(UN)CONDITIONALS IN JAPANESE: A QUESTION-BASED APPROACH

Unconditionals in (1) are known to carry an indifference (or "not mattering") implication. In Japanese, the construction in (2a) formed with the indeterminate *dare* 'who' has the same indifference implication as (1a) (Nishigauchi 1990). However, the **alternative unconditional (AltU)** in (1b) cannot be translated in the same way; (2b) has no sense of indifference, and is interpreted as a conditional. To express indifference, multiple clausal adjuncts need to be present, as in (2c).

(1) a. **[**$_{XP}$ Whoever comes**]**, it will be fun. b. **[**$_{XP}$ Whether Al or Bill comes**]**, it will be fun.

(2) a. **[**$_{XP}$ Dare-ga ki-te-mo**]** tanosii-daroo.
who-Nom come-Cop MO fun-will
'Whoever comes, it will be fun.' = (1a)

b. **[**$_{XP}$ Al-ka Bill-ga ki-te mo**]** tanosii-daroo.
A-or B-Nom come-Cop MO fun-will
'Even if A or B comes, it will be fun.' ≠ (1b)

c. **[**$_{XP}$ [Al-ga ki-te mo] (soretomo) [Bill-ga ki-te mo]**]** tanosii-daroo.
Al-Nom come-Cop MO or Bill-Nom come-Cop MO fun-will = (1b)

In this paper, I argue that unconditional adjuncts are question-denoting, in particular, the adjuncts in (2) correspond to a ***wh*-question (wh-Q)**, **polar Q (PolQ)**, and an **alternative Q (AltQs)**, respectively.

Rawlins's (2008, 2013) Analysis Rawlins claims that unconditional adjuncts in (1) and (3b) are like *if*-conditionals in (3a) in that they provide restrictions to the domains of operators in the main clause.

(3) a. **[**$_{XP}$ If Al comes**]**, it will be fun. b. **[**$_{XP}$ Whether or not Al comes**]**, it will be fun.

In Rawlins's analysis (based on Hamblin 1973), *if*-conditionals are proposition-denoting (as in (4a)) and thus provide a single restriction, whereas unconditionals are question-denoting (as in (4b)) and provide a set of alternative domain restrictions. The semantics of the question operator Q and disjunction are provided in (5). The presence of Q is syntactically signalled (e.g., by the presence of *whether*). In (3b) (which has the LF in (6)), each alternative in (4b) provides a domain restriction to the main-clause modal operator, which yields a set of conditionals in (7). A default universal operator in (8) is inserted in the LF. As a result, *or not* AltU in (3b) denotes a singleton whose sole member is the conjunction of the conditionals in (7). In this analysis, unconditional adjuncts, but not *if*-conditional adjuncts, provide a jointly exhaustive set of restrictions to the main-clause modal operator, which correctly predicts that only unconditionals carry an indifference implication.

(4) a. $[\![$**if Al comes**$]\!]^{c,h}$ = {λw. Al comes in w}
b. $[\![$**Q [whether or not Al comes]** $]\!]^{c,h}$ = {λw. Al comes in w, λw. Al does not come in w}

(5) a. $[\![$**[Q]**α$]\!]$ = $[\![$α$]\!]$ (Kratzer and Shimoyama 2002) b. $[\![$**A [or B]**$]\!]$ = $[\![$**A**$]\!]$ ∪ $[\![$**B**$]\!]$ (Alonso-Ovalle 2006)

(6) $[\![$**∀ [[[Q] whether or not Al comes], [will [it be fun]]]**$]\!]$

(7) {if Al comes it will be fun, if Al does not come it will be fun}

(8) $[\![$**∀** α$]\!]^{w,g}$ = {λw'. ∀p[p ∈ $[\![$α$]\!]^{w,g}$ → p(w')=1]} (Kratzer and Shimoyama 2002)

Japanese AltQs Unlike English AltUs, Japanese AltUs lack interrogative morphology, but I show below that they have characteristic properties of AltQs. In Japanese, an AltQ reading does not obtain with DP disjunction. In (9a), only a PolQ reading is available (answered by 'yes' or 'no'). To induce an AltQ reading, disjunction of larger predicates is required, as in (9b) (answered by 'Al' or 'Bill'). Uegaki (2014) claims that Japanese AltQs like (9b) are underlyingly disjoined PolQs, as schematized in (10). The disjunction marker in (10) may be realized as *soretomo* 'or'.

(9) a. Al-ka Bill-ga kimasu-ka?
Al-or Bill-Nom come-Q
'Does A or B come?' ✓PolQ, *AltQ

b. Al-ga kimasu-ka (soretomo) Bill-ga kimasu-ka?
Al-Nom come-Q or Bill-Nom come-Q
(lit.) 'Does A come (or) does B come?' *PolQ, ✓AltQ

(10) **[**$_{XP}$ [$_{CP}$ TP_1 Q] Disj [$_{CP}$ TP_2 Q] **]**

In this analysis, (9b) constitutes a single question (XP in (10)) involving coordinated CPs. Uegaki (2018) provides evidence for (10). First, an across-the-board (ATB) extraction from each disjunct is possible (the extraction of *paati-e-wa* in (11)), which suggest that the XP as a whole is a coordination.

(11) [paati-e-wa [$_{XP}$ [$_{CP}$ Al-ga __ ikimasu-ka] (soretomo) [$_{CP}$ Bill-ga __ ikimasu-ka]]
party-to-Top Al-Nom go-Q or Bill-Nom go-Q
'Does Al go to the party (or) does Bill go to the party?'

Second, *ka*-disjunctions with CP-disjuncts have the same exclusivity presupposition as AltQs. For instance, the AltQ *Does A or B come?* as well as (9b) presupposes that A or B are the only people who might come, but the sequence of two PolQs *Does A come? Does B come?* lacks this presupposition.

Japanese AltUs I submit that the contrast in (2b,c) is parallel to that of (9a,b). More specifically, the adjunct in (2b) corresponds to the PolQ in (9a), and the adjunct in (2c) corresponds to the AltQ in (9b).

Taking the construction in (2c) first, I argue that (2c) is an AltU, where the adjunct has the same structure as AltQs in (9b). That is, the adjunct XP in (2c) is analyzed as a single question (= XP in (10)) involving coordinated CPs. The adjuncts in (2c) can be conjoined by *soretomo* 'or', just like the Qs in (9b). Crucially, *soretomo* is a marker that can co-ordinate interrogatives (as in (9b)), but not declaratives (Nakanishi and Hiraiwa 2019). Moreover, Uegaki's two arguments for (10) apply to the construction in (2c); an ATB extraction from each adjunct in (2c) is possible, as in (12), and (2c) has the same exclusivity presupposition as the AltQ in (9b) (in (2c), Al and Bill are the only possible guests).

(12) [paati-e-wa [$_{XP}$ [$_{CP}$ Al-ga __ it-te mo] (soretomo) [$_{CP}$ Bill-ga __ it-te mo]]] tanosii-daroo
party-to-Top Al-Nom go-Cop MO or Bill-Nom go-Cop MO fun-will
'To the party, whether Al or Bill goes, it will be fun.'

The current proposal that the XP in (2c) is a single speech act is further corroborated by the fact that having multiple conditional adjuncts or concessive adjuncts are impossible, as illustrated in (13). The example in (13a) with multiple conditionals is especially important in demonstrating that the construction in (2c) is not formed with multiple conditional adjuncts in (2b).

(13) a. [A-ga ki-tara] (*[B-ga ki-tara]) tanosii. b. [A-ga kuru-ga] (*[B-ga kuru-ga]) tanosii.
A-Nom come-Cnd (B-Nom come-Cnd) fun A-Nom come-Cnss (B-Nom come-Cnss) fun
'If A comes (*if B comes), it'll be fun.' 'Though A comes (*though B comes), it'll be fun.'

Regarding the semantics of questions, I assume that PolQs denote singleton sets (Roberts 1996, Biezma and Rawlins 2012, Uegaki 2014). With the semantics of the Q-operator and disjunction in (5), we obtain (14a) as the denotation of the AltU adjunct in (2c) (which is the same as the denotation of the AltQ in (9b)). The rest of the computation is done exactly in the same way as Rawlins's English example. As a result, the AltU sentence in (2c) denotes a singleton set given in (14b).

(14) a. $[\![\textbf{XP in (2c)}]\!]^{c,h}$ = {λw. Al comes in w, λw. Bill comes in w}
b. $[\![\textbf{(2c)}]\!]^{c,h}$ = {if Al comes it will be fun and if Bill comes it will be fun}

Turning now to (2b), I submit that its adjunct involves a PolQ, corresponding to (9a). Since PolQs denote singletons, the denotation of the adjunct in (2b) contains only one alternative, as in (15a); just like *if*-conditionals such as (4a), the adjunct in (2b) provides a single restriction to the modal operator in the main clause. Consequently, as in (15b), (2b) is interpreted as a single conditional sentence.

(15) a. $[\![\textbf{XP in (2b)}]\!]^{c,h}$ = {λw. A or B comes in w} b. $[\![\textbf{(2b)}]\!]^{c,h}$ = {if Al or Bill comes it will be fun}

The proposed analysis can also account for the contrast in (16). While (16a) is interpreted as a conditional, (16b) is an *or not* AltU with an indifference implication. In both (16a,b), the adjuncts are question-denoting. However, the two differ in that the former corresponds to a PolQ, hence involves a singleton set, while the latter to an AltQ, hence involves a set of alternatives (= (4b)).

(16) a. **[**$_{XP}$ Al-ga ki-te mo**]** tanosii-daroo.
Al-Nom come-Cop MO fun-will = 'Even if Al comes, it will be fun.'
b. **[**$_{XP}$ [Al-ga ki-te mo] (soretomo) [(Al-ga) ko-naku-te mo]**]** tanosii-daroo.
Al-Nom come-Cop MO or Al-Nom come-Neg-Cop MO fun-will
= 'Whether or not Al comes, it will be fun.'

The proposed analysis straightforwardly extends to (2a), where the adjunct corresponds to the *wh*-Q *Who comes?* In sum, the constructions in (2) have the same semantics, but we get different interpretations depending on the denotations of the adjuncts (*wh*-Q, PolQ, or AltQ).

English vs. Japanese Finally, I address cross-linguistic differences. In English, AltQs, but not PolQs, can serve as unconditional adjuncts, as in (17) (Gawron 2001, Rawlins 2013).

(17) a.*[Whether Al comes], it will be fun. b. [Whether or not Al comes], it will be fun. (= (3b))

If the current analysis of Japanese (un)conditionals is on the right track, the ungrammaticality of (17a) may be explained as a syntactic blocking. PolQs denote singleton sets, and thus the adjunct in (17a) presumably has the same semantic effect as *if*-conditionals. Since English can explicitly express this meaning by using the *if*-conditional (*if Al comes*), the use of *whether* is prohibited. In contrast, Japanese (un)conditionals in (2) lack an interrogative morphology (like *whether*), which provides a flexibility of interpretations. Depending on whether the adjunct at issue denotes a singleton, we get either a conditional, or an unconditional, interpretation. The claim here may be supported by the fact that, even though both *if* and *whether* in English can be used to mark an embedded interrogative, as in (18b), they differ in that only *whether* permits an embedded AltQ, as in (18b).

(18) a. Al knows {whether/if} Bill will come. b. Al knows {whether or not /*if or not} Bill will come.

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