Mandarin conditionals: the external syntax, order preservation and cyclic linearization
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1 Introduction Based on Haegeman’s (2003) and Endo & Haegeman’s (2019) work on adverbial clauses, using novel data, I argue that in Mandarin conditionals, sentence-initial ruguo-clauses involve successive cyclic movement from a VP internal position through two intermediate positions, the edge of VP phase and Spec jiuP within the consequent clause (1). Moreover, I propose that an order preservation effect, in which a ruguo-clause must always precede an even-focused object, is the result of a representational constraint on the functional hierarchy conspiring with a derivational constraint, i.e. Cyclic Linearization (CL, Fox & Pesetsky 2005).

(1) [CP [ruguo…] [consequent DPsub… [jiiu… [VP … DPobj …]]]]

2 Origin of initial ruguo-clauses Like English if-条件als (Haegeman 2003), at least some initial ruguo-clauses are derived from a lower position within the consequent clause. One direct argument comes from word order variations: despite being canonically sentence-initial (2a), a ruguo-clause alternatively occurs within the consequent (2b).

(2) a. ruguo bu xiyu, Zhangsan jiu hui lai.
   if NEG rain Z. then will come
   ‘If it doesn’t rain, Zhangsan then will come.’

b. Zhangsan ruguo bu xiyu jiu hui lai.

A derivational relation between initial ruguo-clauses (2a) and internal ruguo-clauses (2b) is evident in the fact that an initial ruguo-clause containing an anaphor undergoes obligatory reconstruction to a position lower than the subject and/or the object of the consequent (3-4).

(3) a. ruguo tazi ji de jian zhichi, Zhangsan1 jiu hui bangzhu dajia.
   if 3SG.SELF DE family support Z. then will help people
   ‘If the family of himself is supportive, Zhangsan1 will then help people.’

b. [ruguo tazi ji, … [consequent Zhangsan1 … √ … ]]

(4) a. ruguo tazi ji de jian zhichi, dajia jiu hui bangzhu Zhangsan1.

b. [ruguo tazi ji, … [consequent dajia … Zhangsan1 … ]√ ]

Furthermore, the existence of a second reconstruction site receives support from the absence/presence of Condition C connectivity when anaphoric binding forces reconstruction of an initial ruguo-clause. (5) is correctly ruled in since an intermediate reconstruction site can satisfy anaphoric binding while circumvent Condition C violation. Conversely, (6) is ruled out as no such reconstruction site is available and Condition C connectivity shows up, contra Pan & Paul (2018). Thus, I argue that the derivation of initial ruguo-clauses minimally involves movement from a position lower than the object of the consequent, and through some intermediate position between the subject and the object within the consequent.

(5) a. ruguo bici de zhugong bei jiaolian2 kanzhong,
   if each other DE assist PASS coach value

b. [ruguo e.o.1 … the coach2 … [consequent players1 … √ … him2 ] √Condition A √Condition C

c. [ruguo e.o.1 … the coach2 … [consequent players1 … him2 * ] √Condition A *Condition C

(6) a. *ruguo bici de zhugong bei jiaolian2 kanzhong,
   *if each other’s assists are valued by the coach2, the players; will then support him2,*

b. [ruguo e.o.1 … the coach2 … [consequent players1 … * ] *Condition A *Condition C

c. [ruguo e.o.1 … the coach2 … [consequent he2 … * … players1 * ] *Condition A *Condition C

3 ruguo-clauses and jiu Endo & Haegeman (2019) propose that an adverbial clause is merged as a specifier of a functional head Mod within the main clause. Extending their analysis to Mandarin conditionals by assuming a Spec-Head relation between an internal ruguo-clause and jiu, the “conditional marker” within the consequent (Liu 2017), we can account for the following facts: (i) an internal ruguo-clause and jiu must be adjacent to each other and cannot be separated by another head, e.g. a modal (2b, 7); and (ii) an internal ruguo-clause must precede but not follow jiu (2b, 8). Hence, I argue that the derivation of initial ruguo-clauses involves moving through Spec jiuP.

(7) a. *Zhangsan ruguo bu xiyu hui jiu lai.
   b. Zhangsan hui ruguo bu xiyu jiu lai.

(8) a. *Zhangsan jiu ruguo bu xiyu hui lai.
   b. *Zhangsan hui jiu ruguo bu xiyu hui lai.

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1 The reported judgments have been confirmed by five Mandarin native speakers and three English native speakers.
4 ruguo-clauses and even-focused objects: order preservation and CL Following Lin (1996) and Constant & Gu (2010), I assume a working hypothesis that a sentence-internal even-focused object involves movement of the object from a VP internal position to the specifier position of a functional projection headed by dou (9a), and a sentence-initial even-focused object involves cyclic movement from its base position through Spec dou (9b).

(9) a. \[ \text{CP} \text{Zhangsan} \text{lian} \text{chenshan} \text{dou} \text{bu} \text{VP chuan} \text{]}\]

\[Z \text{even shirt} \text{ALL NEG wear}\]

‘Zhangsan doesn’t wear even shirts.’

b. \[ \text{CP} \text{lian} \text{chenshan} \text{Zhangsan} \text{dou} \text{bu} \text{VP chuan} \text{]}\]

When an even-focused object occurs within a conditional, some order restrictions are found: (i) an internal ruguo-clause must precede but not follow an internal even-focused object (10), and (ii) jiu must precede but not follow dou (10, 11a-b). Assuming a representational constraint on the functional hierarchy: \( jiuP > douP \) (“XP>YP” = “XP is higher than YP”), we can make sense of these restrictions: \( jiuP > douP \) entails Spec \( jiuP > Spec douP \).

(10) a. Zhangsan ruguo tianqi re jiu lien chenshan dou bu chuan.

\[Z \text{if weather hot then even shirt ALL NEG wear}\]

b. \[Zhangsan doesn’t wear even shirts if it is hot.\]

c. \[ \text{Zhangsan doesn’t wear even shirts if it is hot.}\]

Interestingly, an order preservation effect is also found: ruguo-clause < even-focused object (“X<Y” = “X precedes Y”) both sentence-internally (10) and sentence-initially (11). I argue that this is the result of the representational constraint \( jiuP > douP \) conspiring with a derivational constraint (CL). On the one hand, since \( jiuP > douP \) entails Spec \( jiuP > Spec douP \), i.e. internal ruguo-clause < internal even-focused object, under CL, movement through the VP phase edge (Fox & Pesetsky 2005, Ko 2005) would avoid an order contradiction (12a) that would otherwise be generated by non-edge movement (12b):

(12) a. \[ \text{CP} \text{DP}_{sub} \text{CP}_{if} \text{jiu} \text{DP}_{obj} \text{dou} \text{VP} \text{tCP} \text{tDP} \text{V} \text{tDP} \text{tCP} \] \[\text{CP}_{if} < \text{DP}_{obj} < V < \text{CP}_{if} < \text{DP}_{obj}\]

b. \[ \text{CP} \text{DP}_{sub} \text{CP}_{if} \text{jiu} \text{DP}_{obj} \text{dou} \text{VP} \text{tCP} \text{tDP} \text{V} \text{tDP} \text{tCP} \] \[\text{CP}_{if} < \text{DP}_{obj} < V < \text{DP}_{obj} < \text{CP}_{if}\]

The only one of them is sentence-internal and the other is sentence-internal. This is borne out:

(14) a. ruguo tianqi re Zhangsan jiu lien chenshan dou bu chuan.

b. *Zhangsan chenshan ruguo tianqi re jiu dou bu chuan.

e. *Zhangsan chenshan ruguo tianqi re Zhangsan jiu dou bu chuan.

5 Extension Inspired by the parallel between English conditionals and unconditionals (Rawlins 2008), I suggest that the above derivation may also apply to Mandarin unconditionals, e.g. more than one reconstruction site seems to be available for sentence-initial buguan-clauses:

(15) buguan taziji \( \frac{1}{2} \) de jiaren zhichi-bu-zhichi,

no matter 3SG.SELF DE family support-NEG-support

Zhangsan, dou hui bangzhu Lisi2.

Z, ALL will help L.

‘No matter whether the family of himself is supportive or not, Zhangsan will help Lisi2.’

(16) a. buguan bici \( \frac{1}{2} \) de zhugong hui-bu-hui bei jiaolian2 kanzhong,

no matter e.o. DE assist will-NEG-will PASS coach value

qiuqyuan-men, dou hui zhichi ta2.

player-PL, ALL will support 3SG

‘No matter whether each other’s assists are valued by the coach, the players will support him2.’

b. \( \text{[buguan e.o.1,… the coach2,… [consequent players1,… } \sqrt{… } \text{him2, *] }\]

Meanwhile, a quick look at English suggests that this pattern might be cross-linguistically attested:

(17) a. %If books about himself sell well, John1 will pay Bill2.

b. If her1 child is ignored by John2, every mother1 will call him2.

c. *If John sees her1 child, he2 will call every mother1.