Restructuring in Japanese revisited: a phrasal movement analysis of purpose expression

This paper provides an account of restructuring phenomena in Japanese **(1)**, diverging from the complex predication analysis of Miyagawa (1987). Specifically, the interaction between an Infinitival Clause (IC) and a PP associated with a matrix Motion Verb (MV) in a Purpose Expression (PE) will be examined. The two questions addressed are (a) how the PP linearly separating the verb in an IC (ICV) and the MV prevents a PE from showing mono-clausal behavior, (b) why the PE requires an animate subject when neither the MV nor the ICV does. I first review the mono-/bi-clausal behavior of PEs observed in Miyagawa (1987) and argue that such an alternation could not be attributed simply to the difference between PEs involving a single complex predicate vs. two simplex predicates. The major arguments against a complex predication analysis for 'mono-clausal' PEs are (a) that the 'mono-clausal' PE retains a multiple event interpretation (b) the observed animacy requirement in PEs does not follow from the properties of the individual predicates involved in the construction.

PEs in Japanese have been reported to show mono- vs. bi-clausal properties depending on the context. Miyagawa (1987) shows that mono-clausal behavior of PE based (in part) on two clause-mate conditions (a) the discontinuous morpheme *sika nai* 'only', whose parts are required to be clause-mates **(2a)**, can appear separated by an apparent IC boundary **(2b),** (b) a *–ga* marked object of ICV and its licensing stativizing morpheme *(rar)e* 'can' can appear separated by an IC boundary **(3b)** despite the clause-mate requirement **(3a)**. Miyagawa (1987) shows that mono-clausal behavior is absent when the ICV and the MV are separated by a PP (**(4a)** vs. **(2b)** & **(4b)** vs. **(3b)**), suggesting that PEs in these cases are bi-clausal. These facts led Miyagawa (1985) to argue for a split analysis; a PE is mono-clausal when restructuring creates a single complex predicate from the MV and the ICV, while it is bi-clausal when the MV and the ICV project as independent phrases.

The split analysis accounts for the mono-/bi-clausal behaviors of PEs but makes some problematic predictions. It incorrectly predicts a syntactically mono-clausal PE to denote a single (complex) event, and a bi-clausal PE to denote two independent events. In addition, properties of complex predicates heading a PE are wrongly expected to exhibit only properties found in its sub-components. First, a sentence denoting a single complex event results in infelicity when its component sub-event does not take place; **(5a)** yields true iff both 'John cried' and 'John screamed' are true. On the other hand, some sentences are true even when the sub-event does not take place when multiple predications are involved; **(5b)** can be true even if Tom did not run. Given these facts, 'mono-clausal' PEs, but not 'bi-clausal' PEs, are expected to be infelicitous when the event denoted by the ICV does not take place if the 'mono-clausal' PE really does involve a single complex predication. However, this prediction is not supported; both 'mono-' **(6b)** and 'bi-clausal' PEs **(6a)** can be true even if the bear was not in the zoo (thus no seeing event). This suggests that a 'mono-clausal' PE also involves two predications, despite its otherwise mono-clausal behavior. Furthermore, the fact that a PE construction requires an animate subject (**(7c)** vs. **(7d)**) while the predicates involved in PE independently do not **(7a,b)** suggests a unitary syntactic structure for both types of PE which give rise to the observed animacy requirement.

Given that predicates involved in PEs are interpreted independently and project their own argument structure, I propose that the MV and the ICV head their own phrases in syntax, and the mono-/bi-clausal alternation arises from whether or not the IC undergoes phrasal movement to the matrix vP. **(8)** is a schematic picture. IC phrasal movement to vP is motivated by its interaction with the PPs associated with the MV. First, MVs take goal/source PPs as their complement, and the relative heights of the PPs are fixed **(9)** (modifier PP >> complement PP). Since a goal PP cannot be interpreted as part of an IC **(10a)**, the grammaticality of **(10b)** suggests that the IC can be raised above the complement PP, yielding linear precedence. The fact that the clause-mate requirement imposed on elements such as *sika nai* cannot be satisfied given the surface order of ICV >> PP >> MV follows directly from the fact that the IC must move to spec-vP in order to precede PP; *sika* and *nai* no longer appear in the same constituent **(11a)**, just as they do not in **(11b)**. An advantage of the syntactic analysis of PEs is that the animacy requirement observed in **(7)** follows naturally from the general properties of MVs. A sentence involving an inanimate object is felicitous when a PP expresses a path of motion **(12a),** but infelicitous when a thematic goal PP appears in the construction **(12b)**. This suggests the animacy requirement of MVs may be reduced to theta-roles a MV assigns and the number of thematic arguments a MV merges. When there is no thematic PP, either θ_1 or θ_2 is an available merge site for an NP **(13a)**. This allows an inanimate NP to merge in a non-Agentive position θ_2, resulting in a MV expressing pure motion **(13b)**. On the other hand, when a thematic PP occupies θ_2, the only available merge site for the NP is θ_1, an Agentive position, hence the animacy requirement emerges **(13c)**. The fact that θ_1 is occupied leads the MV to be interpreted as an activity V. These properties of MVs shed some light on how the animacy requirement arises in PEs; the IC appears in a lower thematic position of the MV, thus requiring the NP argument of MV to be Agentive.

Examples

(1) John-ga [hon-o kai-ni] it-ta
J.-Nom book-Acc buy-*ni* go-Past
'John went to buy a book'

(2) a. *John-ga [$_{CP}$ Tom-ga hon **sika** kat-ta to] kik-**anakat**-ta
J.-Nom T.-Nom book only buy-Past COMP hear-Neg-Past
'(Int.) John heard that Tom bought only a book (and nothing else)'

b. John-ga [$_{IC}$ hon **sika** kai-ni] ik-**anakat**-ta
J.-Nom book only buy-*ni* go-Neg-Past
'John went to buy only a book (and nothing else)'

(3) a. John-wa Tom-ni [$_{CP}$ hon-o/*-**ga** yom-u ka] kik-**e**-ru
J.-Top T.-to book-Acc/*-Nom read-Pres Q ask-can-Pres
'John can ask Tom if he will read a book'

b. John-wa [$_{PE}$ hon-o/-**ga** yomi-ni] ik-**e**-ru
J.-Top book-Acc/-Nom read-*ni* go-can-Pres
'John can go to read a book'

(4) a. *John-ga [hon **sika** kari-ni] [$_{PP}$ tosyokan e] ik-**anakat**-ta
J.-Nom book only rent-*ni* library to go-Neg-Past
'(Int.) John went to the library to borrow only a book'

b. John-ga [hon-o/***-ga** kari-ni] [$_{PP}$ tosyokan e] ik-**e**-ru
J.-Nom book-Acc/-Nom rent-*ni* library to go-can-Pres
'John can go to the library to borrow a book'

(5) a. John-ga <u>*naki*</u>-<u>*saken*</u>-da **(V-V compound)**
J.-Nom cry-scream-Past
'John scream-cried (cried hard)'

b. John-ga [$_{CP}$ Tom-ga <u>*hasit*</u>-ta to] <u>*kii*</u>-ta
J.-Nom T.-Nom run-Past COMP hear-Past
'John heard that Tom ran'

(6) a. John-ga kuma-o <u>*mi*</u>-ni **[$_{PP}$ doobutuen e]** <u>*it*</u>-ta
J.-Nom bear-Acc see-*ni* zoo to go-Past
'John went to the zoo to see a bear'

b. [John-ga doobutuen e kuma **sika** <u>*mi*</u>-ni <u>*ik*</u>-**anakat**-ta]
J.-Nom zoo to bear only see-*ni* go-Neg-Past
'John went to the zoo to see a bear (and nothing else)'

(7) a. hokori-ga ma-u
dust-Nom dance-Pres
'dust flies'

b. hokori-ga [kochira made] ki-ta
dust-Nom this.side up.to come-Past
'dust came over to this side'

c. *hokori-ga [kochira made] mai-ni kita
dust-Nom this.side up.to dance-*ni* come-Past
'dust came over to this side to fly' **(PE)**

d. hokori-ga [kochira made] mat-te kita
dust-Nom this.side up.to dance-INFL come-Past
'dust came over to this side flying' **(Non-PE)**

(8) a. Subj [$_{vP}$ [$_{VP}$ [$_{IC}$ OBJ V] MV]] **('bi-clausal' PE)**

b. Subj [$_{vP}$ [$_{IC}$ OBJ V]$_k$ [$_{VP}$ t_k MV]] **('mono-clausal' PE)**

(9) a. John-ga [$_{ModPP}$ Tookyoo de] [$_{CompPP}$ Odaiba e] it-ta
J.-Nom Tokyo at Odaiba to go-Past
'John went to Odaiba in Tokyo'

b. *John-ga [$_{CompPP}$ Odaiba e] [$_{ModPP}$ Tookyoo de] it-ta

(10) a. (*[$_{PP}$ Odaiba e]) hon-o (*[$_{PP}$ Odaiba e]) kat-ta
Odaiba to book-Acc Odaiba to buy-Past
'*(one) bought a book to Odaiba'

b. John-ga [$_{IC}$ hon-o kai-ni]$_j$ [$_{PP}$ Odaiba e] t_j it-ta
J.-Nom book-Acc buy-*ni* Odaiba to go-Past
'John went to Odaiba to buy a book'

(11) a. *John-ga [$_{IC}$ hon **sika** kai-ni]$_j$ [$_{PP}$ Odaiba e] t_j i-**kanakat**-ta
J.-Nom book only buy-*ni* Odaiba to go-Neg-Past
'(Int.) John went to Odaiba to buy only a book'

b. *John-ga [$_{DP}$ hon **sika** yonda hito]-o mi-**nakat**-ta
J.-Nom book only read person-Acc see-Neg-Past
'(Int.) John saw a person who read only a book'

(12) a. hokori-ga [$_{PP}$ koko made] ki-ta
dust-Nom here up.to come-Past
'dust came over here'

b. #hokori-ga [$_{PP}$ heya e] ki-ta
dust-Nom room to come-Past
'(Int.) dust came to (one's) room'

(13) a. [$_{vP}$ θ_1 [$_{VP}$ θ_2 MV]]
b. [$_{vP}$ hokori$_j$-ga [koko made][$_{VP}$ t_j ki-ta]] (= 12a)
c.#[$_{vP}$ hokori-ga [$_{VP}$ [$_{PP}$ heya e] ki-ta]] (=12b)

Selected references

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