The Syntax of (Non-)reduced Why-Interrogatives

Anissa Zaitsu – University of California, Santa Cruz

Introduction: English makes productive use of the reduced questions such as (1):

(1) Why take Structure of Japanese?

which I will refer to as Why-VP. Although extremely common in usage, such structures are little studied. In this paper, I analyze the syntax of (1), argue against the sole existing proposal (which takes them to be fundamentally elliptical), develop an alternative (that Why-VP structures are reduced but free-standing clauses), and consider some theoretical implications of that analysis. Throughout, I make crucial use of a corpus of 252 naturally occurring examples of Why-VP in full discourse context, drawn from The New York Times portion of the Gigaword corpus.

Key Characteristics: In Why-VP, the subject must be silent and tense-marking on the verb must be absent. Why is the only interrogative element which may introduce them. In semantic terms, the subject is generic, interpreted as 'you' or 'anyone' – both with the same quasi-universal, impersonal force. The interpretation is also modal – but crucially vague or ambiguous between 'should' and 'would'.

Existing Proposals: The only existing account analyzes Why-VP in terms of ellipsis. Yoshida et al. (2015) analyze examples like (1) as a type of clausal ellipsis that they call Why-Stripping. The VP first fronts to a sentence-initial focus position below why and the remnant clause is elided. The absence of the subject and tense reflects the operation of recoverable deletion of the clausal remnant. This predicts that Why-VP examples should have a correlate in the immediate discourse context and that that context should contain an antecedent for the elided remnant. However, in the 252-item corpus, Why-VP never has a VP correlate in the preceding context and does not require an antecedent for the remnant TP. The example in (1) which is also naturally occurring is not atypical in being used out of the blue. Further, even when there is an apparent antecedent for the remnant and a VP correlate, as in (2):

(2) Speaker A: John criticized Mary. Speaker B: Why criticize Mary?

Speaker B's utterance can be interpreted as: 'why would/should John criticize Mary', or 'why would/should anyone criticize Mary', but certainly cannot be interpreted as: 'why **did** John criticize Mary?' Why-VP demands a modal interpretation and ignores whatever the tense or modal may be provided by the potential antecedent and permits a generic subject interpretation rather than re-using the subject of any potential antecedent.

The examples in the NYT corpus confirm this finding. The relevant contexts do not regularly provide an antecedent for Why-VP construction nor is the modal interpretation necessarily apparent in the previous discourse. (3) is typical:

(3) Spend your money there or elsewhere. That's the discretionary in the phrase discretionary expendable income. But if the choice is not baseball, then why keep coming back ad nauseum to remind the world why you are missing in action at the ballpark?

Mismatches between antecedents and ellipsis sites are certainly attested (Merchant 2001), but the consistency with which Why-VP demands a modal interpretation and its ability to freely discard or appropriate a subject provided in a supposed antecedent poses a challenge for any account that analyzes such structures exclusively in terms of ellipsis.

It may well be that Why-Stripping as an appropriate analysis for the cases that Yoshida et al. (2015) discuss (which do depend on an antecedent). It seems clear however, that examples like (1) and those found in the NYT corpus must be treated differently – as a special class of autonomous Why-interrogatives, rather than as elliptical fragments (Yoshida et al. 2015; Weir 2014; Kim to appear).

An Alternative: If Why-VP structures can be free-standing clauses, then the way of building clauses in English must allow such structures. The real interest of the construction comes from what there is to learn from it about the range of clause-building mechanisms (in English and therefore in general). I propose (i) that why in (1) is a head in C, (ii) which selects the silent infinitival T that licenses the modal interpretation (akin to the covert modal proposed in Bhatt (1999)), and (iii) that this T provides the licensing environment for the subject to be a discourse moderated PRO-arb.

Structures such as (1) are available only with why. It seems natural to assume then that why as a head (a lexical item), is the selector which licenses the appearance of the other key elements in the extended

projection of Why-VP. It follows that why of Why-VP must not have undergone phrasal A-bar movement, a claim which is is substantiated by an important locality constraint on why in Why-VP.

(4) Why say that John invited Mary to the party?

The only possible interpretation of (4) is why modifying the saying event; why simply cannot be construed with the embedded event-description. The framework of Bare Phrase Structure will lead us to expect that why will lead a double life – as a lexical item it can select and project (provide its label to the maximal projection which dominates it) while as a phrase it can undergo phrasal movement to the specifier of a probe C. My claim is that Why-VP reflects the first option. The analysis of why as a selecting head lets us understand why it can only be construed with the content of the matrix clause (it has no lower occurrence) and also provides a mechanism by which it can guarantee the presence of the other crucial elements of the reduced clause – the covert infinitival T, which in turn licenses the silent subject PRO.

Bhatt (1999) argues that there is one covert modal in wh-infinitivals, which shifts between a deontic and purely circumstantial interpretation given various contextual factors. This analysis predicts that Why-VP as a covert wh-infinitival should also obligatorily be interpreted as a circumstantial modal, which is borne out given that Why-VP is often paraphrased with deontic 'should' and sometimes counterfactual 'would,' but never gets an epistemic interpretation. The intuition that the modal interpretation is restricted to 'should' and 'would' in Why-VP is substantiated by some important observations about the distribution of negative polarity items. Such items appear freely in Why-VP but only in modal why-questions with 'should' and 'would':

- (5) a. Why lift a finger?
 - b. Why should/would we lift a finger?
 - c. *Why could/can/might/?must/may/will/might we lift a finger?

No definitive understanding of the conditions under which NPIs are licensed in wh-questions yet exists, but it is clear that certain modals favor their appearance and that certain others do not. If the interaction between NPIs and modals in (5b-c) is a semantic one, then the semantics of the covert modal of Why-VP structures is close, or identical to, the semantics of 'would' and 'should'. Interestingly, however, wh-infinitivials and Why-VP come apart from their finite counterparts in that they are incompatible with the perfect auxiliary have:

- (6) a. *Why have finished my homework by 10pm?
 - b. *I know when to have finished my homework (by).

This implies the interesting conclusion that the modality in wh-infinitival clauses is aspectually deviant from modality in finite clauses, which can occur with auxiliary have (i.e. should have, would have).

The Subject: Evidence from binding, control, passive, and quantifier float converge on the conclusion that there is a structural subject in Why-VP. A (silent) infinitival T in Why-VP would lead us to expect the subject to be a flavor of PRO – the silent minimal pronoun characteristic of infinitival clauses of the control type. PRO-arb, specifically, shares many of the distributional properties and interpretive restrictions characteristic of the subject of Why-VP. They must both be interpreted as being capable of control over the event described in the VP, and they both have generic or quasi-universal interpretations in particular contextual environments.

Conclusion: The analysis of Why-VP in terms of a clausal spine: Why-T-V, with a PRO-arb-like element in the specifier of T draws on existing syntactic elements and mechanisms and provides a reasonable understanding of the core properties of the construction. If this analysis is on the right track, it has interesting implications for theories of modality and aspect in wh-infinitivals, root-clause analyses of PRO, and syntactic characterizations of why.

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