

Changsha Hua HOW/ WHY alternations: a causal solution

HOW as WHY The phenomenon in which a HOW-interrogative receives a WHY interpretation has been documented across languages (Jaworski, 2009; Šimík and Sláma, 2023; Pak, 2017; Sæbø, 2016). Changsha Hua, a Xiang Chinese variety, displays a similar alternation in the interpretation of the interrogative *osi*, which can receive either a means and method HOW reading or a causal WHY reading. The question in (1) is ambiguous between these two interpretations.

- (1) *Zouyi osi lai xiojiao?*
 Zouyi how/why come school
 ‘How did/will Zouyi come to school?’ *means and method* - HOW
 ‘Why did/will Zouyi come to school?’ *causes* - WHY

This ambiguity raises the question of what meaning *osi* contributes such that it can yield both HOW and WHY readings. This project proposes that this syncretism has a systematic explanation: HOW-*osi* and WHY-*osi* share a common causal core, differentiated only by the type of causal relata.

Semantic Proposal: two denotations for *osi* I adapt a Hamblin framework of alternative question semantics, in which the meaning of a question is modeled as a set of possible answers (Hamblin, 1973; Karttunen, 1977). Following Tsai’s 2008 height-based analysis of Mandarin *zenme*, I adopt this structural split as a syntactic foundation and propose two denotations for *osi* conditioned by syntactic height. The central claim is that these two interpretations are not arbitrary homophones but type-distinct instantiations of a single CAUSE predicate, and this semantic contrast arises from the syntactic height at which *osi* is interpreted. Under a HOW reading, *osi* is evaluated in the VP domain, and the CAUSE predicate applies to event-level arguments. Under the WHY interpretation, *osi* functions as a sentence-level operator, with CAUSE applying to propositional arguments.

- (2) $\llbracket osi_{HOW}(1) \rrbracket =$
 $\{p : \exists P_{(v, st)} [p = \lambda w. \exists e [P(e)(w) \wedge \exists e' [\text{come.to.school}(\text{Zouyi})(e')(w) \wedge \text{CAUSE}(e, e')(w)]]]\}$
- (3) $\llbracket osi_{WHY}(2) \rrbracket =$
 $\{p : \exists q [p = \lambda w. \text{CAUSE}(q, \lambda w'. \exists e [\text{come.to.school}(\text{Zouyi})(e)(w')])](w)]\}$

WHY as HOW Changsha Hua also observes alternations in the other direction. The interrogative *ogai*, often used to ask for reasons and explanations, can alternate with the predicative *osi*. Dong (2007, 2019) observed a predicative *zenme* in Mandarin, inquiring for an event in the context where the event in question negatively impacted the patient. Unlike Mandarin, where the WHY interrogative *weishenme* is ungrammatical in this context, Changsha Hua *osi* and *ogai* can both license this interpretation I will argue that this alternation is possible due to the common propositional causal core shared by *osi* and *ogai*.

- (4) *Zouyi osi/ogai ni ta?*
 Zouyi HOW 2ND.SG ASP
 ‘What did Zouyi do to you?’

Implications A type-driven causal semantics yields several empirical advantages. First, it predicts the absence of manner readings by Changsha Hua *osi*: manner properties do not constitute causal precursors and therefore fall outside the domain of the operator. Changsha Hua confirms this. Second, the analysis proposes an explanation for how the method–cause alternation arises cross-linguistically in **HOW/ WHY** questions. Changsha Hua provides evidence that causal structure, rather than lexical ambiguity, underlies the broader alternation. This proposal suggests that interrogatives may be organized by the conceptual domains they encode (e.g., causal explanation) rather than by syntactic configuration (i.e. adjunct vs. argument questions) or morphological form (i.e. *wh*-questions) alone. This, in turn, invites a broader reconceptualization of the interrogative space in semantic terms.

References Dong, Hongyuan. 2019. *Semantics of Chinese Questions: an interface approach*. Hamblin, C. L. 1973. Questions in Montague English. | Karttunen, Lauri. 1977. Syntax and semantics of questions. | Pak, Marjorie. 2017. Propositional how questions and negation. | Sæbø, Kjell Johan. 2016. “how” questions and the manner-method distinction. | Šimík, Radek and Jakub Sláma. 2023. Czech evidential relatives introduced by *jak*, ‘how’: Recognitional cues for the hearer. | Tsai, Wei-Tien Dylan. 2008. Left periphery and how-why alternations.