Free Relatives and Correlatives in Wh-in-situ

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Problem. What Cecchetto and Donati (2015) call the labeling ambiguity - exemplified by the paradigm in (1) - is precluded in many wh-in-situ languages. To illustrate, the wh-structures that receive the indirect question interpretation in Turkish (2a) and in Laz (3a) fail to function as wh-FRs. Both languages employ a gap in the relativization site (2b) and (3b). Interestingly, however, they exhibit wh-correlatives as shown in (4). (See Iatridou (2013) for the discussion on wh-correlatives in Turkish.)

(1) I know/ate [what he cooked].

(indirect question/free relative)

(2) a. John [Mary-nin ne pişir-diğ-in-i] bil-iyor
   John Mary-GEN what cook-NOML-3.SG.POS-ACC know-IMPF
   “John knows what Mary cooked.”

   John Mary-GEN what cook-NOML-3.SG.POS-ACC eat-PST
   “John ate what Mary cooked.”

(3) a. [ham mi-k na [k’omu] mişk’un this who-ERG COMP ate I.know
   “I know who ate this.”

b. [ham (*mi-k) na [k’omu]-s motzondu this who-ERG COMP ate -DAT liked
   “Who(ever) ate this liked it.”

(4) a. [Mary (*ne) pişir-se] John on-u yer
   Mary what cook-CORR John that-ACC will.eat
   “John will eat whatever Mary cooks.”

b. [ham (*mi-k) na [k’omu] himu-s motzondu this who-ERG COMP ate that-DAT liked
   “Who(ever) ate this liked it.”

How can we make sense of the distribution in (1)-(4)? C&D (2015) conjecture that the absence of wh-FRs in wh-in-situ is predicted under their proposal whereby FRs are derived within the “move & project” approach. However, Tsez, as a wh-in-situ language, exhibits argumental FRs (5) (Polinsky, 2015).

(5) lül babi-y-ä ji-bi ʒek’a-zor magalu tetl
    yesterday father-OS-ERG who.ABS hit-PST.WIT.INTER-ATTR.OBL-LAT bread.ABS give.IMPER
    “Give the bread to whoever Father beat yesterday!” (Polinsky, 2015, ex. 131 p. 291)

Furthermore, it is not immediately clear under C&D (2015) why wh-correlatives are available in Laz and Turkish while wh-FRs are not. This becomes a problem particularly under the well-acknowledged view that the correlative clause involves relativization and is an adjunct FR (Izvorski, 1996 a.o) that is followed by a demonstrative proform in an argument/case position. Hence, we need to answer these two questions:

i. What is it that allows a wh-in-situ language to have wh-correlatives but not wh-FRs?

ii. How can Tsez, as a wh-in-situ language, have argumental wh-FRs?

Proposal. There is a typological bifurcation in the wh-syntax of languages: Type-1: wh-words denote predicates (e.g. [[what]] = [λx. x is inanimate]). They move (possibly “covertly”) [resulting in predicate abstraction] and generate a predicate base. (e.g. [[what λ1 John ate t1]] = [λx. x is inanimate and John ate x]). This derived predicate can combine with a Question operator yielding an interrogative structure (i), combine with iota yielding a FR (a definite description) (ii) (Caponigro, 2003), or combine with both Q and t yielding a question-like FR (i.e. wh-ever FRs) (Hirsch, 2015). i. Q (what λ1 John ate t1) = {λw. John ate pasta in w, λw. John ate pizza in w, …}

   ii. t (what λ1 John ate t1) = tx. John ate x

Type-2: wh-words denote alternatives (e.g. [[who]] = {x | x is human}) and compose with the rest of the structure via Pointwise Functional Application (Hamblin 1973), i.e. with no resort to movement. (e.g. PFA([[who]] [[came]]) = {λw. John came in w, Susan came in w, …})

In the proposed typology, a Type-2 language will never have wh-FRs as its genuinely in-situ wh-syntax will never yield a predicate base that the FR can build on. A Type-1 language, however, can freely build wh-questions and wh-FRs within the same wh-syntax that relies on predicate abstraction.
Predictions. (i) Our proposal promises to explain the asymmetry between Tsez and Turkish/Laz in the availability of wh-FRs. In particular, we predict that Turkish/Laz is a genuinely wh-in-situ language (hence Type-2) whereas Tsez is a covert wh-movement language (hence Type-1). According to the focus-intervention diagnostics in Cable (2010), this is borne out (6). Additional tests such as ‘sensitivity to islands’ corroborate this asymmetry.

(6) a. deber-kin ʃebi  r-eti-x
   2SG.DAT-FOC what.ABS.IV IV-want-PRS
   “What is it that even you want?”  (Tsez, Maria Polinsky, pc)
   b. Sen (*bile) ne istiyorsun?
      You even what want.2SG
      “What is it that (*even) you want?”  (Turkish)

(ii) Under the standard (relativization) approach to correlatives (e.g. Srivastav (1991) for Hindi), Turkish and Laz wh-correlatives still pose a challenge to our proposal. If Turkish/Laz is a Type-2 language, we predict wh-relatives to be unavailable and the correlative clause to denote a set of propositions, i.e. a question, not a predicate. There is indeed evidence that correlatives in these languages are question-like and furthermore can be subsumed under conditionals. Under the well-known restrictor analysis of conditionals (Lewis 1975, Kratzer 1981, Heim 1986 a.m.o.), the schematic LF of a conditional statement like “If John comes, Mary will be happy.” will be as in (7), where the conditional antecedent restricts the modal. We propose that Turkish/Laz correlatives as in (4) have the schematic LF in (8).

(7) [[MODAL [John comes]] Mary will be happy]
(8) [OPASSERTION [[MODAL [. . correlative clause(=wh-question)... ]] p]]

The correlative clause denotes a set of propositions, each of which pointwise restricts the modal on a par with a conditional antecedent. The consequent clause p in (8) contains an E-type pronoun (spelled out by a demonstrative pronoun). Finally, the OPASSERTION asserts the conjunction of the propositional alternatives in its complement (Rawlins, 2013, Hirsch 2015), which derives the paraphrase in (9) for (4a).

(9) [if Mary cooks lasagna, John will eat it] & [if Mary cooks soup, John will eat it] & …

One piece of evidence for this analysis comes from the systematic ambiguity of correlatives and conditionals in these languages (10). Under the current proposal, when the OPASSERTION that is present in correlatives is not merged, the wh-question reading arises as the propositional alternatives are not captured.

(10) a. [nereye git-se-ʃ] John bizimle (oraya) gelir
    where go-CORR-1PL John with.us there will.come

matrix question: “Which x is such that if we go to x, John will come with us there;?”
correlative: “[Wherever we go], John will come with us there.”

b. [nak vidik’ot] Tanura jk’uni-jk’ala (hik) moxtasert’u
    where go.CF.1.PL Tanura our-with there come.FUT.PST

matrix question: “Which place x is such that if we went to x, Tanura would come with us (there);?”
correlative: “[Wherever we went], Tanura would come with us there.”

(iii) The crucial assumption in this proposal is that there is no variable assumption between the demonstrative pronoun and the correlative clause. The co-reference is achieved thanks to the E-type construal for the demonstrative. We observe that the co-reference is lost when the demonstrative precedes its understood antecedent, which is a peculiar property of E-type pronouns (11). Parallel facts obtain in English (12). As predicted, the meaning we end up with is an unconditional (Rawlins, 2013).

    Mary with.DEM party who come-CORR will.talk
    “[Whoever comes to the party], Mary will talk to them.”

b. [ʃe’la] Tsez, Maria Polisky, pc

(12) *He beats it if a farmer owns a donkey. (Barker & Shan, 2008, ex. 15b)

Conclusion. The proposed typology accounts for the absence of wh-FRs in genuinely wh-in-situ languages while predicting covert wh-movement languages with wh-FRs. Furthermore, it predicts that genuinely wh-in-situ languages might have wh-correlatives that rely on interrogative structures rather than relativization.