Coordination of unlike phrases in multiple questions

I. Introduction. It is well-known that some languages allow the coordination of *wh*-phrases that do not share the same category or even the same function, see Kazenin 2002 and Gribanova 2009 on Russian, Comorovskii 1996 and Rătiu 2010 on Romanian, Merchant 2008 on Vlach, Lipták 2001, 2003 on Hungarian, Kliaščuk 2008, Citko & Gracanin-Yuksek 2010 and Tomaszewicz 2011 on a cross-linguistic analysis. Here we concentrate on Hungarian (H) and Romanian (R) multiple questions in which the *wh*-phrases are coordinated by some connective, such as H. *és ‘and’ and R. *şi ‘and’.

(1) (H) Ki és mikor érkezett?
who and when arrived

(2) (H) Ki érkezett, é s mikor?
who arrived and when

II. Data. *Coord-wh* differ from ‘paratactic’ *wh*-phrases in at least three aspects: (i) semantically, in addition to pair-list readings, they also license single-pair ones; (ii) syntactically, superiority effects are not observed to the same extent as in ‘paratactic’ *wh*-phrases (at least in Romanian, cf. the contrast between (3) and (4)), and (iii) at prosodic level, the first *wh*-phrase can constitute an independent intonational unit, which is not the case with the initial *wh*-phrase in ‘paratactic’ structures.

(3) a. Cine ce a spus?
who has said

(4) a. Cine ş i ce a spus? (Comorovski 1996)
who and what has said

b. *Ce cine a spus?
what has said

b. Ce ş i cine a spus?
what and who has said

It is generally observed that there is considerable variation and hesitation in the acceptability of multiple questions among the speakers, which makes the analysis particularly difficult. Nevertheless, these differences in acceptability can be accounted for if we take into consideration the syntactic function (i.e. adjunct/argument) of the second *wh*-ph, with respect to the verbal predicate. Thus, the following two groups of data can be identified: those in which the second *wh*-ph is an argument (group A, see (5)), and those in which the second *wh*-ph is an argument (group B, see (6)-(7)):

(5) (H) [Mikor | ki] és miért ment el?
{when | who} and why moved

(6) (H) Hol és [mit ettel]?
where and what ate

(7) (H) Ki és [mit választott]?
who and what chose

We observe that the most widely used structures in both *Coord-wh* and *End-Attach-wh* belong to the group A. For the other ones (group B), the basic constraint on the acceptability of *Coord-wh* (and also *End-Attach-wh*) is that the base clause (indicated in (6)-(7) by square brackets) containing the verbal predicate and the immediately preceding argument *wh*-ph, has to be well-formed, even in the absence of the other *wh*-ph. This is possible in Hungarian and Romanian, since both are pro-drop languages that may also allow the drop of other arguments. We can thus explain the unacceptability of (8) and (9): verbal predicates that do not allow for ‘null’ arguments render these examples less acceptable.

(8) (H) ??Mit és [ki választott]?
what and who chose

(9) (H) ??Hova és [ki megy]?
where and who goes

Another constraint regarding the group B is the fact that *End-Attach-wh* is less acceptable if the ‘stranded’ *wh*-ph is a subject (no cataphoric dependency):

(10) (H) ??Mit mondott és ki?
what said and who

(11) (H) ??Miért hívott és ki?
why called and who

Finally, one subtype of the group B, in which both *wh*-phrases are arguments, as in (7), does not allow *Coord-wh* if the verbal predicate involves some ‘reversible’ (12) or collective (13) semantic relation:

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1 Due to the lack of space, we consider here only the coordination of two *wh*-phrases. Nevertheless, the analysis we propose can be extended to the coordination of more than two *wh*-phrases.

(14) a. \[CP [{\&P} wh_1 \text{ and } wh_2] [[TP t_1 \ldots t_3]] \]
   
   b. \[[\&P [c wh_1 [TP t_1 \ldots t_3]] \text{ and } [wh_2 [TP t_1 \ldots t_3]]\]]

The following evidence from Romanian shows that the structures are not monoclausal: Rațiu 2010 argues that the interrogative particle oare can appear only once per clause with `paratactic' wh-phrases (15a), while with Coord-wh the particle oare can co-occure with each wh-ph (15b). The same goes for the Hungarian interrogative particle vajon.

(15) (R) a. Oare cine (*oare) ce va spune?  
   PRT who (PRT) what will say
   
   b. Oare cine și (oare) ce va spune?  
   PRT who and (PRT) what will say

In addition, the Romanian conjunction iar `and', specialized as a clausal coordinator, can be used with Coord-wh (16). Moreover, Coord-wh allow sentence-level adverbials between the wh-ph (17), confirming that what are conjoined are indeed clauses.

(16) (R) Vreau să știu mai întâi Cine, iar apoi CE a făcut. 
want to know first who, and then what has done

In a monoclausal analysis, the common function of the question words, forming the basis of the coordination, is often assumed to be the focus. However, non-interrogative foci cannot always be coordinated. The monoclausal analysis is therefore not empirically supported.

(18) (H) *Înainte de TEGnap ment moziiba.  
John and yesterday went to cinema.  

(R) *ION și MÂIne va veni.  
Ion and tomorrow will come

On the other hand, the biclausal analysis as commonly assumed is problematic, since the verb supposedly undergoing ellipsis cannot always be reconstructed, either because one of its arguments would be missing (19), or because it would exhibit a different verb form, as in (20) in Hungarian.

(19) (R) Polițistul satului i înconsoțe pe toți; știe cine (*locuiește) și unde locuiește.  
the-policeman-of-the-village knows all people; he knows who (lives) and where lives

(20) (H) a. Nem érdekel, hogy mit készítesz és hogyan készítet. (Lipták 2001)  
not interests that what make.2 SG.INDEF and how make.2SG.DEF

b. Nem érdekel, hogy mit és hogyan [készítesz și készítet].

We propose instead a biclausal analysis in a WYSIWYG (‘what you see is what you get’) manner, by analyzing the wh_1 in Coord-wh\(^2\) and the wh_2 in End-Attach-wh as fragments attached to some ‘complete’ clause, approach that can be easily handled in a constraint-based framework, such as HPSG. We adopt the notion of fragment from Ginzburg & Sag 2000 who use a syntax-semantics interface and posit a head-only fragment construction to account for short questions and short answers in English, fragments which receive a clausal interpretation without having the internal structure of an ordinary clause. There are two main constraints on the context: one semantic, i.e. the presence in the context of a question under discussion, and the other, syntactic, i.e. the presence in the context of a salient utterance whose syntactic properties and referential index match that of the wh-fragment. The advantage of such analysis is that one can avoid the need of empty elements and dispense with movement and deletion operations. In doing so, the apparent coordination of unlikes is in fact a clausal coordination, in which one of the conjuncts is a fragment. This proposal makes it possible to obtain a unitary analysis for both Coord-wh and End-Attach-wh.


\(^2\) Note that the adjunct wh_2 in group A can be analyzed either as an integrated adjunct or as an incidental adjunct.