On the dual nature of wh-clauses: A view from locality

Petr Biskup   Radek Šimík
Masaryk University Brno   Humboldt University of Berlin

Background In this talk we address the syntax and semantics of clausal arguments like (1) and adjuncts like (2) in sentence-initial position (a) and sentence-final position (b). All data come from Czech.

(1) a. **Co(koliv) mu dáš**, utratí.
    what(ever) him give.2SG spends
    'What(ever) you give him, he'll spend (it).'

b. Utratí, **co(koliv) mu dáš**.
    spends what(ever) him give.2SG
    'He'll spend what(ever) you give him.'

(2) b. **Když odejdeš**, budu smutný.
    when/if leave.2SG will.be.1SG sad
    'When/If you leave, I'll be sad.'

b. Budu smutný, **když odejdeš**.
    will.be.1SG sad when/if leave.2SG
    'I'll be sad when/if you leave.'

Note that it has been argued that at least certain clauses are dominated by NP; see e.g. Ross (1967), Chomsky (1973), Emonds (1976), Müller (1995); Alsina, Mohanan & Mohanan (2005) and that adverbial clauses are PPs (e.g. Haegeman 1984). It has been also argued that adverbial clauses can occur in different positions in the clause; see e.g. Iatridou (1991), Haegeman (2003) and Bhatt & Pancheva (2006) for conditionals.

Proposal We build on previous work (Iatridou 1994, Pancheva Izvorski 2000, Hirsch 2016) and argue that the pertinent wh-clauses have a dual syntactic and semantic nature. On one hand, they can function as (i) CONDITIONAL ANTECEDENTS, in which case they are **CPs** denoting a proposition (for (1a) the proposition 'you give him x' for any x; cf. Rawlins 2013 or Hirsch 2016 for a refined view involving propositional alternatives), restricting a modal or adverbial operator (OP) in the functional spine of the main clause / consequent, or as (ii) DEFINITE DESCRIPTIONS, in which case they are **NPs/DPs**, possibly embedded within a PP, denoting an entity restricted by the descriptive content of the clause (for (1b) the entity 'the thing that you give him'). As argued by Hirsch (2016), in some cases (esp. in the case of ever free relatives, exemplified by (1b) with 'ever') one clause fulfills both roles at the same time (by multidominance). Although this option cannot be principally excluded, tests with Condition C and bound variable pronouns (not shown here) suggest that the CP in its lower position is not syntactically visible/present. Therefore, we assume that a wh-clause fulfills only one of the two functions and the other one is fulfilled by a (covert or overt) coindexed pronominal of the appropriate type: proposition or entity, as in (3).

(3) i. [OP [$_{CP}$ **what(ever)$_{1/i}$ you give him t$_1$**]] he spends   e$_i$/it$_i$

   ii. [OP   **p$_i$**   ] he spends [$_{NP}$ **what(ever)$_1$ [you give him t$_1$]$_i$**]

Evidence Various arguments have been given in support of (something along the lines of) (3). We will summarize the existing evidence in the talk; here we concentrate on a previously unexplored prediction of (3), namely that left-peripheral wh-clauses, being CPs, should be at least partly transparent for A'-extraction (weak islands), while right-peripheral wh-clauses, being NPs (or PPs) should be strong islands for A'-extraction. This prediction is made if CPs and NPs are phases and movement from the edge of the adjunct CP to the edge of the dominating NP violates antilocality (Bošković 2015). The contrast in (4), adapted from Lešnerová & Oliva (2003), and in (6) suggests that this prediction is borne out.

(4) a. Chtěl bych být prezidentem, **který$_1$** [$_{CP}$ když **t$_1$** něco řekne], bude to mít váhu.
    want SUBJ.1SG be president which.NOM when something says will it have respect

b. *Chtěl bych být prezidentem, **který$_1$** to bude mít váhu, [$_{NP}$ když něco **t$_1$** řekne].
    want SUBJ.1SG be president which it will have respect when something says
    'I'd like to be a president such that when he says something, it will have respect.'

There is evidence (i) that the relative pronoun *který* undergoes extraction in examples like (4a) and (6a) and (ii) that it targets a position in the matrix clause, CP_2 in (5) (contrary to what Heck (2008) or Grewendorf (2015) argue for comparable cases in (Bavarian) German) which is adjoined as a relative clause to the head noun. Thus, the pattern looks like (5).

(5) a. √ …$[_{NP}$ NP $[_{CP2}$ **whP₁** $[_{CP1}$ … **t₁**… $]_i$ V_{matrix} $[_{NP}$ N $p_i]]]$ 　 ~ (4a), (6a), see also ex. below

　 b. * …$[_{NP}$ NP $[_{CP2}$ **whP₁** 　 V_{matrix} $[_{NP}$ NP $[_{CP1}$ … **t₁**… $]]]]$ 　 ~ (4b), (6b)

We will present several arguments supporting (i) and (ii). They are based on case-connectivity, the whP bears the case assigned within the adjunct; see (4a) and the purpose adjunct clause in (6a). Note that (4a) and (6a) show that the gap in the adjunct is not "parasitic" on a gap in the main clause.

(6) a. To je $[_{NP}$ řečník, $[_{CP2}$ **kterého₁** $[_{CP1}$ abychom mohli 　 pozvat **t₁**], musíme na to
　　 it is 　　　 speaker.NOM which.ACC 　　　 so.that 　　 could.1PL invite 　　　 must.1PL for it

　　 mít spoustu peněz]].
　　 have a.lot.of 　 money

　　 'This is a speaker such that we need a lot of money for inviting him.'

　 b.* To je $[_{NP}$ řečník, $[_{CP2}$ **kterého₁** musíme mít spoustu peněz $[_{PP}$ na $[_{NP}$ to
　　 it is 　　　 speaker.NOM which.ACC must.1PL have a.lot.of money 　　 for 　 it

　　 $[_{CP1}$ abychom mohli 　 pozvat **t₁**]]]]].
　　　　 so.that 　　 could.1PL invite

Second, in order for the relative to be able to combine with its head (by predicate modification), the relative operator *kter-* must move to the edge of CP_2, not just CP_1. Further, reconstruction for reflexive binding is possible, as in (7), and some adverbs modifying the main clause (not the adjunct) can occur between the whP and the embedded complementizer, as shown by (8).

(7) [Kterou **svou₁** 　 cennost]₁ říkali, že když si **Karel₁** uschová t₁, tak udělá nejlíp?
　 which 　　 his.REFL valuable 　 said.PL that when REFL K. 　 deposits 　　 so does best

　 'Which one of Karel's valuables is such that they said that if he deposits it, he'll do well?'

(8) To je ten $[_{NP}$ člověk, $[_{CP2}$ **který₁** [**prý** 　 / **vždycky** $[_{CP1}$ když **t₁** promluví],
　 it is the 　　 man 　　　 which 　　 allegedly always 　　　 when speak.3SG

　 tak všichni ztichnou]]].
　 so all 　　 fall.silent

　 a. 'This is the man such that, allegedly, / always when he begins to speak, all fall silent.'

　 b.* 'This is the man such that when he allegedly / always begins to speak, all fall silent.'

We will also show the extracted whP can move from the preposed adjunct to an even higher position and that Czech does not allow doubly filled COMP in relatives, in contrast to Bavarian.

Implications The proposal implies that the Adjunct Condition cannot be a general condition (contrary to e.g. Huang 1982, Uriagereka 1999, Stepanov 2007). In fact, richness of the clausal structure – presence of NP – brings about strong islandhood. Thus, at least some cases of adjunct islands can be reduced to complex NP island (and excluded by antilocality), like (4b) and (6b). Since the non-embedded, left-peripheral CPs are weak islands, they only block movement of certain elements, e.g. certain (non-referential) adjuncts operators; see (9).

(9) * To je způsob, **jak₁** [když opravíš auto **t₁**], zaručeně ti 　 vydrží.
　　 it is way 　　 how when repair.2SG car 　 guaranteed you.DAT last

　　 'It is a/the way such that if you repair your car that way, it will definitely last.'

Further, besides the argument that argumental clauses like free relatives/correlatives and adverbial clauses like temporals and conditionals are semanticaly present in two different positions, our analysis provides a support for the claim that adverbial clauses can merge in syntax in different clausal positions.