'Why' and *reason*: a unified double-headed relative clause analysis

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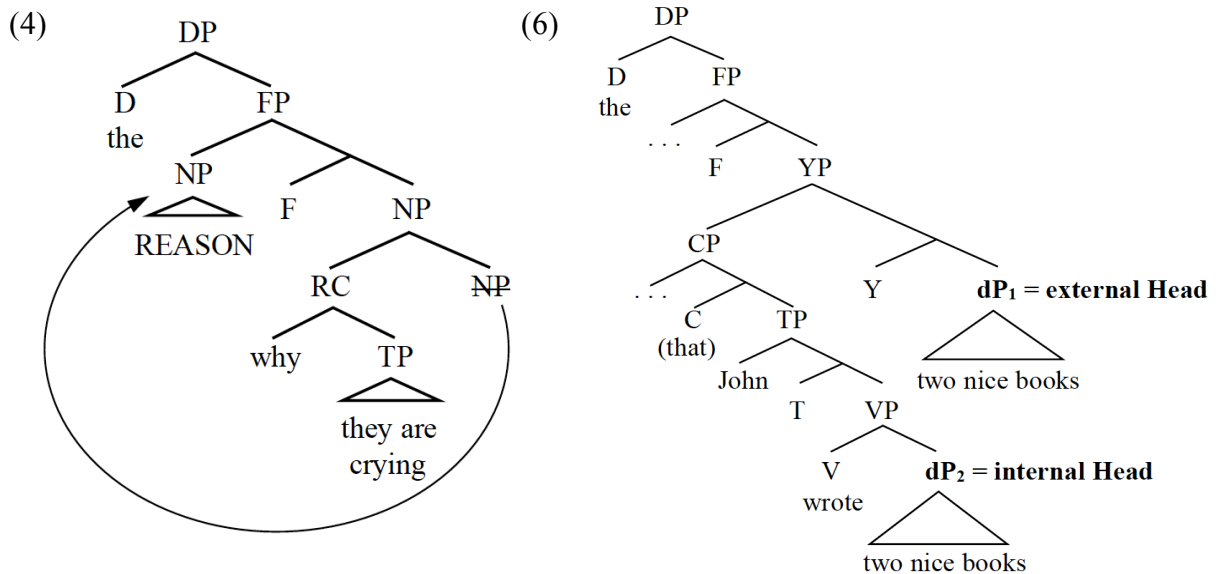*Kanda University of International Studies*   *A. Mickiewicz University, Poznań*

There is a distributional relation between the adverbial 'why' and the noun denoting REASON, as seen in the examples from English and Polish:

(1) a. I don't know {**the reason** / Ø} **why** they are crying.
    b. I don't know **the reason** {**why** / Ø} they are crying.

(2) a. Nie znam {**powodu** /*Ø} {**dlaczego** / **czemu** /*Ø} oni   płaczą.
        not I.know reason   why   why   they are.crying
        'I don't know (the reason) why they are crying.'

    b. Zastanawiam się {**nad   powodem** / Ø} {**dlaczego** / **czemu** /*Ø} oni   płaczą.
        I.wonder   Refl about reason   why   why   they are.crying
        'I'm wondering (about the reason) why they are crying.'(Pol)

Also, *why* is incompatible with other psychological nouns that don't denote REASON, e.g.:

(3) I don't know the {*purpose /*supposition /*suggestion} why they are crying.

With this respect, *why* and REASON look similar to *where* and PLACE, *which* and THING, *who* and PERSON, *when* and TIME, and *how* and WAY (cf. Kayne 2005, 2007, Baunaz & Lander 2018). We argue that an embedded 'why'-clause is a pre-nominal relative clause (RC) that modifies an (overt) ontological noun REASON, an external head of (what's traditionally known as) a "Headless" RC, as in (4).

(4) / (6)

In English and Polish, the external Head REASON raises to a higher position (Spec-FP) but in a (rigid) head-final language like Japanese, it stays in situ:

(5) [DP [RC John-ga   { **naze** / **doosite** / **nani-o** /*Ø} naiteiru no ka][**sono riyuu**]-o]   siritai
            John-Nom why   why(coll.) what-Acc   is.crying Fin Q   Dem reason-Acc I.want.know
        'I want to know the reason why John is crying.' (Jap)

The analysis in (4) follows the format for RCs in Cinque (2020), where all semantic (restrictive, amount, kind-defining, non-restrictive) and syntactic (externally vs. internally Headed, pre- vs.

post-nominal, double-Headed, Headless/"free", correlative, adjoined) types of RCs are derived from a single underlying double-Headed structure, outlined in (6) above. In the "raising" derivation of RCs, the internal Head (dP_2 in (6)) raises overtly to Spec-CP and licenses the deletion of the external Head (under Kayne's 1994 definition of c-command). In the "matching" derivation, the external Head (dP_1 in (6)) raises overtly to Spec-FP and licenses deletion of the internal Head (dP_2) inside the RC. Working with the data from English, Polish and Japanese involving word orders, Neg ("inner") islands, scope, and the locality of case marking, we show that '(the) REASON 'why' ...' construction exhibits the syntactic properties of a "matching" derivation shown in (4).

Next, we illustrate how (4) explains the case-mismatch between the Polish wh-pronoun *który/jaki* 'which' and the head noun *powód* 'reason' in sentences like in (7) which, more broadly, explains the contrasts between *który*- and *co*-relatives in Polish.

(7) Znam **powód** **z** { **jaki-ego/któr-ego**} oni płaczą.
 I.know reason-**Acc** from which-**Gen** they are.crying
 'I know why they are crying.'

Szczegielniak (2004) shows that Polish has two types of relatives. The relatives with the invariant relativizer *co* 'what' (as in (8a)) exhibit typical "raising" properties of RCs (obligatory reconstruction for binding and scope, amount reading, possibility to split up idioms, RC-internal case marking of the Head noun), while the relatives with the wh-pronoun *który* 'which' (in (8b)) show typical "matching" properties of RCs (no reconstruction, no amount reading, no idiom split up, RC-external case marking on the Head noun).

(8) a. artykuł o koleżance Mark-a_i [$_{RC}$ **co** (on $_{*i/j}$) powiedział, że sam napisał]
 article about friend Marek-Gen Rel he said Comp alone he.wrote

 b. artykuł o koleżance Mark-a_i [$_{RC}$ **któr-y** (on$_{i/j}$) powiedział, że sam napisał]
 article about friend Marek-**Gen** which-**Acc** he said Comp alone he.wrote
 'article about Mark's$_i$ friend that/which he$_{(*)i/j}$ said that he$_i$ wrote'

Deriving (7) by extracting the noun ***powód*** 'reason-Acc' from the RC-internal relative phrase [$_{PP}$ *z jakiego/ któr-ego **powod-u** *] is challenged by the fact that Polish resists extractions form the complement of P and that the accusative *powód* shows a case mismatch with the genitive complement in the relative PP. Instead, according to (4), *powód* (Acc) is the external Head case-licensed by the main verb *znam* 'I.know' and raises to the pre-RC position (to Spec-FP). From there it c-commands the RC-internal *powod-u* 'reason-Gen', which deletes under close identity, as seen in (9), deriving the case mismatch.

(9) (Znam) [$_{FP}$ **powód** F [$_{NP}$ [$_{RC}$ [$_{PP}$ z jaki-ego/któr-ego ~~powod-u~~] oni płaczą] __]]]
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