

Wh-(N)-na as a Free Choice Item

Jinyoung Choi

1. Goal

This paper is concerned with

- accounting for the licensing environments and quantificational force and
- deriving the free choiceness of *wh-(N)-na*

2. Previous literature on *wh-(N)-na*

2.1. Licensing environments?

- *wh-(N)-na* can appear everywhere (Kim and Kaufmann 2006).
- *wh-(N)-na* prefers modal contexts (C. Lee 1997).
- *wh-(N)-na* is not licensed in DE contexts such as the antecedent of conditionals, while *amwu-(N)-na* is (Y. Lee 1999).

- (1) a. ***nwukwu-na** o-myen, na-hanthey alliecwu-e.
WHO-OR come-if me-DAT inform-IMP
'(Lit.) If everyone comes, let me know.'
- b. **amwu-na** o-myen, na-hanthey alliecwu-e.
AMWU-OR come-if me-DAT inform-IMP
'If anyone comes, let me know.'

(Y. Lee, 1999)

2.2. Q-force and FC-ness: Universal quantifier? Free choice item?

- *wh-(N)-na* is a universal quantifier, rather than a free choice (Y. Lee 1999; Ohno 1991; D. Chung 1996).
- *wh-(N)-na* is a universal free choice item (C. Lee 1997; Kim and Kaufmann 2006). They, however, fail to present a sufficient amount of evidence to support that *wh-(N)-na* is not merely a universal quantifier, but a free choice item.

2.3. Where does the FC-ness of *wh-(N)-na* come from?

- FC-ness originates from the likelihood scale that the particle *-na* introduces (C. Lee et al. 2000; Y. Lee 1999).

3. *Wh-(N)-na* IS a free choice item.

I show that *wh-(N)-na* and *amwu-(N)-na* pattern alike with each other as free choice items and behave different from the regular universal quantifier *mot(w)u-* 'every, all' in three dimensions.

3.1. Essential link

- Both *amwu-(N)-na* and *wh-(N)-na* convey that there exists an essential link between the denotation of the NP headed by *-na* and the remainder of the sentence (cf. Kim and Kaufmann, 2006). In contrast, a case-marked universal quantifier phrase like *motun-tasus-salccali-ka* 'every five-year-old (kid)-NOM' does not necessarily convey the essential or causal link.

- (2) 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.'

- (3) **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.’

- Essential link has something to do with FCIs. English FCI any is fine with non-accidental or essential generalizations, but not allowed in accidental generalization (Dayal 1998).

- (4) a. Anybody who is in Mary’s semantics seminar is writing a paper on NPIs.
 b. #¹Anybody who is in Mary’s Field Methods course is writing a paper on NPIs.
 (5) a. Everybody who is in Mary’s semantics seminar is writing a paper on NPIs.
 b. Everybody who is in Mary’s Field Methods course is writing a paper on NPIs.

3.2. Vague quantificational force

- Both *amwu-(N)-na* and *wh-(N)-na* exhibit different quantificational interpretations from the regular universal quantifier *mot(w)u-* ‘every, all’. The (A) reading of *mot(w)u-* is not available to *wh-(N)-na* and *amwu-(N)-na*. (cf. Menendez-Benito 2005).

- (6) John-un **motun-yecaay(tul)-lul** chotayha-l.swu.iss-ta.
 J.-TOP ALL-girl-ACC invite-can-DEC
 (A) ‘It is permitted that John invites all girls.’
 (B) ‘For every girl x, John is permitted to invite x.’

- (7) a. John-un **amwu-yecaay-na** chotaeha-l.swu.iss-ta.
 J.-TOP AMWU-girl-OR invite-can-DEC
 ‘John can invite any girl.’
 b. John-un **etten-yecaey-na** chotaeha-l.swu.iss-ta.
 J.-TOP WHAT-girl-OR invite-can-DEC
 ‘John can invite any girl.’

3.3. Restrictions on licensing environments

- *wh-(N)-na* can’t occur everywhere.

- Both *amwu-(N)-na* and *wh-(N)-na* are deviant in episodic sentences. In contrast, the universal quantifier *mot(w)u-* ‘all, every’ does not exhibit such restrictions.

- (8) a. ***amwu-namca-na** se-iss-ta.
 AMWU-guy-OR stand-PROG-DEC
 ‘(Lit.) Any guy is standing.’
 b. ***etten-namca-na** se-iss-ta.
 WHAT-guy-OR stand-PROG-DEC
 ‘(Lit.) Any guy is standing.’
 (9) **motun-namca-ka** se-iss-ta.
 EVERY-guy-NOM stand-PROG-DEC
 ‘Every guy is standing.’

- Novel observation: subtriggering, adding a relative can rescue *wh-(N)-na* in its non-licensing environments, i.e., episodic sentences.

- (10) Pa-ese chwukkwu-lul po-ko.iss-nun **etten-namca-na** se-iss-ta.
 Bar-LOC soccer-ACC watch-PROG-REL WHAT-guy-OR stand-PROG-DEC
 ‘(Lit.) Any guy who is watching the soccer game is standing.’

¹ Dayal (1998) marked this sentence with an asterisk.

- This method of “subtriggering” (LeGrand 1975) is a typical characteristic of (some type of) FCIs in languages like English and Italian (See Dayal 1995, 1998; Chierchia, 2005; cf. Quer 2000; Menéndez-Benito, 2005 for Spanish).

(11) English

- a. Everyone contributed to the fund.
- b. *Anyone contributed to the fund.
- c. Anyone who heard the news contributed to the fund.

4. How to derive the free-choiceness of *wh*-(N)-*na*?

4.1. Is *-na* a scalar particle like *-to/-lato* ‘even’?

- The disjunctive particle *-na* ‘or’ has nothing to do with the likelihood scale, and thus it cannot combine with a minimizer.

(12) John couldn’t even lift a finger.

(13) a. John-un **sonkalak** **hana-to** kkattakha-ci.anh-ass-ta.
 J.-TOP finger one-EVEN lift-NEG-PAST-DEC
 ‘John didn’t even lift a finger.’

b. John-i **sonkalak** **hana-lato** kkattakha-myen motwu cwuk-nun-ta.
 J.-NOM finger one-EVEN lift-if ALL die-FUT-DEC
 ‘If John even lifts a finger, everyone will die.’

(14) a. *John-un **sonkalak** **hana-na** kkattakha-ci.anh-ass-ta.
 J.-TOP finger one-OR lift-NEG-PAST-DEC

b. *John-i **sonkalak** **hana-na** kkattakha-myen motwu cwuk-nun-ta.
 J.-NOM finger one-OR lift-if ALL die-FUT-DEC

4.2. Essential link is the contribution of *-na*

- In the following scenario, exactly the same essential link is conveyed by *wh*-(N)-*na* and *amwu*-(N)-*na* such that there is an essential link between “being a doctor” and “being a marriage option for Sue”.

(15) 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 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?*

(16) Father:

a. **motun-uysa-ka** coh-a.
 EVERY-doctor-NOM good-DEC
 ‘All the doctors are ok.’

b. **Etten/enu-uysa-na** coh-a.
 WHAT/WHICH doctor-OR good-DEC
 ‘Any doctor is ok.’

c. **Amwu-uysa-na** coh-a.
 AMWU-doctor-OR good-DEC
 ‘Just any doctor is ok.’

4.3. Formalization of the essential link

4.3.1. The essential link of *-ever* FRs in English

- A subtype of *-ever* FRs express “indifference” on somebody’s part.
- *-ever* adds to a definite description an extra meaning in (18), which can be inferred from a presupposition of variation in (19).

- (17) 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.
- (18) 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”.
- (19) Presupposition of variation: In every counterfactual world w' that is minimally different from the actual situation w with respect to the denotation of the person at the top of ballot, if the person who was at the top of the ballot had been different in w' , the person would have won.

- The indifference reading conveyed by *-ever* can be attributed to an agent.

- (20) a. Zack voted for who was at the top of the ballot.
 b. Zack voted for whoever was at the top of the ballot.
- (21) Agent Indifference / essential link: Zack was indifferent as to the identity of the person who was at the top of the ballot.
- (22) Presupposition of variation: If the person who was at the top of the ballot had been different, Zack would have voted for that person.

- Von Stechow (2000) formalizes sentences containing an *-ever* FR as in (23). 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.

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

(24=17b) In yesterday’s election, whoever was at the top of the ballot won.

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

- (26) 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 .

(27=20b) Zack voted for whoever was at the top of the ballot.

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

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

- (29) 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 votes for that person in w' iff he votes for the person at the top of the ballot in w_0 .

4.3.2. Extension to *wh*-(N)-*na*

- *wh*-(N)-*na* is an indefinite, whose basic quantification is existential.

- The modal base F is always counterfactual.

- (30) *wh*-(N)-*na* (w_0) (F) (P) (Q) (TEMPLATE 1)
 a. Asserts: $\exists x [P(w_0)(x) \wedge Q(w_0)(x)]$
 b. Presupposes: $\forall w' \in \min_{w_0} [F \cap \lambda w''. P(w'') \neq P(w_0)]$:
 $\exists x [P(w')(x) \wedge Q(w')(x)] = \exists x [P(w_0)(x) \wedge Q(w_0)(x)]$

- (31) 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 in the following respect: 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 $\lambda w. \exists x [P(w)(x) \wedge Q(w)(x)]$ has in w' whatever truth value it has in the actual world w_0 .

- Application to a simple sentence

- (32) a. John-un etten/mwusun-chayk-ina cip-ese cong-i-wi-ey noh-ass-ta.
 J.-TOP WHAT-book-OR pick-and paper-on-LOC put-PAST-DEC
 '(Lit.) John picked up (a) random book(s) and put it on the pile of paper.'
 b. John-un chayk-ul cip-ese cong-i-wi-ey noh-ass-ta.
 J.-TOP book-ACC pick-and paper-on-LOC put-PAST-DEC
 'John picked up a book and put it on the pile of paper.'

- (33) Agent Indifference/essential link: It didn't matter to John what/which (kind of a) book he picks up. There is an essential link between "being a book" and "being picked up by John".

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

- (35) a. Assertion: $\lambda w_0. \exists x. \text{book}(x, w_0) \ \& \ \text{pick}(j, x, w_0) \ \& \ \text{put-on-pile}(j, x, w_0)$
 b. Presupposition: $\lambda w_0. \forall w' \in \min_{w_0}. [F \cap \lambda w''. \{x: \text{book}(x, w'')\} \neq \{x: \text{book}(x, w_0)\}]$:
 $\exists x. \text{book}(x, w') \ \& \ \text{pick}(j, x, w') \ \& \ \text{put.on.pile}(j, x, w') =$
 $\exists x. \text{book}(x, w_0) \ \& \ \text{pick}(j, x, w_0) \ \& \ \text{put.on.pile}(j, x, w_0)$

- (36) 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 .

- Application to a complex sentence like a generic statement

- (37) a. Mal-un etten-phwul-ina mek-nun-ta.

- horse-TOP WHAT-grass-OR eat-GEN-DEC
 ‘Horses eat (just) any grass.’
 b. Mal-un phwul-ul mek-nun-ta.
 horse-TOP grass-ACC eat-GEN-DEC
 ‘Horses eat grass.’

(38) External indifference / essential relation: The identity of grasses doesn’t matter. There is an essential relation between “being grass” and “being an x such that horses eat x”.

(39) Presupposition of counterfactual variation: If a different type of grass had been considered, horses would have eaten it.

(40) **TEMPLATE 2** (with an operator & global projection)

ϕ [*wh-/amwu*–(N)-*na* (w_0) (F) (P) (Q)]

a. Asserts: $[[\phi \textit{wh-/amwu}–(N)-*na* (w_0) (F) (P) (Q)]]$

b. Presupposes: $\forall w' \in \min_{w_0} [F \cap \lambda w''. P(w'')] \neq P(w_0)$:

$[[\phi \textit{wh-/amwu}–(N)-*na* (w') (F) (P) (Q)]]$ = $[[\phi \textit{wh-/amwu}–(N)-*na* (w_0) (F) (P) (Q)]]$

(41) a. Assertion: $\lambda w_0. \text{GEN}_{s \leq w_0} [C(s) \ \& \ \exists y. \text{horse}(y,s) \ \& \ \exists x. \text{grass}(x,s)] [\text{eat}(y,x,s)]$

b. Presupposition: $\lambda w_0. \forall w' \in \min_{w_0} [F \cap \lambda w''. \{x: \text{grass}(x,w'')\} \neq \{x: \text{grass}(x,w_0)\}]$:
 $\text{GEN}_{s^+ \leq w'} [C(s^+) \ \& \ \exists y. \text{horse}(y,s^+) \ \& \ \exists x. \text{grass}(x,s^+)] [\text{eat}(y,x,s^+)] =$
 $\text{GEN}_{s \leq w_0} [C(s) \ \& \ \exists y. \text{horse}(y,s) \ \& \ \exists x. \text{grass}(x,s)] [\text{eat}(y,x,s)]$

(42) a. Assertion: Every s, a (minimal) subsituation of w_0 containing a horse and grass, is a situation in which the horse in s eats the grass in s.

b. Presupposition: For each w' , a counterfactual world of w_0 , in which the set of grass is different from the set of grass in the actual world, every s^+ , a subsituation of w' where there is a horse and grass, is a situation where the horse eats the grass iff every s, a subsituation of w_0 where there is a horse and grass, is a situation in which the horse in s eats the grass in s.

- Local projection of the presupposition of variation

- (43) taypwupwun.uy-aytul-i etten/mwusun-chayk-ina cip-ese
 MOST-student-NOM WHAT-book-OR pick-and
 tokseswuep-ulo ka-ass-ta.
 reading.class-GOAL go-PAST-DEC
 ‘(Lit.) Most students picked up (a) random book(s) and went to the reading class with it.’

(44) Agent indifference/ essential link: There is an essential link between “being a book” and “being picked up by most students”. It doesn’t matter what kind of a book it is. Most of the students picked up a book indifferently.

(45) Presupposition of counterfactual variation: For most students, if there had been a different book, they would have picked that book up.

(46) **TEMPLATE 3** (with an operator & local projection accommodation)

ϕ [*wh-/amwu*–(N)-*na* (w_0) (F) (P) (Q)]

$[[\phi]]$ ($[[\textit{wh-/amwu}–(N)-*na* (w_0) (F) (P) (Q)]]$ = $1 \wedge \forall w' \in \min_{w_0} [F \cap$

$\lambda w''. P(w'')] \neq P(w_0)$: $[[\textit{wh-/amwu}–(N)-*na* (w') (F) (P) (Q)]]$ = $[[\textit{wh-/amwu}–(N)-*na* (w_0) (F) (P) (Q)]]$)

(47) $\lambda w_0. \text{MOST}_x [\text{student}(x,w_0)] [\exists y. \text{book}(y,w_0) \ \& \ \text{pick}(x,y,w_0) \ \&$

$\forall w' \in \min_{w_0} [F \cap (\lambda w''. \{y: \text{book}(y,w'')\} \neq \{y: \text{book}(y,w_0)\})] \rightarrow \text{pick}(x,y,w') = \text{pick}(x,y,w_0)]$

- (48) For most students x , two things happen: (i) there is some book that x picks and (ii) in all the counterfactual worlds w' that are minimally different from w_0 with respect to the identity of the set of books, x would have picked up a book in w' .

5. Licensing conditions of *wh*-(N)-*na*

5.1. Observation

- (49) Licensing environments and quantificational force of *wh*-(N)-*na* in comparison with *amwu*-(N)-*na*

	<i>Amwu</i> -(N)- <i>na</i>	<i>Wh</i> -(N)- <i>na</i>
Generic	√ ∇	√ ∇
<i>Can</i>	√ ∃	√ ∃/∀
<i>Must</i>	√ ∃	√ ∃/∀
Imperative	√ ∃	??/√ ∃/∀
Episodic Affirmative	*/√ ∃	*/√ ∃/∀
Episodic Negation	*/√ ∃	*/√ ∃/∀
Antecedent of <i>If</i>	√ ∃	(√) ∃/∀
Restrictor of ∇	√ ∃	(√) ∃/∀

- *Wh*-(N)-*na* is happy in so-called FC contexts such as generic, modal and imperative sentences.
- *Wh*-(N)-*na* can occur in DE contexts (contra Y. Lee 1999).

- (50) a. **etten-senswu-na** sen-ul palp-emyen, kyengki-nun kkuthna-n-ta.
 WHAT-player-OR line-ACC cross-if game-TOP finish-GEN-DEC
 ‘No matter which player x is, if x crossed a line, the game is over.’
 b. ??amwu-senswu-na sen-ul palp-emyen, kyengki-nun kkuthna-n-ta.
 AMWU-player-OR line-ACC cross-if game-TOP finish-GEN-DEC
 ‘(Lit.) If any player crossed a line, the game is over.’

- *Wh*-(N)-*na* is not allowed in episodic sentences (51), but can be improved by subtriggering, topicalization and agentivity.

- (51) ***etten-namca-na** se-iss-ta.
 WHAT-guy-OR stand-PROG-DEC
 ‘(Lit.) Any guy is standing.’

1) Subtriggering

- (52) Pa-ese chwukkwu-lul po-ko.iss-nun **etten-namca-na** se-iss-ta.
 Bar-LOC soccer-ACC watch-PROG-REL WHAT-guy-OR stand-PROG-DEC
 ‘(Lit.) Any guy who is watching the soccer game at the bar is standing.’

- 2) Topicalization: if *wh*-(N)-*na* is placed in subject position in a past-tensed sentence, the sentence sounds far better than sentences that contain *wh*-(N)-*na* in non-subject positions.

- (53) a. *John-un **etten-yecaay-na** palapo-ass-ta.
 J.-TOP WHAT-girl-OR see-PAST-DEC
 ‘(Lit.) John saw any girl.’
 b. ?**etten-yecaay-na** John-ul palapo-ass-ta.
 WHAT-girl-OR J.-ACC see-PAST-DEC
 ‘(Lit.) Any girl saw John.’

3) Agentivity

- (54) a. *John-un ecey phathi-ese **etten-yeca-hako-na** macuchi-ess-ta.
 J.-TOP yesterdayparty-LOC WHAT-girl-with-OR run.into-PAST-DEC
 ‘(Lit.) John ran into random girls at the party yesterday.’
 b. John-un ecey phathi-ese **etten-yeca-hako-na** khissuha-ass-ta.
 J.-TOP yesterdayparty-LOC WHAT-girl-with-OR kiss-PAST-DEC
 ‘(Lit.) John kissed random girls at the party yesterday.’

(55) Rescuing strategies for *wh*-(N)-*na*

- A. Making a generic-like sentence
 a. Making *wh*-(N)-*na* topicalized (**topicalization**)
 b. Making the domain more specified by adding a relative clause (**subtriggering**)
 B. Putting it under the scope of a volitional agent (**agentivity**)

5.2. Accounts for the licensing environments of *wh*-(N)-*na*

-Licensing condition of *wh*-(N)-*na*: *wh*-(N)-*na* can occur in a sentence where the presupposition of variation triggered by *-na* is fulfilled.

- In generic, modal and conditional sentences, the presupposition of variation is satisfied via external indifference.
- In episodic sentences, *wh*-(N)-*na* is judged ungrammatical because the presupposition of variation is not fulfilled.

- (56=51) ***etten-namca-na** se-iss-ta.
 WHAT-guy-OR stand-PROG-DEC
 ‘(Lit.) Any guy is standing.’

- (57) LF: [_{IP} Assert [_{TP} *etten-namca-na* is standing]]

- (58) a. **Assertion**: $\lambda w_0. \exists x. \text{guy}(x, w_0) \ \& \ C(x, w_0) \ \& \ \text{stand}(x, w_0)$
 b. **Presupposition**: $\lambda w_0. \forall w' \in \min_{w_0} [F \cap (\lambda w''. \{x: \text{guy}(x, w'') \ \& \ C(x, w'')\}) \neq \{x: \text{guy}(x, w_0) \ \& \ C(x, w_0)\}]: \exists x. \text{guy}(x, w') \ \& \ C(x, w') \ \& \ \text{stand}(x, w') = \exists x. \text{guy}(x, w_0) \ \& \ C(x, w_0) \ \& \ \text{stand}(x, w_0)$
 a'. **Assertion**: There is a guy that is standing in the actual world.
 b'. **Presupposition**: For every counterfactual world w' accessible from w_0 , which is different only with respect to the set of guys, a guy is standing in w' iff there is a guy that is standing in w_0 .

- The presupposition of counterfactual variation in (58b) roughly reads: “In every counterfactual world, a guy is standing, whose identity does not matter. This proposition is what Dayal (1998) argues to be too strong a statement to ever be true”. In other words, the presupposition of indifference that there is a guy who is standing in every possible world cannot be fulfilled. Thus, the sentence is judged ungrammatical.

- Rescuing strategy 1: topicalization

- (59) ?**etten-yecaay-na** John-ul palapo-ass-ta.
 WHAT-girl-OR J.-ACC see-PAST-DEC
 '(Lit.) Any girl saw John.'

wh-(N)-na moves to the restrictor of the generic operator that is introduced for free. The sentence is interpreted as semi-generic.

- (60) $[_{IP} \text{ GEN } \textit{wh-(N)-na} [_{IP} \text{ Assert } [_{TP} \text{ t saw John }]]]$

- (61) a. Assertion: $\lambda w_0. \text{GEN}_{s \leq w_0} [\exists x. \text{girl}(x,s) \ \& \ C(x,s)] [\text{see}(x,j,s)]$
 b. Presupposition: $\lambda w_0. \forall w' \in \min_{w_0} [F \cap \lambda w''. \{x: \text{girl}(x,w'') \ \& \ C(x,w'')\}] \neq$
 $\{x: \text{girl}(x,w_0) \ \& \ C(x,w_0)\} : \text{GEN}_{s^+ \leq w'} [\exists x. \text{girl}(x,s^+) \ \& \ C(x,s^+)] [\text{see}(x,j,s^+)] =$
 $\text{GEN}_{s \leq w_0} [\exists x. \text{girl}(x,s) \ \& \ C(x,s)] [\text{see}(x,j,s)]$

- (62) a. Assertion: Generally, a girl with property C saw John.
 b. Presupposition: In every counterfactual world w' that is minimally different from w_0 in the following respect: the set of girls with property C in w' is different from the set of girls with property C in w_0 , the asserted proposition has in w' whatever truth value it has in the actual world w_0 .

- Rescuing strategy 2: subtrigging

- (63) Pa-ese chwukkwu-lul po-ko.iss-nun **etten-namca-na** se-iss-ta.
 Bar-LOC soccer-ACC watch-PROG-REL WHAT-guy-OR stand-PROG-DEC
 '(Lit.) Any guy who is watching the soccer game at the bar is standing.'

Subtrigged *wh-(N)-na* moves out of the assertoric operator and sits in the restriction of the generic operator introduced on top to make a law-like statement.

- (64) $[_{IP} \text{ GEN } [_{IP} \text{ subtrigged } \textit{wh-(N)-na} [_{IP} \text{ Assert } [_{TP} \text{ t saw John }]]]]$

- (65) a. Assertion: $\lambda w_0. \text{GEN}_{s \leq w_0} [\exists x. \text{guy}(x,s) \ \& \ \text{soccer-at-bar}(x,s)] [\text{stand}(x,s)]$
 b. Presupposition: $\lambda w_0. \forall w' \in \min_{w_0} [F \cap (\lambda w''. \{x: \text{guy}(x,w'') \ \& \ \text{soccer-at-bar}(x,w'')\})] \neq$
 $\{x: \text{guy}(x,w_0) \ \& \ \text{soccer-at-bar}(x,w_0)\} : \text{GEN}_{s^+ \leq w'} [\exists x. \text{guy}(x,s^+) \ \& \ \text{soccer-at-bar}(x,s^+)]$
 $[\text{stand}(x,s^+)] = \text{GEN}_{s \leq w_0} [\exists x. \text{guy}(x,s) \ \& \ \text{soccer-at-bar}(x,s)] [\text{stand}(x,s)]$

- (66) a. Assertion: Generally, a guy who is watching the soccer game at the bar is standing.
 b. Presupposition: For every counterfactual world w' accessible from w_0 , which is different only with respect to the set of guys who are watching the soccer game at the bar, the asserted proposition has in w' whatever truth value it has in the actual world.

- Rescuing strategy 3: agentivity

- (67) John-un ecey phathi-ese **etten-yeca-hako-na** khissuha-ass-ta.
 J.-TOP yesterdayparty-LOC WHAT-girl-with-OR kiss-PAST-DEC
 '(Lit.) John kissed random girls at the party yesterday.'

(68) LF: [_{IP} Assert [_{TP} John [_{VP} kissed *etten-yeca-hako-na*]]]

(69) a. Assertion: $\lambda w_0. \exists x. \text{girl}(x, w_0) \ \& \ C(x, w_0) \ \& \ \text{kiss}(j, x, w_0)$

b. Presupposition: $\lambda w_0. \forall w' \in \min_{w_0} [F \cap (\lambda w'. \{x: \text{girl}(x, w') \ \& \ C(x, w')\} \neq \{x: \text{girl}(x, w_0) \ \& \ C(x, w_0)\})]: \exists x. \text{girl}(x, w') \ \& \ C(x, w') \ \& \ \text{kiss}(j, x, w') = \exists x. \text{girl}(x, w_0) \ \& \ C(x, w_0) \ \& \ \text{kiss}(j, x, w_0)$

(70) a. Assertion: In the actual world w_0 , there is some girl that John kissed.

b. Presupposition: In all worlds w' minimally different from w_0 in which the set of girls is different from the set of girls in w_0 , John kisses a girl in w' iff he kisses a girl in w_0 .

- The presupposition of indifference is attributed to the agent John, yielding agent indifference, that is, John acted indifferently in kissing girls. Thanks to the agent indifference, an essential link comes to hold between “being a girl” and “being kissed by John.” Hence, *wh-(N)-na* is grammatical in this context. In this case, *wh-(N)-na* is interpreted as a plural indefinite under the repetitive action by the agent.

6. Quantificational force of *wh-(N)-na*

- *wh-(N)-na* is an indefinite whose basic quantification is existential.
- Whenever it is interpreted in the restrictor of GEN, it receives universal quantification.
- When it conveys agent’s indifference, a plural reading arises due to the agent’s repetitive or indiscriminative action.