East Asian Relatives Revisited: On the Disunity between Gapped and Gapless Relatives

Relative clauses in Japanese, Korean, and Chinese have been controversial since a mixture of gapped (e.g. (1)) and gapless (e.g. (2)) relatives are found throughout ([1], [2], [3], [4], [6], [7], more recent ones). The central issue in this domain has been how best to characterize the two kinds of relatives. Syntactic approaches mainly deal with the former with operator movement or copy operation and treat the latter ‘peripheral’ (with [1] being an exception). In contrast, pragmatic approaches offer various uniform accounts subsuming the two under a set of common semantic-pragmatic factors. In any case, the past research were preoccupied with the presence/absence of a ‘gap’ (trace) and have not recognized or touched upon the significance of ‘obligatoriness’ of such a gap vis-à-vis the properties of head nouns.

Drawing mostly on Japanese data, this paper proposes a new approach that upholds the division between gaped and gapless relatives. Specifically, the latter is rendered as an appositive construction. The present account focuses not merely on the presence/absence of a gap but rather on how obligatory such a gap is. What determines OBLIGATORINESS here is the notion of argument saturation: The relatives in (1a,b) with a transitive verb (kaku ‘write’) are incomplete propositions (i.e. gap filling is semantically obligatory) but the clauses in (1c), (2), and (3) are complete, regardless of the possibility of locating a gap or not. In particular, the gap in (1c) is adverbal and optional and there would be no plausible gap in (2) or (3).

When different head nouns are coordinated, distinct patterns emerge modulo obligatoriness (gap optionality is indicated with parentheses): (i) head nouns corresponding to obligatory arguments (either the subject or object here) can be coordinated, e.g. (4a-c); (ii) head nouns corresponding to obligatory and optional elements separately cannot be coordinated, e.g. (4d); (iii) head nouns corresponding to a gapless head and optional element can be coordinated, e.g. (4e); (iv) even those corresponding to a gapless head and appositive noun can be coordinated, e.g. (4f), while those corresponding to an obligatory element and appositive noun cannot be coordinated, e.g. (4g). If a gap is obligatory, all the head/appositive nouns are forced to fill it, rendering (4d,g) semantically ill-formed. The coordination facts here are rather surprising if the division of gapped vs. gapless relatives is drawn merely based on presence/absence of gaps. But the patterns of head noun coordination are quite expected given that the division is attributed to obligatoriness of gaps vis-à-vis head nouns.

The account proposed. First, the examples with a gap (1a,b) and (4a,b) are regular noun modification and rendered as, e.g. (1a): \( \lambda x [\text{write}(\text{book}, x) \land \text{novelist}(x)] \), i.e. a CN \(<s,t>\). The novelist is identified as the writer. Second, the instances requiring no gap (1c), (2), and (3) are appositives with the clauses being a nominalized proposition: \( p \in D_{<s,t>} \Rightarrow \exists \check{\beta}(p) \in D_{<s,t>} \) (following [5], \( \check{\beta}(p) = [t : \forall w \in p, w \leq x'] \) with ‘t’ being a definite operator; a nominalized proposition is indicated by SMALL-CAPS). The appositive construction mediates (via pragmatically oriented Contextual-Relevance function establishing an appositive relation between the head noun and a nominalized clause based on the head noun semantics, cf. [3], [4], [7]) rendering (1c) as \( \lambda x [\text{method}(x) \land \text{C-Rel}(x, \text{AUTHOR-WRITE-BOOK})] \) (where C-Rel(x) = MEANS, i.e. x is a method and means to achieve \( \check{\beta}(p) \)) (2) as \( \lambda x [\text{book}(x) \land \text{C-Rel}(x, x, \text{READER-BECOME-SMART})] \) (where C-Rel(x) = EFFECTER, i.e. x is a book and an effector for \( \check{\beta}(p) \)); (3) as \( \lambda x [\text{fact}(x) \land \text{C-Rel}(x, x, \text{READER-BECOME-SMART})] \) (where C-Rel(x) = EQUALITY). Thus, (1c), (2), and (3) fall into the appositive category, accounting for (4).

Unlike in pragmatic accounts, ‘relatives’ are non-uniform, and ‘gapless relatives’ are not peripheral as in syntactic accounts. The gapped relatives belong to a filler-gap construction where a gap is filled obligatorily, while the so called ‘gapless relatives’ and even ‘relatives’ with optional gaps are appositives with no gap to be filled. If what is proposed here is correct, it not only significantly simplifies an account for relatives but also signals the end of one of the enduring disputes, namely, the one concerning gapped and gapless ‘relatives’.
Data

(1) relative clause with a gap (aka a ‘trace’):
a. \([s \text{ gap}, \text{ hon-o} \ kai-ta] \text{ sakka}_1 \)小说家 [書-ACC 創作-PAST 小説家 名]-NOM 写作-PAST 書
‘the novelist [that wrote the book]’
b. \([s \text{ sakka}_1 \text{ ga gap}, \text{ kai-ta} ] \text{ hon,} \) 小説家 [書-ACC 創作-PAST 小説家 名]-NOM 写作-PAST 書
‘the book [that the author wrote]’
c. \([s \text{ sakka}_1 \text{ ga hon-o} \ (\text{ gap, }) \text{kai-ta} ] \text{ hoohoo} \ (\text{ gap = adverb, i.e. optional}) \text{ method}\)

(2) relative clause without a gap:
\([s \text{ atama-ga} \ \text{ yokunar-u}] \text{ hon} \ [s \text{ atama-ga} \ \text{ yokunar-u}] \text{ zizitu} \text{ book} \) \text{ head-NOM 成功-PERS 書}
‘the book [that (the reader) becomes smart]’

(3) appositive clause with ‘fact’
\([s \text{ atama-ga} \ \text{ yokunar-u}] \text{ hon} \ [s \text{ atama-ga} \ \text{ yokunar-u}] \text{ zizitu} \text{ book} \) \text{ head-NOM 成功-PERS 書}
‘the book [that (the reader) becomes smart]’

(4) ‘head/fact-noun’ coordination:
a. \([s \text{ gap,} \text{ hon-o} \ kai-ta][\text{sakka to kyoozo-yu}] , \text{ ‘the novelist and professor [that wrote the book]’} \) 小説家 [教授-ACC 創作-PAST 小説家 名]-NOM 写作-PAST 學者
b. \([s \text{ sakka}_1 \text{ ga gap,} \text{ kai-ta}[\text{hon to kizi,} , \text{ ‘the book and article [that the author wrote]’} \) 小説家 [教授-ACC 創作-PAST 小説家 名]-NOM 写作-PAST 學者
 aw. \([s \text{ (sorezore) gap, gap,} \text{ kai-ta}[\text{sakka, to hon,} , \text{ ‘the novelist [that wrote the book] and the book [that the novelist wrote], respectively’} \) 小説家 [教授-ACC 創作-PAST 小説家 名]-NOM 写作-PAST 學者
 b. \([s \text{ sakka}_1 \text{ ga gap,} \text{ gap,} \text{ kai-ta}[\text{hon, to hoohoo,} , \text{ ‘(Int.) the book [that the novelist wrote] and method [that the novelist employed writing the book]’} \) (OK, if [hon to hoohoo, i.e. both being the object)
c. \([s \text{ atama-ga} \ (\text{ gap, }) \text{ yokunar-u}[\text{hon to hoohoo,} , \text{ ‘the book [that (the reader) becomes smart (reading it)]} \) 小説家 [教授-ACC 創作-PAST 小説家 名]-NOM 写作-PAST 學者
 d. \([s \text{ atama-ga} \ (\text{ gap, }) \text{ yokunar-u}[\text{hon to zizitu,} , \text{ ‘the book [that (the reader) becomes smart (reading it)]} \) 小説家 [教授-ACC 創作-PAST 小説家 名]-NOM 写作-PAST 學者
 e. \([s \text{ atama-ga} \ (\text{ gap, }) \text{ yokunar-u}[\text{hon to hoohoo,} , \text{ ‘the book [that (the reader) becomes smart (due to it)]} \) 小説家 [教授-ACC 創作-PAST 小説家 名]-NOM 写作-PAST 學者
 f. \([s \text{ atama-ga} \ (\text{ gap, }) \text{ yokunar-u}[\text{hon to zizitu,} , \text{ ‘the book [that (the reader) becomes smart (due to it)]} \) 小説家 [教授-ACC 創作-PAST 小説家 名]-NOM 写作-PAST 學者
 g. \([s \text{ gap,} \text{ hon-o} \ kai-ta][\text{sakka, to zizitu} , \text{ ‘the novelist [that wrote the book] and the fact [that he did so]’} \ (likewise for an object gap)

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