Korean *-lato* as additive free choice

TL;DR *-Lato* in Korean combines with indefinite expressions to form 'emphatic' Free Choice Items (FCIs), whose semantics and distribution are marginally distinct from those of pure FCIs. We argue that *-lato* constitutes an instance of "additive free choice" (Fălăuş & Nicolae 2022); that is, *-lato* can be further decomposed into the disjunction *-la(-na)* and the additive *-to*.

PSIs in Korean In Korean, *wh*-indefinites can combine with particles such as *-to*, *-(i)na*, and *-(i)lato*, forming what are now commonly known as Polarity Sensitive Items (PSIs).

(1) a. Nwukwu-to hakkyo-ey an w-ass-ta.
who-ADD school-to NEG come-PST-DECL
'Nobody came to school.'

b. Nwukwu-{na/lato} hakkyo-ey o-l swu iss-ta.
who-DISJ/DISJ-ADD school-to come-REL way exist-DECL
'Anyone can come to school.'

Nwukwu-to exhibits the semantics of a Strong Negative Polarity Item (SNPI) (licensed in anti-morphic contexts), whereas *nwukwu-na* and *nwukwu-lato* exhibit the semantics of FCIs (licensed in modal and imperative contexts). An increasing body of recent work aims to derive the semantics and distribution of PSIs from their morphological structure: cross-linguistically, they are made up of an indefinite plus either an additive (e.g. Hindi *ek bhii*) or disjunction (e.g. Hungarian *akárki*) (see, e.g., Chierchia 2013, among others). Korean also fits this paradigm, as *-to* and *-na* function as plain additive and disjunction markers, respectively (examples omitted).

(Pure) FCIs Chierchia (2013), building on insights from Fox (2007), among others, offers an explanation of how FCIs of the form 'indefinite + DISJ' get to acquire their characteristic semantics and distribution. The key assumption is that these items obligatorily activate pre-exhaustified subdomain alternatives. We illustrate this with the example in (1b) below:

(2) a. Assertion: Nwukwu-na 'who + DISJ' can come to school.

b. LF: $\exists x \in D \Diamond come(x)$

c. D-ALT: $\{\exists x \in D' \Diamond come(x) \mid D' \subset D\}$

d. PRE-EXH D-ALT: $\{\text{EXH}\ [\exists x \in D' \Diamond come(x)] \mid D' \subset D\}$
$= \{\exists x \in D' \Diamond come(x) \wedge \neg\exists x \in D \backslash D' \Diamond come(x) \mid D' \subset D\}$

Assuming that activated alternatives must be obligatorily exhaustified, all elements of PRE-EXH D-ALT will be negated, since none of them is entailed by the original assertion. Note that negating a proposition of the form '$\exists x \in D' \Diamond come(x) \wedge \neg\exists x \in D \backslash D' \Diamond come(x)$' yields a conditional, i.e. '$\exists x \in D' \Diamond come(x) \rightarrow \neg\exists x \in D \backslash D' \Diamond come(x)$'. This is how the FC effect is derived: for every subdomain D' of D, if the assertion holds of D', it will also hold of D\D'.

ADD-FCIs Fălăuş & Nicolae (2022) introduce a novel class of free choice items in Romanian, which they refer to as additive FCIs (ADD-FCIs). ADD-FCIs differ from pure FCIs in that they involve the additive particle in addition to the disjunction and an indefinite expression.

(3) a. ADD-FCIs (e.g. *orişicine*): *ori* 'DISJ' + *şi* 'ADD' + *wh*-word

b. Pure FCIs (e.g. *oricine*): *ori* 'DISJ' + *wh*-word

F&N's analysis of ADD-FCIs builds on two assumptions: (i) the additive *şi* signals obligatory exhaustification with respect to its pre-exhaustified alternative (EXH_{ADD}), and (ii) EXH_{ADD} takes scope over EXH_{FCI}. Let us review these assumptions in turn.

We have seen above that exhaustification with respect to pre-exhaustified subdomain alternatives (EXH_{FCI}) yields FC effects, by virtue of the fact that the negation of those pre-exhaustified subdomain alternatives results in a conditional meaning. In a parallel manner, the additive inference associated with particles such as *şi* can be understood as a result of exhaustification:

(4) a. Assertion: Şi Ana came to school. (example modified from F&N 2022)

b. LF: came(Ana)

c. pre-exhaustified alternative: EXH [came(Ana)] = came(Ana) $\wedge$ $\neg\exists$x$\in$D [x $\neq$ Ana $\wedge$ came(x)]

When ***şi*** is associated with an individual, the pre-exhaustified alternative of the assertion takes the form 'only P(x)'. Since this is not entailed by the original assertion, it ends up being negated, which derives the additive inference: 'came(Ana) $\wedge$ $\exists$x$\in$D [x $\neq$ Ana $\wedge$ came(x)]'. When ***şi*** is associated with a quantifier, F&N argue, the pre-exhaustified alternative of the assertion takes the form 'Qx$\in$D P(x) $\wedge$ $\neg$Qx$\in$D'$\backslash$D P(x),' for some superset D' of D. This explains the 'emphatic' component of ADD-FCIs: on top of universal quantification derived from the application of EXH_{FCI}, EXH_{ADD} results in a domain-widening effect, i.e. '$\forall$x$\in$D' P(x)'.

(5) $\exists$x$\in$D P(x) $\rightarrow$ $\boxed{\text{EXH}_{\text{FCI}}}$ $\rightarrow$ $\forall$x$\in$D P(x) $\rightarrow$ $\boxed{\text{EXH}_{\text{ADD}}}$ $\rightarrow$$\forall$x$\in$D' P(x), where D $\subset$ D'.

In Romanian, *orişicine*, unlike *oricine*, cannot appear in the antecedent of an unconditional unless the antecedent is marked by conditional mood. F&N attribute the limited distribution of *orişicine* to its emphatic nature; it quantifies over larger domains, which renders it incompatible with the indicative mood. The intuition behind this contrast is that the use of a conditional mood expands the modal base, thereby introducing a larger set of accessible worlds.

-lato We argue that Korean *-lato* can also be decomposed into the disjunction *-la(-na)* and the additive *-to*, placing it within a the novel class of the FC paradigm: additive free choice. Its combination with a *wh*-indefinite, e.g. *nwukwu-lato*, has been repeatedly reported by Korean researchers to convey a kind of 'emphasis' in comparison to its pure FCI counterpart, *nwukwuna*, and to exhibit a more limited distribution (Lee et al. 2000, Choi 2005).

(6) a. Chelswu-nun nwukwu-{na/*lato} manna-ss-ta.
Chelswu-TOP who-{DISJ/DISJ-ADD} date-PST-DECL
'Chelswu dated **anyone**.'

b. Chelswu-nun nwukwu-{na/*lato} an manna-ss-ta.
Chelswu-TOP who-{DISJ/DISJ-ADD} NEG date-PST-DECL
'Chelswu didn't date **anyone**.'

While *nwukwu-na* may appear in non-(overtly)-modal contexts, *nwukwu-lato* is systematically excluded from such environments. Note that *nwukwu-na* sounds natural in these examples only when it "induces an implicit modal meaning" (Lee et al. 2000). This intuition is reflected in the translations through the boldfaced **anyone**, indicating that the only available interpretation here is a 'not-just-any' reading — one that, in English, is typically conveyed by stressed **any**. Therefore, we conclude that (6a) and (6b) are instances of an "embedded FC", which arises from the presence of a covert modal operator scoping above the FCI and below the EXH:

(7) EXH [$\Diamond_{\text{covert}}$ Chelswu dated/didn't date nwukwu-na 'who + DISJ']

If this is correct, the ungrammaticality of *nwukwu-lato* in (6a) and (6b) indicates its incompatibility with the covert modal operator $\Diamond_{\text{covert}}$. The extent to which a given modal operator can access possible worlds is an extremely challenging topic, and is known to depend on a range of idiosyncratic factors (see, e.g., Chierchia 2013). At this point, we tentatively conclude that the modal base of $\Diamond_{\text{covert}}$ in Korean is subject to the same restriction as that of the indicative mood: both may only access the worlds in the context set. (Talk includes further investigation, potentially related to variation in modal flavor and degrees of freedom among different FCIs.)

Implications Korean provides an ideal testing ground for a range of Polarity Sensitive (PS) phenomena, as it attests to the full paradigm predicted in the literature: $\exists$ + ADD, $\exists$ + DISJ, and $\exists$ + DISJ + ADD. (According to F&N, Romanian lacks the first option.) Korean ADD-FCI *nwukwu-lato* also transparently conforms to the scope configuration assumed in F&N — $\text{EXH}_{\text{ADD}} \gg \text{EXH}_{\text{FCI}}$ — in contrast to the Romanian *orişicine*. Further investigation is surely needed to better understand the semantics and distribution of various PSIs, including the relatively new category of ADD-FCIs, and their cross-linguistic differences.

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