

## A contrastive approach to conditional perfection: Chinese vs. German/English

Bare conditionals (*if p, q*) can receive a **conditional perfection** (CP) interpretation (*iff p, q*), cf. (1) from Geis & Zwicky (1971). CP is widely seen as a pragmatic (strengthening) inference (Geis & Zwicky 1971, van der Auwera 1997, Horn 2000, Herburger 2015 a.o.), with some recent work focusing on theoretical and experimental modelling. However, the crosslinguistic picture is still unclear. Our starting point is that within a given language, CP **varies** considerably due to construction-specific and contextual properties. Based on this, we offer a crosslinguistic viewpoint with a case study comparing CP in Chinese vs. German and English, taking the latter two languages to be sufficiently similar in this respect.

**Theory:** We assume CP to be **gradable**: the more CP-favoring factors are satisfied, the stronger the CP-meaning becomes. Following von Fintel (2001), we take a CP-favoring factor to be linked to an implicit **Question under Discussion (QUD1)**, which has the form *under what conditions q?*. This QUD is **exhaustive** to the extent that it asks for all conditions under which q holds. By contrast, we take a CP-disfavoring factor to be linked to a **non-exhaustive QUD2**, which is about p's consequences (*what if p?*). A conditional *if p, q* is more likely to be perfected under QUD1 than under QUD2. The fewer favoring factors come together, the weaker the link to QUD1 becomes, and the weaker the CP-inference becomes. A plausible rule of thumb to identify the QUD is focus placement (Rooth 1992): with focus on p, we are likely to deal with QUD1; with focus on q, we are likely to deal with QUD2.

**Crosslinguistic comparison:** Our research questions are 1) what CP-favoring factors there are and 2) how they differ across languages. Zooming in on the contrast between Chinese and German, we find that (i) both (groups of) languages behave the same under certain syntactic manipulations, e.g. of clause type. However, certain potentially favoring factors cannot be activated as easily in Chinese as they can be in German. Regarding these differences, we focus on (ii) the position of the antecedent, (iii) accent placement on conditional *then*.

(i) Regarding CP, *imperative conditionals* (Schwager 2006), e.g. (2), behave like declaratives both in Chinese and in German/English. The switch from declarative to imperative is CP-neutral (neither favoring nor disfavoring), and the aforementioned rule of thumb applies: focus placement matters, see (2) vs. (3). In neither language does CP arise in conditional yes-no questions (Horn 2000), see (4). We tend to think of such questions as explicit non-exhaustive QUD2s asking for the consequent (*what if p?*).

(ii) In German/English, the **position of the antecedent** (left vs. right) may vary across discourse contexts (von Fintel 1994). On our intuition, right-adjoined antecedents favor CP more than left-adjoined antecedents do. Indeed, (5-b) slightly more strongly suggests than (5-a) that mowing the lawn is the only thing the hearer can do to get \$5 from the speaker. Right-adjoined antecedents are deviant in Chinese (Pan & Paul 2018). However, such conditionals may slightly improve depending on the choice of particle in the consequent q: in [q if p], a q with *jiu* in it is slightly better than a plainly ungrammatical q with *name* 'then' in it, see (6).

(iii) **Stressing *then*:** Schlenker (2004) observes that focus on conditional *then* has a CP-like effect, see e.g. (7) with German *dann*. For Chinese *jiu*, which tends to be translated as 'then' in conditionals, we notice an even more severe constraint than in section (ii). Chinese has stressed and unstressed *jiu*, which differ in meaning, cf. Liu (2017a,b). Crucially, only unstressed *jiu* can occur in conditional consequents, and stressing *jiu* leads to ungrammaticality, see (8).

**Summary:** Our case study reveals language-specific restrictions on CP-inferences, see Table 1. It is too early to conclude that Chinese bare conditionals are not as easily perfectible as German (or English) ones, and a more complete picture needs to be gained by considering other grammatical or discourse factors. At the same time, we hold that the contrasts between these languages and beyond are important in developing theories of CP.

- (1) If you mow the lawn, I'll give you \$5.  
 ~> If **and only if** you mow the lawn, I'll give you \$5.
- (2) **QUD1: Under what condition can the hearer stay?**  
 a. Stay if it rains<sub>F</sub>, # but if it doesn't, feel free to stay too.  
 b. Yaoshi xiayu<sub>F</sub>, jiu liuxia ba; # yaoshi bu xiayu, ni ye keyi liuxia.  
 if rain<sub>F</sub> JIU stay IMP # if not rain you also can stay
- (3) **QUD2: What if it rains?**  
 a. Stay<sub>F</sub> if it rains, but if it doesn't, feel free to stay too.  
 b. Yaoshi xiayu, jiu liuxia<sub>F</sub> ba; yaoshi bu xiayu, ni ye keyi liuxia.  
 if rain JIU stay<sub>F</sub> IMP if not rain you also can stay
- (4) a. If Jerry comes, will Elaine go?  
 b. Yaoshi Jerry lai, Elaine jiu qu ma?  
 if Jerry come Elaine PRT go PRT  
 ↗ If Jerry doesn't come, will Elaine stay?
- (5) a. If you mow the lawn, I'll give you \$5. [if p] q  
 b. I'll give you \$5, if you mow the lawn. q [if p]
- (6) Women {?jiu / \*name} qu sanbu, ruguo tianqi hao.  
 we {?JIU / \*NAME} go walk if weather good
- (7) Du bekommst dann<sub>F</sub> eine Belohnung, wenn du den Rasen mäht.  
 you get then<sub>F</sub> a reward if you the lawn mow  
 ~> no sooner than you mow the lawn will you be rewarded
- (8) \*Women jiu<sub>F</sub> qu sanbu, ruguo tianqi hao.  
 \*we JIU<sub>F</sub> go walk if weather good

Table 1: CP-inferences in German/English vs. Chinese: tentative answers to the question whether a CP-inference tends to occur in a given setting (left column) in the language

	English/German	Chinese
antecedent left vs. right	yes	??
stressed <i>then</i>	yes	no
CT: declaratives	yes	yes
CT: imperatives	yes	yes
CT: question	no	no

CT = clause type

**References:** von Stechow, K. 2001. Conditional Strengthening. Ms., MIT. • Horn, L. R. 2000. From if to iff: conditional perfection as pragmatic strengthening. *Journal of Pragmatics*. • Herburger, E. 2015. Conditional perfection. *SALT* 25. • Liu, M. 2017a. Mandarin conditional conjunctions and *only*. *Studies in Logic*. • Liu, M. 2017b. Varieties of alternatives: Mandarin focus particles. *Linguistics & Philosophy*. • Pan, V. J. & Paul, W. 2018. The syntax of complex sentences in Mandarin Chinese: a comprehensive overview with analyses. *Linguistic Analysis*. • Schwager, M. 2006. Imperative conditionals. *SALT* 16. • van der Auwera, J. 1997. Pragmatics in the last quarter century: The case of conditional perfection. *Journal of Pragmatics*.