Two types of presuppositions in polar questions

This paper investigates presuppositions in two types of polar questions: (i) questions like (1), which involve a presupposition trigger – in this case, clefting – and (ii) questions like (2), which involve a polar interrogative particle (PolQ). Unlike other interrogative particles discussed in the literature, e.g., Japanese *ka* (Uegaki, 2018, a.o.) and Hindi-Urdu *kyaa* (Bhatt and Dayal, 2020, a.o.), I will show that PolQ considered here are obligatory, restricted to polar and alternative questions, and can be embedded under both rogative and responsive predicates (see e.g., Kamali and Krifka (2020) on Turkish *mI*).

(1)   a.   Was it Lou who left?
         b.   *Presupposes:* Someone left.   [Propositional presupposition]

(2)   a.   Oya **mı**   ayrildi?   (Turkish)
               Oya PolQ leave.PST
               'Was it Oya who left?'
         b.   *Presupposes:* Someone left.   [Question-specific presupposition]

Drawing from novel data in Turkish and Finnish (for space reasons, only the Turkish data are included here), this paper shows that we need to distinguish two types of presuppositions in questions, which I label as follows: (i) propositional presuppositions, which can also be found in declaratives (1), and (ii) question-specific presuppositions, which are restricted to questions (2). I argue that these two types of presuppositions are encoded at different levels in the structure and display different projection patterns, casting doubt on approaches arguing that presuppositions are always contributed by the propositions corresponding to the answers (Uegaki, 2020).

Propositional vs. question-specific presuppositions. Even though the content of the presuppositions of (1) and (2) is the same, I show that these two presuppositions belong to two distinct categories. The question in (1), just like other questions involving well-known presupposition triggers, comes with a propositional presupposition which is also present in its declarative counterpart *It was Lou who left.* In contrast, the question in (2) comes with a question-specific presupposition which can only be found in questions involving PolQ *mI* (i.e., polar and alternative questions). As schematized in (3), these two types of presuppositions differ in their projection behavior when embedded under rogative predicates like *wonder*.

(3)   For any polar question Q that presupposes $\pi(Q)$:
         a.   When $\pi(Q)$ is a propositional presupposition, *x wonders Q* presupposes $\pi(Q)$.
         b.   When $\pi(Q)$ is a question-specific presupposition,
                x wonders Q presupposes that x believes $\pi(Q)$.

Example (4) shows that a polar question like *Was it Zoe who went to the university?* cannot be embedded under *wonder* when either of the illocutionary agents (the attitude holder in (4-a) and the speaker in (4-b)) does not take for granted its presupposition $\pi(Q)$. This suggests that when this question is embedded under *wonder*, the presupposition $\pi(Q)$ projects to the matrix level.

(4) $\pi(Q)$ = Someone went to the university.
         a.   #Bill doesn't know whether someone went to the university yesterday. He wonders whether it was Zoe who went there.
         b.   #I don't know whether someone went to the university yesterday. (But) Bill wonders whether it was Zoe who went there.

In contrast, example (5) shows that a polar question involving PolQ *mI* cannot be embedded under *wonder* when the attitude holder does not take for granted its presupposition $\pi(Q)$, but can when the speaker does not take it for granted. This suggests that the question-specific

presupposition $\pi(Q)$ is anchored to the attitude holder's beliefs at the matrix level.

(5) $\pi(Q)$ = Someone went to school.   (Turkish)

    a.   *Ali doesn't know whether someone went to school yesterday .*
       #Ama Oya mi   gitti   diye merak   ediyor.
       but   Oya PolQ go.PST C   curiosity do.PRES
       'But he wonders whether it was Oya who went there.'

    b.   *I don't know whether someone went to school yesterday.*
       Ama Ali Oya mi   gitti   diye merak   ediyor.
       but   Ali Oya PolQ go.PST C   curiosity do.PRES
       'But Ali wonders whether it was Oya who went there.'

Proposal. I propose that propositional and question-specific presuppositions are encoded at different levels in a polar question. Propositional presuppositions come from the proposition forming the question and project to the question-level. Adopting a singleton analysis for polar questions (e.g., Biezma and Rawlins 2012), I analyze question (1) as in (6). In contrast, question-specific presuppositions are encoded within the CP-layer. PolQ *mI* in Turkish is a focus marker which is interpreted within the proposition forming the question. The focus alternatives triggered by the constituent it combines with project all the way up to the interrogative $C_{[+Q]}$ head. $C_{[+Q]}$ is a focus operator which triggers an existential presupposition, as defined in (7-c). Adopting Rooth's (1992) theory of focus, I analyze question (2) as in (7). (Empirical arguments in favor of this analysis of PolQ involve intervention effects and interaction of PolQ with other logical operators, and will be discussed in the talk.) I extend this analysis to Finnish.

(6)   a. $[_{CP}\, C_{[+Q]}\, [_{TP}\ \text{it is Lou}_F\ \text{who left}]]$ [Derivation of (1)]
    b. $⟦\,\text{TP}\,⟧^g = \lambda w : \exists x[left_w(x)].left_w(l)$
    c. $⟦\,C_{[+Q]}\,⟧^g = \lambda q.\lambda w : w \in dom(q).\lambda p.p = q$
    d. $⟦\,(1)\,⟧^g = \lambda w : \exists x[left_w(x)].\lambda p.p = \lambda w : \exists x[left_w(x)].left_w(o)$

(7)   a. $[_{CP}\, C_{[+Q]}\, \Gamma\, [\, [_{TP}\, [\ \text{Oya}_F\ \text{mi}]\ \text{left}]\ \sim_\Gamma]\,]$ [Derivation of (2)]
    b. $⟦\,\text{TP}\,⟧^g = \lambda w.left_w(o)$
    c. $⟦\,C_{[+Q]}\,⟧^g(g(\Gamma)) = \lambda q.\lambda w : \exists\phi \in g(\Gamma)[\phi_w].\lambda p.p = q$
    d. $⟦\,(2)\,⟧ = \lambda w : \exists\phi \in g(\Gamma)[\phi_w].\lambda p.p = \lambda w.left_w(o)$
          with $g(\Gamma) \subseteq \{\lambda w.left_w(x)|x \in D_e\}$

Deriving the distinct projection patterns. These two questions denote partial functions only defined in worlds where someone left. In addition, question (1), unlike question (2), presupposes at the propositional level that someone left. To capture the distinct projection behavior of these presuppositions, I analyze *wonder* as in (8). Just like other attitude predicates (Heim 1992), $wonder_w(Q)(x)$ presupposes that *x believes* $\pi(Q)$. From this, it follows that the question-specific presupposition of (2) is anchored to the attitude holder's beliefs. In addition, I propose that wondering presupposes that for all illocutionary agents, the question is answerable. From this, it follows that the propositional presupposition of (1) projects to the matrix level.

(8) $⟦\,\text{wonder}\,⟧^g(Q)(x)(w)$ is defined iff $Dox^x_w \subseteq \pi(Q) \wedge \exists p \in Q[p_w$ is defined]

Crucially, if both types of presuppositions were triggered at the propositional level (as argued by Uegaki 2020 for *wh*-questions), one could not explain their distinct projection behavior.

Conclusion. This paper identifies two types of presuppositions in questions and provides a new diagnostic to distinguish them, thus contributing to a better understanding of the source of presuppositions in questions and their projection behavior. In ongoing work, I extend this analysis to other question-embedding predicates and other types of questions.

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