

Pseudo wh-copying as wh-slifing

Introduction German is well-known for possessing wh-copying, cf. (1).

- (1) Wo glaubst du, wo Peter jetzt wohnt?
 where believe you where Peter now lives
 ‘Where do you think Peter now lives?’

In wh-copying, the target SpecCP-position contains the moved wh-phrase and the intermediate SpecCP-positions contain overtly realized “copies” of it; hence the name. There exists a variant of (1) where the finite verb of the embedded clause appears in second instead of its typical clause-final position, cf. (2).

- (2) Wo glaubst du, wo wohnt Peter jetzt?

I will call this type *pseudo wh-copying*. The few sources mentioning it treat it as structurally similar to wh-copying (Reis 2000: 395). The aim of this talk is to show that pseudo wh-copying differs drastically from wh-copying. I will present a number of differences between the two types, argue on the basis of these for an analysis of pseudo wh-copying in terms of wh-slifing, and discuss some predictions of the analysis.

Differences There are five differences between pseudo wh-copying and wh-copying. First, they differ prosodically. In wh-copying, the initial wh-phrase can bear stress and there can be a rise at the end of the sentence. In pseudo wh-copying, there is necessarily stress on both wh-phrases and a rise after each clause.

- (3) WO glaubst du ↑ WO wohnt er jetzt? ↑

Second, they differ pragmatically. In a context where one discusses that Peter constantly moves, one can use (1) but not (2). (2) is only fine in a context in which the question where Peter now lives is explicitly discussed and has been given an answer that the person asking didn’t understand and wants to be repeated. Third, they differ with respect to their binding properties. In wh-copying, a QP in the main clause can bind a pronoun in the embedded clause (cf. 4a); moreover, wh-copying is sensitive to Principle C (cf. 4b).

- (4) a. √Wo glaubt jeder_i, wo er_i wohnt? b. *Wo glaubt sie_i, wo Maria_i verabredet ist?
 where thinks everyone where he lives where thinks she where Maria appointed is
 ‘Where does everyone think he lives?’ ‘Where does she think that Mary has a date?’

In pseudo wh-copying, on the other hand, QP-binding is impossible and Principle C can be violated.

- (5) a. *Wo glaubt jeder_i, wo wohnt er_i? b. √Wo glaubt sie_i, wo ist Maria_i verabredet?

Fourth, the two types license different elements. Pankau (2013) shows that wh-copying doesn’t involve full copies in intermediate SpecCPs, but only pronominal copies of the moved wh-phrase. This explains why many speakers allow d-pronouns and why no speaker allows complex wh-phrases in intermediate SpecCPs.

- (6) a. #Wen denkst du, den sie mag? b. *Welchen Mann denkst du, welchen Mann sie mag?
 who think you him she likes which man think you which man she likes
 ‘Who do you think she likes?’ ‘Which man do you think she saw?’

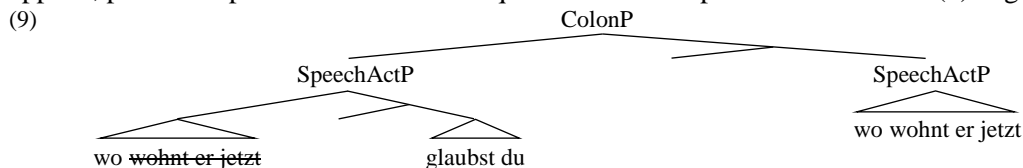
In pseudo wh-copying, it’s reversed: d-pronouns are impossible and complex wh-phrases are always fine.

- (7) a. *Wen denkst du, den mag sie? b. √Welchen Mann denkst du, welchen Mann mag sie?

Fifth, wh-copying disallows, whereas pseudo wh-copying allows, left branch extraction (LBE): (8a), the version of (6b) featuring LBE, is ungrammatical, whereas (8b), the version of (7b) with LBE, is fine.

- (8) a. *Welchen glaubst du, welchen Mann sie mag? b. √Welchen glaubst du, welchen Mann mag sie?

Analysis I follow Pankau (2013) that the properties of wh-copying are identical to long distance wh-movement and that wh-copying is a form of long distance wh-movement enriched by a mechanism for the realization of intermediate copies. This mechanism captures the restrictions on the elements in intermediate SpecCP positions. As for pseudo wh-copying, I suggest that it is based on wh-slifing to which sluicing applies, plus the repetition of the sluiced question. The simplified structure for (2) is given in (9).



I adopt Haddican et al. (2014)’s analysis that sentences are speech act projections and that wh-slifing involves a speech act projection containing a wh-question and a parenthetical clause such that the former asymmetrically c-commands the latter. Matrix sluicing applies to the wh-question inside the wh-slifing

sentence. Finally, the wh-slifing sentence is asyndetically specified by repeating the wh-question it contains. For ease of exposition, I will adopt Koster (2000)'s theory that a separate syntactic projection is involved for asyndetic specification, namely ColonP. This analysis captures the properties of pseudo wh-copying. That each clause bears a separate prosodic contour follows from the asyndetic conjunction of in fact two sentences, which define the domain for the assignment of prosodic contours. The application of sluicing gives the pragmatic properties and stress assignment to the wh-phrases. A sluiced question must be equivalent to the question under discussion (Roberts 2012), capturing that pseudo wh-copying is only licit in contexts where the question is explicitly discussed. Sluicing also requires the wh-word to be focused (Merchant 2001). As wh-words in German are necessarily stressed only in contexts where they are also necessarily focused (Jacobs 1991), wh-words in pseudo wh-copying must be stressed, too. The binding properties of pseudo wh-copying reduce to the binding properties of slifing (Haddican et al. 2014), cf. (10).

- (10) a. *Wo wohnt er_i, denkt jeder_i? b. √Maria_i ist im Kino verabredet, denkt sie_i.
 where lives he thinks everyone Maria is in.the cinema appointed thinks she
 'Where does everyone think he lives?' 'Maria has a date in the cinema, she thinks.'

As the constituents contained in the wh-question and those contained in the parenthetical clause don't c-command each other, a QP cannot enter into variable binding with a pronoun nor can Principle C be violated. Similarly, the constituents contained in the repeated wh-question do not enter into any c-command relations with the constituents in the wh-slifing clause, so no binding relations can be established either. The unavailability of d-pronouns in pseudo wh-copying follows because the repeated wh-question must be a licit question in itself; but d-pronouns never introduce questions in German, cf. (11).

- (11) √Wen/*Den hat sie gesehen? 'Who has she seen?'

As complex wh-phrases are licit question words, both the wh-slifing sentence and the repeated question can contain them. Lastly, the LBE-violation is only apparent. Sluicing can elide the NP-complement of a wh-determiner (Merchant 2001), so the proper analysis of (8b) features both TP-ellipsis and NP-ellipsis.

- (12) [ColonP [SpeechActP [[DP Welchen Mann] mag sie] [glaubst du]] [SpeechActP welchen Mann mag sie]]

Predictions The analysis of pseudo wh-copying makes a number of correct predictions. First, as asyndetic conjunction is optional, the wh-slifing sentence plus sluicing alone is predicted to also be grammatical. Second, as sluicing is optional, wh-slifing alone, that is, wh-slifing without sluicing, should also be fine. Both predictions are confirmed: the same context allowing (2) also allows the following two variants.

- (13) a. Wo glaubst du? b. Wo wohnt er jetzt, glaubst du?

Third, since the structure for pseudo wh-copying is independent of the one for wh-copying, pseudo wh-copying is predicted to be fine in languages without wh-copying. Greek confirms this prediction. In a context where one says that Susana scared Argos but you didn't understand it, both (14a) and (14b) are fine.

- (14) a. Ποιον είπες, ποιον τρόμαξε η Σουζάνα; b. Ποιον είπες;
 whom you.said whom scared the Susana whom you.said
 'Who, did you say, who did Susana scare?' 'Who, did you say?'

Fourth, properties peculiar to sluicing in German are correctly predicted to show up in pseudo wh-copying as well. Pankau (2016: 11) observes that sentential negation is retained under sluicing in German.

- (15) Ich weiß, wen du magst, ich will wissen, wen *(nicht).

I know who you like I want know who not
 'I know who you like, I want to know, who you don't like.'

Imagine Peter says "I think Maria didn't dance with John", but you didn't hear who Maria didn't dance with. In such a context, sentential negation must be retained in pseudo wh-copying, cf. (16). Crucially, (16) cannot involve NEG-raising as sentential *nicht* is always VP-adjoined and expected to follow *denkst du*.

- (16) Mit wem *(nicht) denkst du, mit wem hat Maria nicht getanzt?

with whom not think you with whom has Maria not danced
 'Who do you think Maria didn't dance with?'

Haddican, Bill & Anders Holmberg & Hidekazu Tanaka & George Tsoulas. 2014. Interrogative slifing in English. *Lingua* 138(1): 86-106. Jacobs, Joachim. 1991. Implikaturen und "alte Information" in w-Fragen. In: Marga Reis & Inger Rosengren (eds.), *Fragesätze und Fragen*, 201-222. Tübingen: Niemeyer. Koster, Jan. 2000. *Extraposition as parallel construal*. Ms. University of Groningen. Merchant, Jason. 2001. *The Syntax of Silence*. OUP. Pankau, Andreas. 2013. *Replacing Copies. The Syntax of Wh-Copying in German*. LOT Publications. Pankau, Andreas. 2016. *Sluicing as pre-movement deletion*. Talk given at CGSW 31, University of Stellenbosch. Reis, Marga. 2000. On the parenthetical features of German was...w constructions and how to account for them. In: Lutz, Uli & Gereon Müller & Wolfgang Sternefeld (eds.), *Wh-scope marking*, 359-407. Amsterdam: Benjamins. Roberts, Craig. 2012. Information structure in discourse. *Semantics & Pragmatics* 5: 1-69.