## A Correlative Construction in Japanese and Italian and its Implication to Typology Pietro Cerrone and Hiromune Oda University of Connecticut

**Introduction:** Correlatives have received a fair amount of attention in the theoretical and typological linguistic literature (Dayal 1996, Bhatt 2003 a.o.; Downing 1973, Keenan 1985 a.o.; see Lipták 2009 for an overview). According to Keenan 1985 and Lipták 2009, correlatives are attested in "loose" head-final languages (e.g., Indo-Aryan) or free word order languages (e.g., Slavic). In this paper, however, we argue that Japanese, which is a "rigid" head-final language, and Italian, which is neither a head-final nor free word order language, do allow one type of correlative construction, contrary to this standard view. This means that the earlier classification of correlatives needs to be revised. We then propose a novel account of the syntax of correlatives based on Moro's (2000) and more recently Chomsky's (2013) symmetry-breaking approach.

**Basic Properties of Correlatives:** Cross-linguistically, correlative constructions have the following properties: (a) a free relative clause in the left periphery and (b) a correlate in the main clause that is associated with the free relative clause. (1) is a typical example from Hindi, where a free relative clause is located in the left periphery of the sentence and its correlate is located in a position where the relative clause is interpreted.

- (1) **[Jo laRkii khaRii hai]**<sub>i</sub> vo (laRkii)<sub>i</sub> lambi hai.
  - REL girl standing is DEM girl tall is 'The girl who is standing is tall.'

(Hindi: adapted from Dayal 1996)

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There are some syntactic restrictions on the correlative construction. First, the correlative clause cannot follow its correlate in contrast to a headed restrictive relative clause, as shown in (2). (2) \*vo laRkii **jo laRkii khaRii haij** lambii hai. (correlative clause)

(2) \*vo laRkii<sub>i</sub> **[jo laRkii khaRii hai]**<sub>i</sub> lambii hai. that girl REL girl standing is tall is 'The girl who is standing is tall.'

Second, the correlate has to contain a demonstrative. Thus, 3rd person pronouns cannot be used as in (3).

(3) [Kto wygra]i, {tego/\*jegoi} pochwalę {tego/\*goi} who.NOM win.3SG DEM.ACC/he.ACC praise.1SG.FUT DEM.ACC/he.ACC

'I will praise the one who wins.' (Polish: adapted from Pietraszko 2015) In addition to the typical correlatives that receive a definite interpretation (*definite-correlatives*), there are correlative constructions that involve free choice free relatives (*FC-correlatives*). In Hindi, the focus particle *bhii* 'even' can be attached to a correlative clause, which derives an FC-correlative as in (4).

(4) [jo-**bhii** laRkii mehnat kartii hai]<sub>i</sub> vo<sub>i</sub> safal ho-tii hai. REL-**ever** girl effort do is that successful be-HAB is 'Whichever girl makes an effort, she is successful.' (H

ıl.' (Hindi: Dayal 1996)

Lipták 2009 notes that FC-correlatives are actually predominant in certain languages such as Slavic and Hungarian. Thus, in (5), the most salient interpretation is a free choice interpretation.

(5) [Amelyik kutya közel jön hozzám]<sub>i</sub>, azt<sub>i</sub> elkergetem.

REL.which dog close comes to.me that.ACC chase.away.1SG

'Which(ever) dog comes close to me, I'll chase it away.' (Hungarian: Lipták 2009)

Thus, we should take the two types of correlatives into consideration: definite correlatives and FC-correlatives. **Correlatives in Japanese and Italian:** In Japanese and Italian, although definite correlatives are not attested, FC-correlatives are actually attested, which has been overlooked in the literature. More specifically, free choice free relative clauses show the basic properties of correlatives described above. First consider (6).

- (6) a. **[Dono-onnanoko-ni atte mo]**<sub>i</sub>, John-wa **sono-{ko/onnanoko}-o**<sub>i</sub> kiniiru daroo. which-girl-DAT meet.INF also John-TOP that-KO/girl-ACC like will (Japanese)
  - b. **[Qualunque ragazza incontri]**i, a Gianni piace **quella**i. whichever girl meet.3SG.SUBJ to Gianni likes that.F.SG (Italian) 'Whichever girl he meets, John will like her.'

In (6), there is a FC free relative in the left periphery and a correlate associated with it in the main clause. As Italian (7) represents, this free choice free relative clause cannot follow the correlate, like in Hindi.

(7) \*A Gianni piace quella<sub>i</sub> [qualunque ragazza incontri]<sub>i</sub>.

to Gianni likes that.F.SG whichever girl meet.3SG.SUBJ (Italian) 'Whichever girl he meets, John will like her.'

In addition, the correlate has to have a demonstrative and cannot be omitted or replaced with a personal pronoun in Japanese as in (8a). In Italian, neither a clitic pronoun nor a personal pronoun is allowed as in (8b). (Cf. (6a,b))

- (8) a. \*[Dono-onnanoko-ni atte mo]<sub>i</sub> John-wa {**ko/onnanoko/kanojo**}-o<sub>i</sub> kiniiru daroo. which-girl-DAT meet.INF also John-TOP KO/girl/**she**-ACC like will
  - b. \*[Qualunque ragazza incontri]<sub>i</sub>, a Gianni {la/le<sub>i</sub>} piace {le<sub>i</sub>}. whichever girl meet.3SG.SUBJ to Gianni her.CL likes her 'Whichever girl he meets, John will like her.'

Thus, contrary to what is claimed in the typological literature, Japanese and Italian actually allow correlatives, which are FC-correlatives that show the same syntactic properties as definite correlatives.

<u>Syntax of Correlatives:</u> One prominent approach to the syntax of correlatives is Bhatt's (2003) analysis, in which a correlative clause is base-generated as a modifier of its correlate and then undergoes A'-scrambling/leftbranch extraction (LBE) to the left periphery. Although this analysis captures a wide range of data in languages discussed in the literature, it cannot be extended to Italian, which is standardly assumed to disallow scrambling and LBE. Thus, we propose a novel analysis based on Moro's (2000) and more recently Chomsky's (2013) symmetry-breaking approach, in which the correlative clause and its correlate are base-generated as sisters and the former undergoes topicalization to the left periphery to solve the symmetry problem (see Pietraszko 2015 for an argument for topicalization), as schematized in (9).

(9)  $[CP[CorrelCP \dots RelXP\dots]_i [CP \dots [DemXP t_i]\dots]]]$ 

This analysis explains the fact that a correlative clause and its correlate cannot be separated by an island, as in Italian (10). Note that a correlative clause can be separated from its correlate by a clause boundary as in (11).

- (10) \* [Qualunque ragazza incontri]<sub>i</sub>, ho sentito [island la notizia che a Gianni non piace quella<sub>i</sub>]. whichever girl meet.3SG.SUBJ I.have heard the news that to Gianni not likes that.F.SG 'Whichever girl he meets, I heard the news that Gianni doesn't like her.'
- (11) [Qualunque ragazza incontri]<sub>i</sub>, ho sentito [CP che a Gianni non piace quella<sub>i</sub>]. whichever girl meet.3SG.SUBJ I.have heard that to Gianni not likes that.F.SG 'Whichever girl he would meet, I heard that Gianni doesn't like her.'

In addition, since a correlative clause undergoes topicalization, which is A'-movement that forces reconstruction, it is predicted that when an R-expression is included in a correlative clause and is co-indexed with a pronoun above a correlate, the sentence should be ungrammatical. This is borne out in (12). Note that coreference between an R-expression in a left-peripheral adjunct clause and a pronoun in the main clause is possible as in (13), which indicates that the FC-correlative in (12) is not base-generated in the left periphery.

- (12) \*[Dono-onnanoko-ni John-gai atte mo]k kare-wai sono-ko-ok kiniiru daroo.
  which-girl-DAT John-NOM meet.INF also he-TOP that-KO-ACC like will.
  'He will like whichever girl John meets.'
- (13) [Moshi John-gai Mary-nik attara], kare-wai kanojo-ok kiniiru daroo. if John-NOM Mary-DAT meet.COND he-TOP she-ACC like will 'If John meets Mary, he will like her.'

<u>Conclusion</u>: we have shown that one type of correlatives, i.e., FC-correlatives, does exist in Japanese, a rigid head-final language, and Italian, a non-head-final and non-free word order language, contrary to the standard view in the typological literature. This means that "correlatives" should be classified into two types (definite correlatives and FC-correlatives), and both typological and theoretical studies should reconsider whether more languages allow "correlatives" by also taking FC-correlatives into consideration.

Selected Ref: Bhatt, R. 2003. Locality in correlatives. NLLT. Dayal, V. 1996. Locality in wh-quantification: Questions and relative clauses in Hindi. Keenan, E. 1985. Relative clauses. In Language typology and syntactic description II. Lipták, A. 2009. The landscape of correlatives: An empirical and analytical survery. In Correlatives cross-linguistically.