, these four sets of data strongly suggest that the root *amwu*-(N) ranges over an open or widened domain while the root *wh*-(N) ranges over a specific or regular domain. Also, *amwu*-(N) tends to take narrow or in-situ scope whereas *wh*-(N) behaves like a partitive indefinite, i.e., it can or tends to take wide scope over an operator such as a modal.

Since the two roots – regardless of whether they introduce a widened or a regular domain – yield the same free choice effects, Choi (2007) concludes that the source of free choiceness in these items is not Domain Widening, but something else. We turn now to the common source of free choiceness in the –*na*-based FCIs, namely the particle –*na*.

5 The contribution of the particle –*na* 'or'

5.1 Essential link

In this section, we examine the contribution of the particle –*na*. Choi (2007) proposes that the nature of the contribution of the particle –*na* 'or' is to trigger an essential link or a causal relation between the property expressed by the restrictor of the NP with –*na* and the main predicate of the sentence.

For example, in (31) below, the particle –*na* 'or' induces an essential link or a causal relation between "being five years old" and "being allowed/able to solve the problem".

If the particle *–na* is omitted, (and a case marking is inserted as default according to the Korean morphology system,) then the essential or causal relation is not generated, as in (32).

(31) a. amwu-tasus-salccali-na ku mwuncey-lul phul-swu.iss-e.
AMWU-five.old-OR that problem-ACC solve-can-DEC
'Just any five-year-old can solve the problem.'

b. etten-tasus-salccali-na ku mwuncey-lul phul-swu.iss-e.
WHAT-five.old-OR that problem-ACC solve-can-DEC
'Any five-year-old can solve the problem.'

(32) motun-tasus-salccali-ka ku mwuncey-lul phul-swu.iss-e.
ALL-five.year-NOM that problem-ACC solve-can-DEC
'Every five-year-old can solve the problem.'

As opposed to Kim and Kaufmann (2006), who claim that *amwu*-(N)-*na* conveys a counterfactual implication but *wh*-(N)-*na* doesn't, we advocate that there is exactly the same counterfactual component with both *amwu*-(N)-*na* and *wh*-(N)-*na*. To see this, let's consider another example with the scenario in (33).

(33) Sue's father and mother want her to get married soon. So they are trying to arrange blind dates for their daughter. From various sources, Sue's mother was introduced to four doctors, Andrew, Bill, Con, and Dave, and three lawyers, Ethan, Fred, and George, and received a picture of each of them. Now she is asking her husband's opinion:
Mother (showing all the pictures to Father): These are the doctors and lawyers that I was introduced to. Who do you think is the best?
Father: Doctors are better than lawyers.
Mother (showing the pictures of the doctors): Which one?

(34) Father:

a. motun-uysa-ka coh-a
ALL-doctor-NOM good-DEC
'All the doctors are ok.'

b. Etten/enu-uysa-na coh-a
WHAT/WHICH-doctor-OR good-DEC
'Any of the doctors is ok.'

c. *Amwu*-uysa-na coh-a
AMWU-doctor-OR good-DEC
'Just ANY doctor is ok.'

All the three sentences in (34) appear to have the interpretation that each of the four doctors, Andrew, Bill, Con, and Dave is a good candidate from the father's perspective. However, imagine a situation where Sue's mother mistakenly showed the father the picture of a non-doctor among the other pictures, say, a picture of the lawyer George? What will happen if the father discovers the mother's mistake? First of all, (34a) containing the universal quantifier *mot(w)u-* 'every' may not hold anymore, because by uttering (34a), the father expresses that each of the four persons in the pictures who

he believes are doctors is ok to him. However, if one of them is actually not a doctor, then the father may want to go on checking the actual doctor, i.e., Dave's picture. If he doesn't like the picture of Dave, then his original opinion will be changed. In contrast to this, the father's opinion in (34b) remains unchanged, because (34b) containing *wh*-(N)-*na* conveys that no matter how the person in each picture looks and who he is, if he is one of the (contextually salient) doctors, then he is a marriage option for Sue. Hence, a counterfactual implication is conveyed by *wh*-(N)-*na* in (34b). In other words, the sentence expresses an essential link or causal relation between "being one of the relevant doctors" (here arguably construed as "being a doctor that has been introduced to the mother and whose picture has been given to her") and "being a marrying option for Sue". *Amwu*-(N)-*na* in (34c) goes one step further. It conveys that a doctor outside of the given domain is also considered as a marriage option for Sue as long as the person is a doctor. That is, the sentence with *amwu*-(N)-*na* expresses an essential or causal link between "being a doctor possibly outside the contextual domain" and "being a marrying option for Sue". This "outside of the domain" reading comes from the domain-widening effects of *amwu*-, which seem to have led Kim and Kaufmann (2006) to claim that only *amwu*-(N)-*na* delivers a counterfactual implication.

5.2 Parallelism with –*ever* Free Relatives

Given that the particle –*na* 'or' triggers an essential or a causal relation regardless of the indefinite roots, Choi (2007) suggests that the contribution of –*na* is parallel to the contribution of –*ever* in –*ever* Free Relatives (FRs) in English. von Fintel (2000) adopts Dayal's (1997) insight that –*ever* FRs introduce a layer of quantification over possible worlds, and proposes that –*ever* in –*ever* FRs induces a presupposition of variation on either counterfactual worlds or epistemic worlds. Choi (2007) captures the essential link of –*na* with the same formalism for –*ever* in –*ever* FRs.

Let us first look at the properties of –*ever* FRs, presented in von Fintel (2000). Von Fintel (2000) points out that a subtype of –*ever* FRs expresses "indifference" on somebody's part. Compare (35a) and (35b). Both of them assert the same proposition paraphrasable using a definite description, namely, the proposition that the person who was at the top of the ballot won the election yesterday.

(35) a. In yesterday's election, who was at the top of the ballot won.
b. In yesterday's election, whoever was at the top of the ballot won.

Different from (35a), (35b) conveys an extra meaning triggered by –*ever* , such that the identity of who was at the top of the ballot did not matter to winning yesterday's election. In the sense that the identity of the denotation of –*ever* FRs does not matter for the general nature or outcome of the election, Tredinnick (2005) dubbed this type of essential link **"external indifference"**, as in (36). In von Fintel (2000), this essential link follows from the presupposition of variation given in (37), which is identified as the nature of –*ever* 's contribution. The presupposition of variation tells us that if the individual denoted by an –*ever* FR had been different, the truth value of the assertion in the actual world would still be valid in all the counterfactual worlds.

(36) External indifference essential link: It doesn't matter who was at the top of the ballot in yesterday's election. There was an essential link between "being at the

top of the ballot" and "winning the election".

(37) Presupposition of variation: If the person who was at the top of the ballot had been different, the same thing would have happened: that (new) person would have won.

Besides external indifference, there is another type of indifference reading. If you compare (38a) and (38b), both of them assert the following: that Zack voted for the person who was at the top of the ballot. However, while the plain FR in (38a) does not necessarily convey any counterfactual implication, *–ever* in (38b) adds another layer of meaning, that is, the presupposition of variation on the basis of the counterfactual modal, as given in (39).

(38) a. Zack voted for who was at the top of the ballot.
b. Zack voted for whoever was at the top of the ballot.

(39) Presupposition of variation: If the person who was at the top of the ballot had been different, the same thing would have happened: Zack would have voted for that (new) person.

To satisfy this presupposition, the addressee most plausibly infers that the identity of the person who was at the top of the ballot did not matter to Zack, or in other words, Zack was indifferent about who was at the top of the ballot, as in (40). In this case, since it is the agent Zack who is indifferent about the identity, this type of indifference reading is called "**agent indifference**" (Tredinnick 2005, Choi 2005).

(40) Agent indifference essential link: Zack was indifferent as to the identity of the person who was at the top of the ballot. There was an essential link between "being at the top of the ballot" and "getting Zack's vote".

-Ever FRs have another usage, i.e., ignorance (Dayal 1997, von Fintel 2000), where *-ever* FRs express the speakers ignorance about the denotation of the FRs, as in (41). Here again, *-ever* adds a presupposition, but this time the presupposition is based on an epistemic modal base and not a counterfactual modal base. This type of reading, however, will not be dealt with in this paper, because the Korean *–na* FCIs do not induce an ignorance reading and the purpose of this section is to show parallelism between *–ever* FRs and *–na*-FCIs.

(41) Whatever Arlo is cooking has a lot of garlic in it.

In von Fintel (2000), a sentence containing an *–ever* FR is formalized as in (42). In the formulae, F indicates the modal base for *–ever* FRs, which is a set of worlds on which the presupposition of variation operates. P refers to the denotation of the NP property contained in the *–ever* FR, and Q refers to the property expressed by the rest of the sentence. Sentences containing an *–ever* FR assert that the thing that has P is Q in the actual world, as shown in (42a). The presupposition triggered by *–ever* says that in all worlds (of the corresponding modal base) that are different from the actual world only with respect to the referent of the *–ever* FR, the asserted proposition has in w' whatever truth value it has in the actual world w_0.

(42) Whatever (w_0) (F) (P) (Q)

a. **Asserts**: $Q(w_0)(\iota\, x.P(w_0)(x))$

b. **Presupposes**: $\forall\, w' \in \min_{w0}\, [F \cap \lambda\, w''.\ \iota\, x.P(w'')(x) \neq \iota\, x.P(w_0)(x)]$: $Q(w')(\iota\, x.P(w')(x)) = Q(w_0)(\iota\, x.P(w_0)(x))$

By applying this to the example of external indifference, the sentence in (35b), repeated in (43) below, is formally represented as in (44) and paraphrased as in (45). The modal base F is counterfactual, and thus a presupposition of counterfactual variation is conveyed, as in (45b). That is, the presupposition triggered by *–ever* conveys that if the person at the top of the ballot had been different in all the counterfactual worlds, the truth of the proposition "the person at the top of the ballot won" would also hold in the counterfactual worlds. From this presupposition of variation, it is inferred that regardless of who was at the top of the ballot, "being at the top of the ballot" and "winning yesterday's election" are in an essential relation.

(43) In yesterday's election, whoever was at the top of the ballot won. (=35b)

(44) a. **Assertion**: $\lambda\, w_0.\ win(\iota\, y.top\text{-}of\text{-}ballot(y,w_0),w_0)$

b. **Presupposition**: $\lambda\, w_0.\forall w' \in \min_{w0}\, [F \cap \lambda\, w''[\iota\, y.top\text{-}of\text{-}ballot(y,w'') \neq \iota\, y.top\text{-}of\text{-}ballot(y,w_0)]]$: $win(\iota\, y.top\text{-}of\text{-}ballot(y,w'),w') = win(\iota\, y.top\text{-}of\text{-}ballot(y,w_0),w_0)$

(45) a. **Assertion**: In w_0, the person who was at the top of the ballot in w_0 won.

b. **Presupposition**: In each world w', a counterfactual world of w_0, if someone else had been at the top of the ballot in w', the person who was at the top of the ballot in w' won in w' iff the person who was at the top of the ballot in w_0 won in w_0.

Likewise, the example of agent indifference repeated in (46) below can be formalized and interpreted as in (47) and (48). The assertion means that Zack voted for the person who was at the top of the ballot in the actual world. The presupposition conveys that if the identity of the person at the top of the ballot had been different, the same thing, i.e., Zack's voting for the person at the top of the ballot would have happened.

(46) Zack voted for whoever was at the top of the ballot. (=38b)

(47) a. **Assertion**: $\lambda\, w_0.\ vote(z, \iota\, x.top\text{-}of\text{-}ballot(x,w_0),w_0)$

b. **Presupposition**: $\lambda\, w_0.\forall w' \in \min_{w0}\, [F \cap \lambda\, w''[\ \iota\, x.t\text{-}o\text{-}b(x,w'') \neq \iota\, x.t\text{-}o\text{-}b(x, w_0)]]$: $vote(z, \iota\, x.top\text{-}of\text{-}ballot(x,w'),w') = vote(z, \iota\, x.top\text{-}of\text{-}ballot(x, w_0), w_0)$

(48) a. **Assertion**: In w_0, Zack voted for the person who was at the top of the ballot in w_0.

b. **Presupposition**: In all counterfactual worlds w' minimally different from w_0 in which someone different is at the top of the ballot, Zack voted in w' for the person at the top of the ballot in w' iff he voted in w_0 for the person at the top of the ballot in w_0.

The formalization in (44) and the one in (47) are exactly parallel. Whether an *–ever* FR has an external indifference or agent indifference interpretation depends on contextual factors, and is only an "epiphenomenal inference" that is drawn from the presupposition of variation (Tredinnick 2005: 108). That is, for the presupposition of variation introduced by *–ever* to be construed most plausibly, in (43), it is inferred that an

essential link was made by some external force on the election, and external indifference obtains. On the other hand, in (46), the easiest way to satisfy the presupposition of variation and capture the essential link between "being at the top" and "receiving Zack's vote" is to assume Zack's indifferent attitude. Hence, agent indifference obtains in the case of (46).

5.3 Formalization of *–NA* FCIs

Choi (2007) extends the formalization (42) that is proposed for *-ever* FRs to the *–na*-based FCIs, as in (49).

(49) *wh-/amwu–*(N)*-na* (w_0) (F) (P) (Q)

a. **Asserts**: $\exists x\,[P(w_0)(x) \wedge Q(w_0)(x)]$

b. **Presupposes**: $\forall w' \in \min_{w0}\,[F \cap \lambda\, w''.P(w'') \neq P(w_0)]$: $\exists x\,[P(w')(x) \wedge Q(w')(x)] \leftrightarrow \exists x\,[P(w_0)(x) \wedge Q(w_0)(x)]$

The template in (49) for *–na*-FCIs is parallel to the one for *-ever* FRs except for a few details. While the formula for *-ever* FRs contains an iota operator since *-ever* FRs are definite, the iota operator has been replaced by an existential quantifier for *–na*-FCIs because *amwu-*(N)*-na* and *wh-*(N)*-na* are indefinites whose basic quantification is existential. In the presupposition in (49b), too, the equation among the iota expressions from *-ever* FRs has been replaced by an equation among the extensions of the NP property P of *amwu-/wh-*(N)*-na*. Another point that differentiates *–na*-FCIs from *-ever* FRs is that while the presupposition of *-ever* has as its modal base either the counterfactual or epistemic modal, the presupposition of *–na* always takes the counterfactual modal. Now, the computation of the assertion and presupposition in (49) derives the paraphrases in (50).

(50) a. **Assertion**: Some P is Q in the actual world w_0.

b. **Presupposition**: In all the counterfactual worlds w' that are minimally different from w_0 in the following respect, namely that the set of individuals that have property P in w' is different from the set of individuals that have property P in w_0: the asserted proposition λ w. $\exists x\,[P(w)(x) \wedge Q(w)(x)]$ has in w' whatever truth value it has in the actual world w_0.

Now let us apply this to simple sentences like in (51). Similar to *-ever* FRs, *-na*-FCIs can also be interpreted on agent indifference, as paraphrased in (52). Because John did not care about the identity of the book, an essential link holds between "being the set of books" and "having a member picked up by John". This essential relation is triggered by the presupposition of variation in (53), i.e. if there had been a different set of books, John would have picked one up.

(51) a. John-un amwu-chayk-ina cip-ese congi-uy-ey noh-ass-ta.
J.TOP AMWU-book-OR pick-and paper-top-LOC put-PAST-DEC
'John picked up a random book and put it on the pile of paper.'

b. ?John-un etten-chayk-ina cip-ese congi-uy-ey noh-ass-ta.
J.-TOP WHAT-book-OR pick-and paper-top-LOC put-PAST-DEC
'John picked up (a) random book(s) and put it (/them) on the pile of paper.'

(52) Agent Indifference essential link: It didn't matter to John what/which (kind of a) book he picks up. There is an essential relation between "being the set of books" and "having one member picked up by John".

(53) Presupposition of variation: If the set of books had been different, the same thing, i.e., John's picking up a book, would have happened.

If we apply the formalism (49) to *amwu-*/*wh-*(N)*-na* in (51), we will get (54), which is read as in (55).

(54) a. **Assertion**: λ w_0. $\exists$x.book(x,w_0) & pick(j,x,w_0) & put-on-pile(j,x,w_0)

b. **Presupposition**:
λ w_0.$\forall$w' $\in$ $\min_{w0}$.[F $\cap$ λ w". {x:book(x,w")}$\neq$ {x:book(x,w_0)}]:
$\exists$x.book(x,w') & pick(j,x,w') & put.on.pile(j,x,w') $\leftrightarrow$
$\exists$x.book(x,w_0) & pick(j,x,w_0) & put.on.pile(j,x,w_0)

(55) a. **Assertion**: In the actual world w_0, there is some book in w_0 that John picked up and put on the pile in w_0.

b. **Presupposition**: In all counterfactual worlds w' minimally different from w_0 with respect to the identity of the set of books, there is some book in w' that John picked up and put on the pile in w' iff there is some book in w_0 that John picked up and put on the pile in w_0.

Now let us consider a more complex case in which some operator Φ scopes above the –*na*-FCIs. This would be the case, for example, in generic statements like (56a,b), where the generic operator GEN divides the clause's material into a restrictor including the –na-FCI and a nuclear scope. The particle –*na* introduces the presupposition of variation in (57). The resulting essential relation is easily understood as external indifference, as given in (58).

(56) a. amwu-tasus-salccali-na ku mwuncey-lul phul-swu.iss-e.
AMWU-five-year-OR that problem-ACC solve-can-DEC
'Just any five-year-old can solve the problem.'

b. etten-tasus-salccali-na ku mwuncey-lul phul-swu.iss-e.
WHAT-five-year-OR that problem-ACC solve-can-DEC
'Any five-year-old can solve the problem.'

(57) Presupposition of variation: If the set of five-year-old children was different, a five-year-old would in general be allowed/able to solve the problem.

(58) External indifference essential relation: The identity of five-year-old children doesn't matter. There is an essential relation between "being a five-year-old child" and "being in general allowed/able to solve the problem".

The corresponding formalization and paraphrase are in (59)-(60):[4]

[4]For the sake of simplicity, the formulae involving GEN are somewhat abbreviated throughout the paper. The full version of e.g. (59a) would be (i), following von Fintel (1994:64):

(i) λ w_0. GENs $\leq$ w_0 [s $\in$ min(λ s".$\exists$y.5-yr-old(y,s"))] [$\exists$s' $\geq$ s [s' $\in$ min(λ s".$\exists$y.5-yr-old(y,s") & solve(y,p,s"))]]

(59) a. **Assertion**: λ w_0. GENs $\leq$ w_0 [$\exists$y.5-yr-old(y,s)] [solve(y,p,s)]

b. **Presupposition**: λ w_0.$\forall$w' $\in$ $\min_{wo}$ [F $\cap$ λ w".{x:5-yr-old(x,w")}$\neq$ {x:5-yr-old(x,w_0)}]:
GENs$^+$ $\leq$ w' [$\exists$y.5-yr-old(y,s$^+$)] [solve(y,p,s$^+$)] $\leftrightarrow$
GENs $\leq$ w_0 [$\exists$y.5-yr-old(y,s)] [solve(y,p,s)]

(60) a. **Assertion**: Every s, a (minimal) subsituation of w_0 containing a five-year-old, is a situation s in which the five-year-old solves the problem in s.

b. **Presupposition**: For each w', a counterfactual world of w_0, in which the set of five-year olds is different from the set of five-year olds in the actual world: every s$^+$, a substitution of w' where there is a five-year-old, is a situation where the five-year-old solves the problem if and only if every s, a subsituation of w_0 where there is a five-year-old, is a situation in which the five-year old solves the problem in s.

6 An Account for the Rescuing Strategies

In sections 1 and 2, we saw that subtrigging can rescue universal but not existential FCIs, and that agentivity can rescue existential FCIs.[5] This is so both in Korean and in Romance languages like Spanish. In section 4, we took a closer look at Korean FCIs and saw that the *wh*-root carries a contextual domain while the *amwu*-root induces domain-widening. Since both roots can form FCIs, it was concluded that the source of free choiceness is not Domain Widening. In section 5, we argued that the source of free choiceness is the particle *–na*, which triggers a presupposition of counterfactual variation that must be made felicitous.

Now we attempt to account for the licensing environments of the universal and existential FCIs in Korean. Why are they excluded in an episodic sentence? How can subtrigging and agentivity rescue (one of) the two FCIs? We propose that the presupposition of variation of the particle *–na* is too strong and thus infelicitous in an episodic sentence (cf. Dayal 1998, Chierchia 2005). Subtrigging and agentivity help satisfy this presupposition of variation, making *–na*-FCIs acceptable. Finally, we extend this analysis to the two types of FCIs in Spanish.

6.1 Rescuing Korean universal FCIs: Subtrigging

We saw that subtrigging can rescue universal FCIs in episodic sentences, as in (61), but not existential FCIs, as in (62):

(61) a. *John–un nwukwu-hako-na macuchi-ess-ta. (Choi, 2007)
J.-TOP WHO-with-OR run.into-PAST-DEC
'(Lit.) John ran into anyone.'

"Every s, a minimal subsituation of w_0 containing a five-year-old, can be extended to a minimal situation s' in which a five-year-old solves the problem."

[5] We leave the question of whether agentivity rescues universal FCIs for future research.

b. John-un ke-ipkwu-lo tuleo-nun nwukwu-hako-na $_{\forall\,/\,*\exists}$
J.-TOP the-entrance-by enter-REL WHO-with-OR $_{\forall\,/\,*\exists}$
macuchi-ess-ta.
encountered
'(Lit.) John ran into anyone who was coming in by the entrance.'

(62) a. *John–un amwu-hako-na macuchi-ess-ta. (Choi, 2007)
J.-TOP AMWU-with-OR run.into-PAST-DEC
'(Lit.) John ran into anyone$_{\exists}$ / a random person.'

b. *John-un ke-ipkwu-lo tuleo-nun amwu-hako-na macuchi-ess-ta.
J.-TOP the-entrance-by enter-REL AMWU-with-OR encountered
'(Lit.) John ran into anyone$_{\exists}$ / a random person who was coming in by the entrance.'

We propose that the crucial role of subtrigging is to help make felicitous the presupposition of variation introduced by *–na*. This is done in the following way. As we have seen, one avenue to satisfy the presupposition of variation is to interpret it as external indifference, that it, to interpret the sentence as making a law-like statement positing an essential relation between the N-property of the FCI and the property expressed by the rest of the clause.

To achieve this goal, we need to turn the episodic sentence into a semi-generic sentence by introducing the GEN operator and placing the FCI-indefinite in the restrictor of GEN. This gives us the LF in (63), that is, an LF where the FCI indirectly receives (quasi) universal quantificational force coming GEN:[6]

(63) LF: [$_{\text{IP}}$ GEN [$_{\text{IP}}$ FCI-indefinite [$_{\text{IP}}$ John ran into t]]]

Now, if the FCI is not subtrigged, as in (61a), the assertion and the presupposition of variation would have very implausible truth conditions. As the reader can see in (64), the assertion reads: "Every s containing a person is a situation where the person is run into by John". And the presupposition says that there is an essential relation between "being a person" and "being run into by John". As Dayal (1998) and Chierchia (2005) note, this interpretation is too strong to ever be true. Thus, the presupposition is infelicitous, and the sentence with the unsubtrigged universal FCI is judged ungrammatical.

(64) **Assertion**: λ w_0. GENs $\leq$ w_0 [$\exists$x.person(x,s)] [run.into(j,x,s)]
Presupposition:
λ w_0.$\forall$w' $\in$ $\min_{w0}$ [F $\cap$ λ w".{x:person(x,w")} $\neq$ {x:person(x,w_0)}]:
GEN $_{s^+ \leq w'}$[$\exists$x.person(x,s^+)] [run.into(j,x,s^+)] $\leftrightarrow$
GEN $_{s \leq w_0}$ [$\exists$x.person(x,s)] [run.into(j,x,s)]

In contrast, the addition of the relative clause in a semi-generic sentence like (61b) makes (the assertion and) the presupposition of variation weaker and more easily satisfiable. This can be seen in the formalization in (65). The presupposition of variation here says that there is an essential relation between "being someone coming in by the entrance" and "being run into by John". This essential link can easily be satisfied in a

[6] GEN directly quantifies over situations, as in (59) and in footnote 4.

situation where the entrance was too small and a lot of people were trying to come in and go out by the entrance. Since the presupposition is fulfilled, the subtrigged universal FCI is judged grammatical in this sentence.

(65) **Assertion**: λ w_0. GENs $\leq$ w_0 [$\exists$x.person(x,s) & entering(x,s)] [run.into(j,x,s)]
Presupposition:
λ w_0.$\forall$w' $\in$ $\min_{w0}$ [F $\cap$ λ w".{x:person(x,w") & entering(x,w")} $\neq$ {x:person(x,w_0) & entering(x,w_0)}]:
$\text{GEN}_{s^+ \leq w'}$ [$\exists$x.person(x,s^+) & entering(x,s^+)] [run.into(j,x,s^+)] $\leftrightarrow$
$\text{GEN}_{s \leq w_0}$ [$\exists$x.person(x,s) & entering(x,s)] [run.into(j,x,s)]

Consider now what happens if, instead of having the FCI in the restrictor of GEN receiving universal quantificational force, the FCI remained in situ with its regular existential force (with or without GEN in the sentence), e.g. as in (66):

(66) LF: [$_{IP}$ John ran into FCI-indefinite]

It is not entirely clear to us why an unsubtrigged FCI with existential force is unacceptable in this case. The predicted formalization is given in (67). The sentence asserts that the intersection of "people" and "individual run into by John" is non-empty. The presupposition of variation conveys that there is something essential or law-like about this intersection being non-empty, regardless of who the actual set of people are.[7] Be it as it may be, we would like to note that adding a relative clause does NOT make the presupposition weaker and more satisfiable. To the contrary, as can be seen in (68), the subtrigging version makes a stronger assertion –namely, that the intersection of "people coming in by the entrance" and "individual run into by John" is non-empty– and presupposes that there is something essential or law-like about this stronger claim. This is spelled out in (68).

(67) **Assertion**: λ w_0. $\exists$x [person(x,w_0) & run.into(j,x,w_0)]
Presupposition:
λ w_0.$\forall$w' $\in$ $\min_{w0}$[F $\cap$ λ w".{x:person(x,w")} $\neq$ {x:person(x,w_0)}]:
$\exists$x [person(x,w') & run.into(j,x,w')] $\leftrightarrow$
$\exists$x [person(x,w_0) & run.into(j,x,w_0)]

(68) **Assertion**: λ w_0. $\exists$x [person(x,w_0) & entering(x,w_0) & run.into(j,x,w_0)]
Presupposition: λ w_0.$\forall$w' $\in$ $\min_{w0}$ [F $\cap$ λ w".{x:person(x,w") & entering(x,w")} $\neq$ {x:person(x,w_0) & entering(x,w_0)}]:
$\exists$x [person(x,w') & entering(x,w') & run.into(j,x,w')] $\leftrightarrow$
$\exists$x [person(x,w_0) & entering(x,w_0) & run.into(j,x,w_0)]

Hence, in the case of existential FCIs, subtrigging does not function as a rescuing strategy. If the original unsubtrigged sentence is deviant, adding a relative clause does not make its felicity conditions easier to satisfy.

[7] Our hunch is that external indifference is not well-suited for capturing the essentiality of a non-empty intersection because external indifference sentences are semi-definitional: they introduce properties that define or characterize the members of a class; they do not "measure" a class against another class by checking their intersection. In section 6.2, we will see that the same essentiality of non-empty intersections is perfectly satisfiable when construed as agent indifference.

6.2 Rescuing Korean existential FCIs: Agentivity

We turn now to the second rescuing strategy, agentivity, which rescues existential FCIs in episodic sentences:

(69) *John–un amwu-hako-na / nwukwu-hako-na macuchi-ess-ta.
J.-TOP AMWU-with-OR / WHO-with-OR run.into-PAST-DEC
'(Lit.) John ran into anyone .'

(70) John-un amwu-chaek-ina / ?enu-chaek-ina cip-ese ku-uy-ey
J.-TOP AMWU-book-OR / WH-book-OR take-and the-top-LOC
olienoh-ass-ta.
put-PAST-DEC
'(Lit.) John took a random book and put it on the top (of the pile).'

In this case, as it corresponds to an episodic sentence, we have the simple LF in (71), with the FCI indefinite interpreted existentially in situ:

(71) LF: [$_{IP}$ John took FCI-indefinite]

Here again, we propose that the crucial role of agentivity is to make plausible the presupposition of variation of *–na*. The formalization is spelled out in (72). Here the essential link is between "being the set of books" and "having one member picked up by John". In other words, (70) asserts that the intersection of "being a book" and "being picked up by John" is non-empty, and its presupposition of variation conveys that such non-emptiness is not accidental but somehow essential. This presupposition can be easily satisfied if one assumes agent indifference: Because the agent John doesn't care about the identity of the books, if a different set of books had been available, John would have picked a book too. In this way, agentivity rescues existential FCIs.

(72) For (70a,b)
Assertion: λ w_0. $\exists$x.book(x,w_0) & pick.up(j,x,w_0)
Presupposition: λ w_0.$\forall$w' $\in$ $\min_{w0}$ [F$\cap$ λ w".{x:book(x,w")} $\neq$ {x:book(x,w_0)}]:
$\exists$x.book(x,w') & pick.up(j,x,w') $\leftrightarrow$ $\exists$x.book(x,w_0) & pick.up(j,x,w_0)

We have seen how the rescuing strategies align with the quantificational force of Korean FCIs. A remaining question is, why *amwu*-(N)-*na* can only receive an existential reading in these sentences while *wh*-(N)-*na* allows for both quantificational forces. Following Choi (2007), we assume that the difference has to do with scopal properties somehow derived from the nature of the indefinite root. We saw in section 4 that *amwu-* is the widening-domain root and that it imposes in situ scope with respect to a modal, as *amwu-* cannot gain scope over the modal in (29b). In the same way, an *amwu-* indefinite cannot move to the restrictor of a newly introduced GEN to gain universal force in (62). We also saw that *wh-*, the regular-domain root, has more scope freedom, as it can take scope under or over the modal in (29a). In the same fashion, the *wh*-indefinite can stay in situ ($\exists$ force) in (70) or move to the restrictor of GEN ($\forall$ force) in (61).

6.3 Extension to Spanish

The analysis of rescuing just presented is built on the assumption that free choice effects are due to a presupposition of variation that needs to be satisfied in context, not to Domain Widening. We have seen that there is morphological evidence for this assumption in Korean, as the size of the domain introduced by the roots is orthogonal to the free choice effect (section 4.2).

The morphology of Spanish FCIs brings no evidence in this respect. It is not possible to isolate a morphological component responsible for domain-widening to test whether, with or without it, free choice effects remain or disappear. In the lack of morphological evidence, and since the empirical pattern of rescuing is the same as for Korean, we assume that free choice effects in Spanish are also due to a presuposition of variation. Then, the analysis of rescuing that we have motivated for Korean can be straightforwardly applied to Spanish FCIs as well, as briefly sketched below.

A FCI gives rise to a presupposition of variation. If the FCI is the universal *cualquier* appearing in a (non-agentive) episodic sentence, as in (73a), this presupposition amounts to a law-like statement ("external indifference") that is too strong for it to ever be satisfied. Subtrigging in (73b) makes the presupposition weaker and, thus, more easily satisfiable. Now the presupposition is that there is an essential link between "being an object that wasn't in its place" and "being stumbled upon by John".

(73) a. *Ayer Juan tropezó con cualquier objeto.
Yesterday Juan stumbled with CUALQUIER object
'Yesterday Juan stumbled against any object.'

b. Ayer Juan ??tropezó / tropezaba con cualquier objeto que
Yesterday Juan stumbled$_{\text{PERF}}$ / stumbled$_{\text{IMPERF}}$ with CUALQUIER object that
no estuviese en su sitio.
not was$_{\text{SUBJ}}$ in its place
'Yesterday Juan stumbled against any object that wasn't in its place.'

If the FCI is the existential *un N cualquiera* appearing in a (non-agentive) episodic sentence, as in (74a), subtrigging does not make the presupposition any weaker, as seen in (74b). (74a) asserts that the intersection between "being an object" and "being stumbled upon by John" is non-empty, and it presupposes that there is something essential about it being non-empty. (74b) makes the stronger claim that the intersection between "being an object that is not in its place" and "being stumbled upon by John" is non-empty, and it presupposes that there is something essential about this stronger claim. Hence, the presupposition of (74b) is not weaker than the presupposition of (74a). As a result, subtrigging in (74b) does not help as a rescuing strategy.

(74) a. ???Ayer Juan tropezó con un objeto cualquiera.
Yesterday Juan stumbled with AN object CUALQUIERA
'Yesterday Juan stumbled against any$_{\exists}$ / a random object.'

b. ???Ayer Juan tropezó / tropezaba con un objeto cualquier
Yesterday Juan stumbled$_{\text{PERF}}$ / stumbled$_{\text{IMPERF}}$ with AN object CUALQUIERA
que no estuviese (/estaba) en su sitio.
that not was$_{\text{SUBJ}}$ (/was$_{\text{IND}}$) in its place

'Yesterday Juan stumbled against any$_{\exists}$ / a random object that wasn't in its place.'

If, instead, we combine the existential *un N cualquiera* with a volitional agent, the FCI is acceptable in an episodic sentence, as in (75). This is because the presupposition of variation –namely, that there is an essential link between "being the set of books" and "having a member picked up by John"– can be easily construed as "agent indifference".

(75) Juan necesitaba un pisapapeles, de modo que cogió un libro cualquiera
Juan needed a paperweight, of way that he-took A book CUALQUIERA
de la estantería y lo puso encima de la pila.
from the shelf and it he-put on-top of the pile
'John needed a paperweight, so he took a random book from the shelf and put it on top of the pile.'

7 Summary

We have seen that different sub-types of FCIs respond to different amending strategies. Whereas universal FCIs in Korean and Spanish are rescued by subtrigging in episodic sentences, existential FCIs are not sensitive to this method but are rescued by agentivity instead.

To explain this pattern, we have assumed that the source of free choice effects is a certain presupposition of variation (von Fintel 2000 for *–ever* FRs, Choi 2007 for Korean *–na*-based FCIs) and not Domain Widening (Kadmon and Landman 1993, Chierchia 2005, among many others). The upshot is that, once we have a FCI, we need to make sense of the presupposition of variation. This is easily done in purely generic sentences (e.g. (56)), which present law-like statements where the presupposition of variation is understood as external indifference. But this presupposition is too strong in the case of episodic sentences (cf. Dayal 1998, Chierchia 2005), and it renders both types of FCIs unacceptable in episodic environments. The role of subtrigging and agentivity is to make the presupposition of variation plausible in an episodic context. Subtrigging helps create semi-generic readings where the FCI takes on (quasi) universal force and where the presupposition of counterfactual variation can plausibly be satisfied as external indifference (or law-like statement). Agentivity permits the presupposition of variation of an existential FCI to be cashed out as agent's indifference.

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