

## A Phrasal Analysis of English, Japanese and Chinese Comparative Constructions

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In the previous studies in comparatives, languages have been classified into two types based on whether they allow clausal type comparatives or not, assuming parameters prepared solely for dealing with comparatives. However, some phenomena cannot be simply explained by this distinction alone. For example, Japanese comparatives ban only the degree-compared but not quantity-compared clausal comparatives, while languages like Chinese do not seem to allow clausal comparatives at all. This paper tries to find out more general parameters which explains this contrast.

Through analysing the syntactic derivations of comparative constructions in English and Japanese, this paper shows that the difference in their derivation comes from how they react to the Left Branch Condition by Ross (1967/1986). We argue that in English, the moved operator in comparative clause is a zero adverb instead of left-branch modifier, based on the semantics by Izvorski (1995), which explains the grammaticality of the sentence in which the LBC is apparently violated in the previous analyses.

(1) a. The desk is as high as [ $w/t_i$  it is [ $_{AP}$  [e] $_i$  wide]]

b. The table is longer than [ $_{\emptyset}$  to what extent/degree] $_i$  it is wide  $t_i$ .

This type of movement is prohibited in Japanese because it has no such degree expression as *to what extent* to avoid the extraction of left branch elements.

(2)\*kono-table wa [ano-tukue-ga [[x-much] $_i$  haba-hiroi] ~~x-much~~ $_i$ ] yori nagai

This table-Top that desk-Nom wide than long

However, if we change the degree + adjective string to a noun *habahiro-sa* 'width', the sentence become grammatical.

(3) kono-table wa [ $_{NP}$  ano-tukue-no [ $_{N}$  habahiro-sa]] yori nagai

This paper assumes that degree expression here changes its form to a suffix *-sa* and transforms the adjective into a noun, avoiding the extraction of the degree in this sentence, (i.e. *habahiroi* 'wide' + *-sa* 'x-much (suffix)' = *habahiro-sa* 'width').

This paper further proposes that every language has only phrasal comparatives. Based on this hypothesis, Chinese, Japanese and English comparatives uniformly have, in their *than/yori/bǐ*-complement, a phrase with relative clause modifying the head of it.

(4) Tā mǎi shū bǐ [ $_{NP}$  tā mǎi de [ $_{N \emptyset}$  quantity] $_i$ ] duō

He bought books than she bought DE many

(5) He bought more books than [ $_{AdvP}$  [ $_{Adv \emptyset}$  in what quantity] [she bought books [e] $_i$  ]]

Under the analyses above, the only differences are the position (first or last) and the

status (N or Adv) of the head. These differences are explained by parameters as follows.

(i) Head-position Parameter: language positions a head before or after its complement

(ii) Degree-extraction Parameter: degree modifier of an adjective can be extracted out of the phrase or not

Japanese or Chinese set (i) as "after the complement" and (ii) as "no" while English have the opposite values. This hypothesis has advantages in that these parameters can be observed in non-comparative contexts (e.g. interrogative as in (6): without intonation on *wh* for the Japanese counterpart) too, so that we do not have to assume the parameters which are prepared solely for analysing comparatives.

(6) a. [To what extent]<sub>i</sub> was the New deal effective [e]<sub>i</sub>?

b. ?\*[dono-kurai]<sub>i</sub> New deal seisaku-wa [ [e]<sub>i</sub> yukou] desitaka?

To what extent                      policy-Top    effective    was

The paper finally presents some cross-linguistic and interpretational evidence that suggests the phrasal analysis of English "clausal" comparatives and supports the hypothesis. The first evidence comes from similarity of English comparatives and Italian counterparts, which have an overt adverbial head with very similar behaviour to a relative clause, in that they both seem to have sensitivity to island effects. Another evidence comes from similar behaviours to the NPI licensing between English comparative "clause" and relative clause headed by a noun, where they are proved to have the same type of head movement and very similar structures.

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