

Small Clauses: Evidence from Japanese*

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Building on the proposal made by Chomsky (1955/75), Irimia (2012) argues that what has been analyzed as a small clause does not form a constituent. Instead, she proposes that the matrix predicate and the small-clause predicate constitute a complex predicate which takes an argument (the subject of a small clause) as its complement. She investigates different types of small clauses including depictives and resultatives from various languages. As was the case with English, it has been assumed that there are small clauses in Japanese. With the rise of the complex predicate analysis, it must be formally shown whether the complex predicate analysis also applies to Japanese sentences or the small clause analysis is actually the correct analysis in Japanese. As it turns out, there is much evidence that there are small clauses in Japanese. In order to show this, I have looked at negative polarity items, the subject-oriented long-distance anaphor *zibun*, and honorifics.

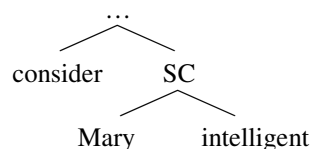
1. Two Analyses

Small clauses are structures that contain a subject phrase and a predicate phrase which can either be a noun phrase, an adjectival phrase, a verb phrase without inflection, or a participle (Cardinaletti and Guasti 1995). There are two opposing views as to how to analyze these structures. One is to treat them as a constituent. In this view, the lower predicate phrase first merges with the lower noun phrase to form a constituent which is smaller than a tense phrase. An example sentence and its basic structure under this analysis are shown below.

(1) Small Clause Analysis (NP VP [NP XP]_{SC})

a. I consider [Mary intelligent]_{SC}

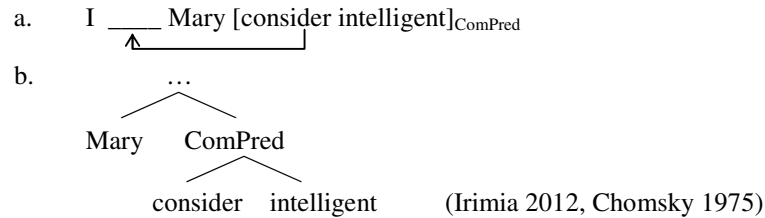
b.



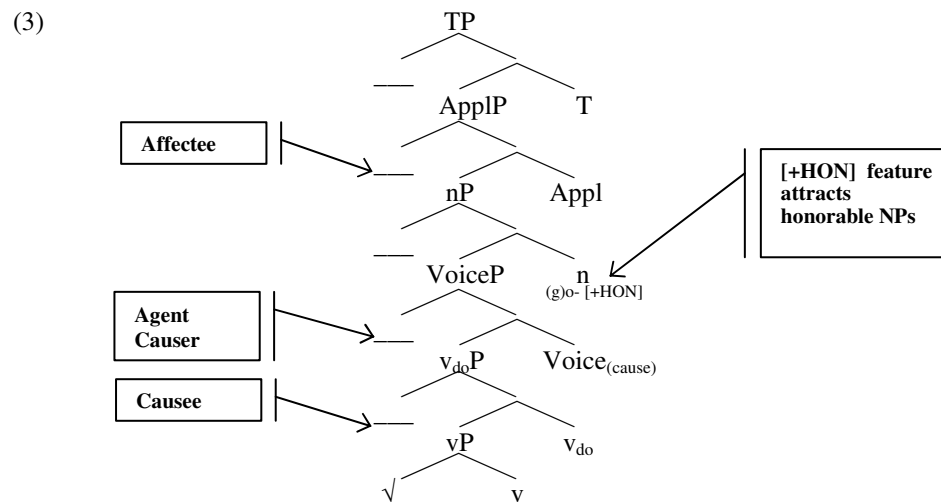
* I would like to thank my supervisor, Elizabeth Cowper, who encouraged me to submit an abstract to this conference. I owe thanks to the members of the syntax project group for comments and suggestions. Thanks are also due to the audience at the conference for challenging questions.

Another approach is to have the matrix verb and the lower predicate phrase form a complex predicate which then takes a noun phrase as an argument. The simplified structure under this analysis for the same sentence is shown below.

(2) Complex Predicate Analysis (NP __ NP [VP XP]_{ComPred})



Here, I will assume v_{do} as causee introducer (Harley 2008), Voice (Kratzer 1996), honorific nominalizer (Yokoyama 2012), and Peripheral Applicative (Kim 2011). The type of argument introduced in each phrase is indicated below.



2. Negative Polarity Items

2.1 Properties of Negative Polarity Items

In Japanese, there are two types of negative polarity items (NPIs). One is indeterminate NPIs such as *dare-mo* ‘anyone’, and the other is exceptive NPIs such as NP-*sika* ‘only NP’ (Shimoyama 2011). An example of each is shown below.

- (4) a. **Dare-mo** paathii-ni sankasi-*(**nakat**)-ta.
 who-NPI party-in participate-Neg-Pst
 'Nobody came to the party.' (intended)
- b. **John-sika** paathii-ni sankasi-*(**nakat**)-ta.
 John-NPI party-in participate-Neg-Pst
 'Only John came to the party.'

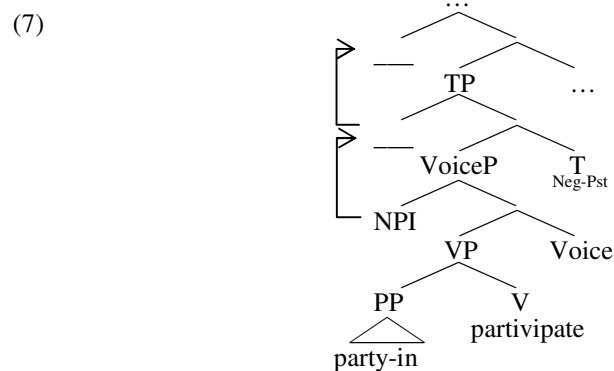
These items require negation to be in the same clause. If NPI and negation are not clausemates, it yields an ungrammatical sentence with the intended reading.

- (5) a. *Taroo-wa [Yoko-ga **dare-mo** syootaisi-ta to] iwa-**nakat**-ta.
 Taro-Top [Yoko-Nom who-NPI invite-Pst C] say-Neg-Pst
 'Taro didn't say that Yoko invited anyone.' (intended)
 (Shimoyama 2011: (6))
- b. *John-ga [Mary-ga George-**sika** yatot-ta to] iwa-**nakat**-ta.
 John-Nom [Mary-Nom George-NPI employ-Pst C] say-Neg-Pst
 'John said Mary employed only George.' (intended)

Furthermore, negation must take a wider scope over NPIs. The following sentences are cleft constructions where NPIs are clefted.

- (6) a. *Paathii-ni sankasi-**nakat**-ta no-wa **dare-mo** da.
 party-in participate-Neg-Pst C-Top who-NPI Cpl
 'It is anyone that didn't come to the party.'
- b. *Paathii-ni sankasi-**nakat**-ta no-wa **John-sika** da.
 party-in participate-Neg-Pst C-Top John-NPI Cpl
 'It is only John that came to the party.'

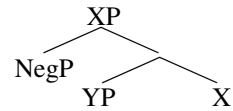
Since clefted elements raise up to the CP domain, they are outside the scope of negation (Mihara and Hiraiwa 2006). This means that NPIs in the above sentences are outside the scope of negation. Hence, the sentences are ungrammatical.



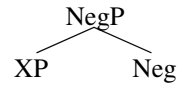
2.2 Position of Lower Negation

It has been brought to my attention that the position of negation on the lower predicate is crucial to my analysis (Lisa Travis p.c.). There are two possible analyses regarding the position of negation. One is to treat negation as a phrasal adjunct (8a). The other is to incorporate negation into the core structure, that is, to have the Neg head take a complement (8b).

(8) a. Adjunct NegP



b. Headed NegP



In the structure (8a), negation has its own independent projection, and it is located on the left of what is negated. Right adjunction is hardly ever seen in Japanese; modifiers are always on the left of what is modified. In (8b), on the other hand, the head of NegP takes as its complement what is negated. Since Japanese is a head-final language, negation appears on the right in this structure.

The following examples are cases where negation *-nai(i)* appears. There is another type of negation in Japanese *-nu (-zu)*. However, since it is not relevant to the discussion of small clauses, it will be omitted.

- (9) a. John-wa kasiko-ku **nai.**
 John-Top wise-P **Neg.Pr**
 'John is not wise.'
- b. John-wa kasiko-ku **na-ku mie-ru.**
 John-Top wise-P **Neg-P look-Prs**
 'John looks wise.'
- b'. John-wa kasiko-ku mie-**nai.**
 John-Top wise-P look-**Neg**
 'John doesn't look wise.'
- c. John-wa serori-o tabe-**nai.**
 John-Top celery-Acc eat-**Neg.Pr**
 'John doesn't eat celery.'
- d. John-wa kane-ga nai.¹
 John-Top money-Nom missing.Pr
 'John does not have money.'

¹ *Nai* can be used as an attributive adjective as in (i). However, this use is quite limited.

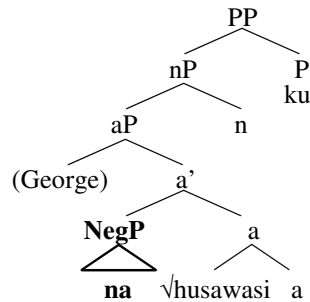
- (i) Nai mono-wa nai.
 missing thing-Top missing
 'What's gone is gone.'

(9a-c) are the examples where *-nai* negates a predicate. In (9d), *nai* itself is used as a predicate. In (9a, b), *kasiko(i)* ‘wise’ is negated whereas *tabe(ru)* ‘eat’ is negated in (12c). As is clear, whenever *-nai* is used as negation, it appears on the right of what is negated. This seems to suggest that the structure in (8b), in which the Neg head takes a complement, is the correct analysis in Japanese.

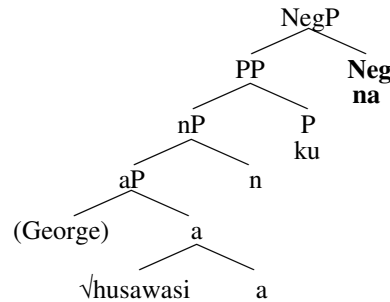
The following example is a sentence with a small clause candidate. The structures of the lower predicate under the two approaches are shown in (10b-c).

- (10) a. John-ga George-o husawasi-ku **na-ku** kanzi-ta.
 John-Nom George-Acc suitable-P **Neg-P** feel-Pst
 ‘John felt that George was not suitable.’

b. Adjunct NegP !!



c. Headed NegP ✓



As was the case in (9), negation appears on the right of the lower predicate. As is clear in (10b), negation is expected to appear on the left of the predicate if the adjunct negation approach was correct. However, this is not the case. The structure in (10c) does conform to the linear order of predicate and negation in (10a). To repeat, the Neg head seems to take a complement in Japanese. It is important to notice here that under this analysis, negation c-commands the subject position of a potential small clause. In addition, I will assume that negation on the lower predicate is part of the small clause.

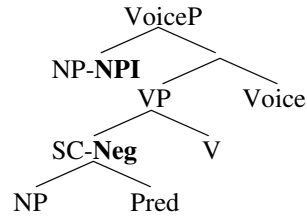
2.3 Evidence for Small Clauses

The following sentences are small-clause type of constructions with an NPI in the matrix subject and negation on the predicate.

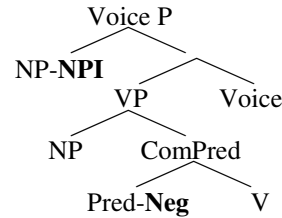
- (11) a. *Dare-mo George-o husawasi-ku **na-ku** kanzi-ta.
 who-NPI George-Acc suitable-P **Neg-P** feel-Pst
 ‘Anyone felt that George wasn’t suitable.’
 (Intended: ‘No one felt that George was suitable.’)

- b. *John-sika George-o husawasi-ku **na-ku** kanzi-ta.
 John-NPI George-Acc suitable-P **Neg-P** feel-Pst
 ‘Only John felt George was suitable.’

c. Small Clause Analysis ✓



d. Complex Predicate Analysis ✓



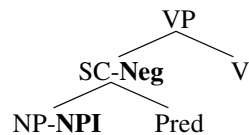
In the small clause analysis, the ungrammaticality of the sentences above can be explained in terms of isolation of NPI from negation. Since the NPI and the negation are not clausemates, the sentences are ungrammatical. In the complex predicate analysis, the ungrammaticality can be accounted for with scope of negation. The NPI is outside the scope of negation; therefore, the sentences are ungrammatical. Thus, the two analyses can both explain the ungrammaticality of the sentences (11a-b).

The major difference between the small-clause structure and the complex-predicate structure is the position of the second noun phrase. The following sentences contain an NPI in the second noun phrase.

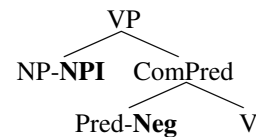
(12) a. John-ga **dare-mo** (sono sigoto-ni) husawasi-ku **na-ku** kanzi-ta.
 John-Nom who-NPI that.job-for suitable-P Neg-P feel-Pst
 'John felt that no one was suitable (for the job).'

b. John-ga George-sika (sono sigoto-ni) husawasi-ku **na-ku** kanzi-ta.
 John-Nom George-NPI that.job-for suitable-P Neg-P feel-Pst
 'John felt that only George was suitable (for the job).'

c. Small Clause Analysis ✓



d. Complex Predicate Analysis !!



In the complex predicate analysis, the NPI is merged higher than the negation. Since the NPI is not in the scope of negation, it makes a wrong prediction as to the grammaticality of the sentences in (12a-b). The small clause analysis, on the other hand, predicts the correct result since the negation is taking a wider scope over the NPI. These examples clearly show the difference between the two analyses, and support the claim that these structures contain small clauses rather than complex predicates.

3. “Subject”-oriented Long-distance Anaphor *Zibun*

3.1 Properties of *Zibun*

The subject-oriented long-distance anaphor *zibun* has been the subject of much research. Some basic properties of *zibun* following Akikawa (1999) are listed below.

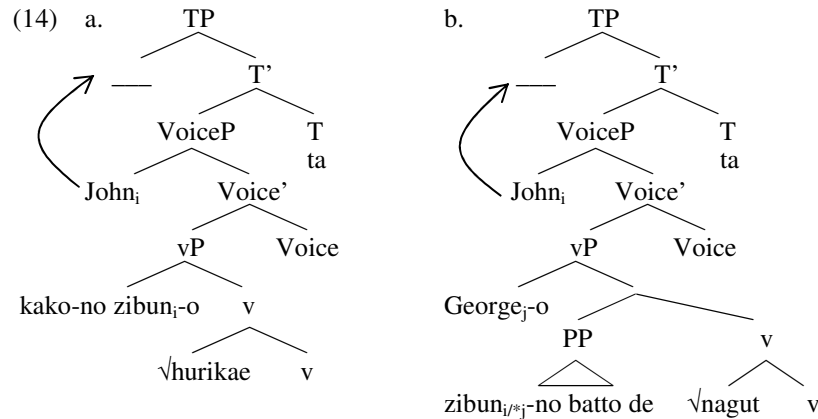
- The antecedent of *zibun* must be an animate NP
- *Zibun* can be bound from within or outside its domain.
- *Zibun* can be a possessor
- *Zibun* must be c-commanded by its antecedent

I will first discuss what can be the antecedent of *zibun* because it is crucial to my analysis of small clauses.

3.2 Antecedent of *Zibun*

There is no doubt that the subject can be the antecedent of *zibun*. However, non-subject NPs can sometimes be the antecedent of *zibun*. First, in a plain declarative sentence, the subject is the only candidate for the antecedent of *zibun*.

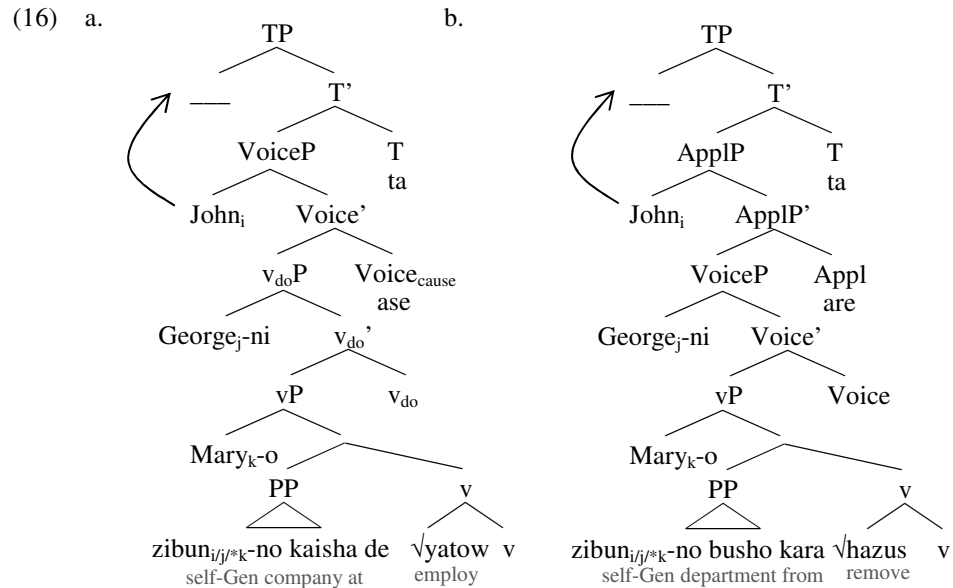
- (13) a. John_i-ga kako-no zibun_i-o hurikaet-ta.
 John_i-Nom past-Gen self_i-Acc look.back-Pst
 ‘John looked back on his own past.’
- b. John_i-ga George_j-o zibun_{i/j}-no batto-de nagut-ta.
 John_i-Nom George_j-Acc self_{i/j}-Gen baseball.bat-with strike-Pst
 ‘John struck George with his own baseball bat.’



As is clear in the structure in (13), the antecedent of *zibun* is the agent argument introduced as the specifier of the voice phrase. The internal argument *George* in (13b) cannot be the antecedent of *zibun*.

In passive and causative sentences, not only the subject but also the agent of the lower predicate can be the antecedent of *zibun*.

- (15) a. Causative
 John_i-ga George_j-ni Mary_k-o zibun_{i/j/*k}-no kaisha de yatow-ase-ta.
 John_i-Nom George_j-Agt Mary_k-Acc self_{i/j/*k}-Gen company at employ-Caus-Pst
 'John_i made George_j hire Mary_k at self_{i/j/*k} company.'
- b. Adversity
 John_i-ga George_j-ni Mary_k-o zibun_{i/j/*k}-no busho kara hazus-are-ta.
 John_i-Nom George_j-Agt Mary_k-Acc self_{i/j/*k}-Gen department from remove-Pass-Pst
 'John_i was affected by George_j transferring Mary_k from self_{i/j/*k} department.'



As was the case with simple declarative sentences, the argument introduced in VoiceP can be coreferential with *zibun*. The causee in causative sentences and the affectee in adversity passive sentences are also eligible to be the antecedent of *zibun*. What is common to the structures in (16) is that the argument introduced inside the verb phrase, that is, the internal argument, cannot be the antecedent of *zibun*.

In ditransitive sentences, neither the object nor the indirect object can be the antecedent of *zibun*.

- (17) a. John_i-ga George_j-ni Mary_k-o zibun_{i/*j/*k}-no tugoo-de azuke-ta.
 John_i-Nom George_j-NI Mary_k-Acc self_{i/*j/*k}-Gen convenience-for entrust-Pst
 'John_i entrusted Mary to George for (his_i) selfish reasons.'

- b. John_i-ga George_j-ni zibun_{i/j}-no shootai-o akasi-ta.
 John_i-Nom George_j-NI zibun_{i/j}-Gen identity-Acc reveal-Pst
 'John_i revealed his_i identity to George.'
 c. John_i-ga Mary_j-o zibun_{i/j}-no kamera-ni osame-ta.
 John_i-Nom Mary_j-Acc self_{i/j}-Acc camera-NI store-Pst
 (Lit.) 'John_i stored Mary in his_i camera.'
 (= 'John_i took a picture of Mary with his_i camera.')

The order of the direct object and the indirect object is reversed between (17b) and (17c). If scrambling has something to do with *zibun*-binding, either the indirect object *George* in (17b) or the direct object *Mary* in (17c) should be possible as the antecedent of *zibun*. However, neither NP can bind *zibun*. It is, therefore, safe to say that neither the direct object nor the indirect object can be the antecedent of *zibun*. Consequently, it can be said that internal arguments cannot be the antecedent of *zibun*.

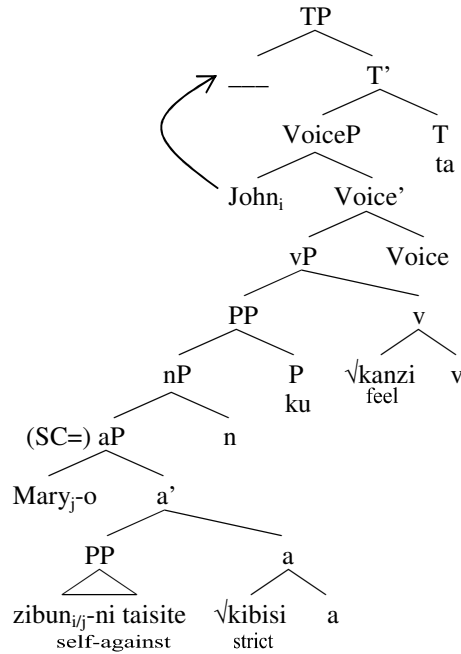
3.3 *Zibun* as Evidence for Small Clauses

The anaphor *zibun* can be bound by a non-object phrase inside or outside of its domain. The following sentences consist of a small clause candidate and a full embedded clause.

- (18) a. Small clause candidate
 John-ga Mary-o zibun-ni taisite kibisi ku kanzi-ta.
 John_i-Nom Mary_j-Acc self_{i/j}-to:facing strict P feel-Pst
 'John thought that Mary was strict with herself/him.'
 b. Full embedded clause
 John-ga [Mary-ga/o zibun-ni taisite kibisii-to] kanzi-ta.
 John_i-Nom Mary_j-Nom/Acc self_{i/j}-to:facing strict-C feel-Pst
 'John thought that Mary was strict with herself/him.'

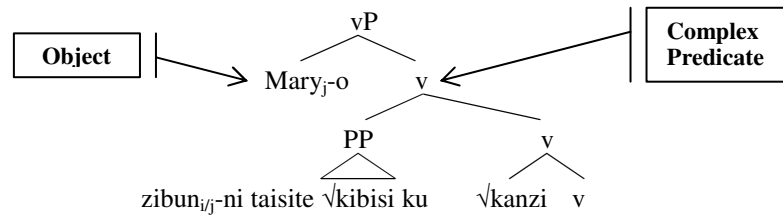
In the case of the full embedded clause (18b), *zibun* can refer to either *John* or *Mary*. The important thing to note here is that although *Mary* in (18b) can be in accusative Case, it is clearly not the object of the sentence. The potential subject of the small clause in (18a), *Mary*, can also be coreferential with *zibun*. This suggests that *Mary* is indeed the subject of the small clause. The structure for (18a) is shown in (19).

(19)



Under the complex predicate analysis, the two predicates are combined to form one larger predicate as in (20).

(20)



This complex predicate takes the second noun phrase as its complement, which means that this noun phrase is the internal argument of the predicate. *Zibun* cannot refer to an internal argument of a sentence. The grammaticality of the sentence in (18a) cannot be explained by the complex predicate analysis. Therefore, the small clause analysis is clearly superior to the complex predicate analysis.

4. Honorifics

The sentences below contain subject honorification, where respect is paid to *sensee* ‘teacher.’

- (21) a. **Sensee-ga** John-o **o-home** ni nat-ta.
 teacher-Nom John-Acc Hon-praise P become-Pst
 ‘The teacher praised John.’
- b. John-ga **sensee-o** home-ta.
 John-Nom teacher-Acc praise-Pst
 ‘John praised the teacher.’
- c. **Sensee-ga** [**kootyoo-ga** **o-modori** ni nat-ta-to] **o-omoi** ni nat-ta.
 teacher-Nom [principal-Nom Hon-return P become-Pst-C] Hon-think P become-Pst.
 ‘The teacher thought that the principal returned.’
- d. John-ga [**sensee-ga** **o-modori** ni nat-ta-to]_{CP} omot-ta.
 John-Nom [teacher-Nom Hon-return P become-Pst-C] think-Pst
 ‘John thought that the teacher returned early.’
- e. **Sensee-ga** [John-o/ga hayaku modot-ta-to]_{CP} **o-omoi** ni nat-ta.
 teacher-Nom [John-Acc/Nom early return-Pst-C] Hon-think P become-Pst
 ‘The teacher thought that John returned early.’

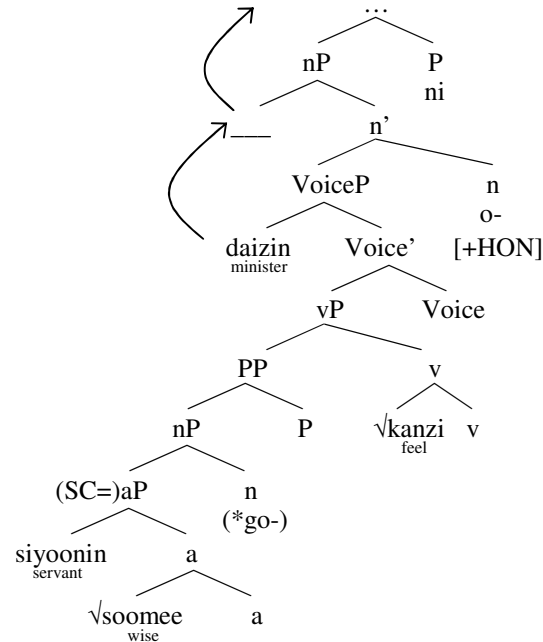
These examples show that honorification must be triggered by an argument within the same clause, which is the subject of the clause. This further suggests that if a noun phrase in a small-clause type of structure can be the trigger of subject honorifics within the small clause, that noun phrase must be a syntactic subject.

The following sentences are small-clause type of structures where an honorific prefix *go-* is on the predicate. In these sentences, *daijin* ‘minister’ and *kokuoo* ‘king’ are the potential triggers of the honorification whereas *shiyoonin* ‘servant’ is considered unworthy of respect.

- (22) a. **Daizin-ga** **kokuoo-o** **go-soomee** ni **o-kanzi** ni nat-ta.
 Minister-Nom king-Acc Hon-wise P Hon-feel P become-Pst
 ‘The minister felt that the king was wise.’
- b. Siyoonin-ga **kokuoo-o** **go-soomee** ni kanzi-ta.
 servant-Nom king-Acc Hon-wise P feel-PST
 ‘The servant felt that the king was wise.’
- c. **Daizin-ga** siyoonin-o (***go-**)soomee ni **o-kanzi** ni nat-ta.
 Minister-Nom servant-Acc wise P Hon-feel P become-Pst
 ‘The minister felt that the servant was wise.’

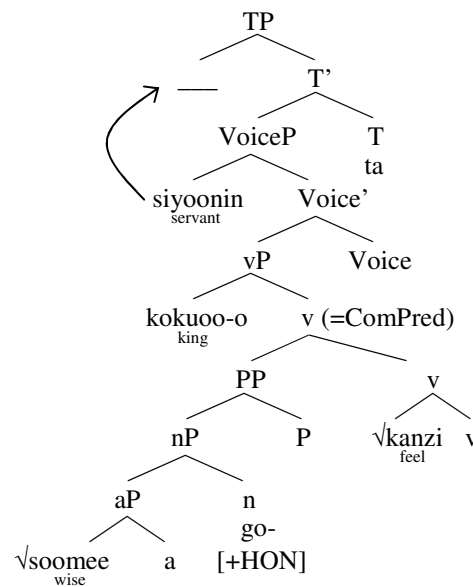
The fact that the honorific prefix *go-* [+HON] on the predicate cannot be triggered by the minister which is in the matrix clause in (22c) confirms that the honorific on the embedded predicate can only be triggered by the second argument. What can be concluded from this data is that the second noun phrase is the subject of the embedded predicate, which supports the small clause analysis. To illustrate this point, the structure for (22c) is shown below.

(23)



There are two problems with adopting the complex predicate analysis. The structure under this approach for (22b) is shown below.

(24)



The obvious problem with the structure in (24) is that the honorific feature remains unchecked. Since the inner argument is generated outside the inner predicate, it should not be able to trigger the honorification on the adjective. The inner predicate is indeed honorified in (22a-b). One may argue against this by positing a different structure. However, the co-occurrence of two honorifics within the same sentence in (22a) is still inexplicable. Under the complex predicate analysis, the sentences (22a-c) consist of one clause. If the complex predicate analysis was indeed correct, there should not be two subject honorifics within the same sentence. These problems further prove the superiority of the small clause analysis.

5. English

Irimia (2012) and Williams (1983) looked at scope relations in small clause constructions in English. They compare a raising construction with an existential sentence with a non-infinitival complement.

- (25) A student seems to be sick.
 =A specific student seems sick. (a>>seem)
 =Some student or other seems sick. (seem>>a)

- (26) A student seems sick.
 =A specific student seems sick. (a>>seem)
 ≠Some student or other seems sick. (*seem>>a)

(Irimia 2012: (3,4), cf. Williams 1983: (20a))

In English, the raising construction in (25) has two readings available whereas in the sentence (26), there is only one reading where the quantifier ‘a’ takes a wider scope over the existential verb ‘seem.’ Therefore, the complex predicate analysis is appropriate in English.

6. Conclusion

Within Universal Grammar, there seem to be two types of derivation available for small-clause type of constructions. In English, there is concrete evidence that the complex predicate analysis is appropriate. However, as we have seen, negative polarity items, the anaphor *zibun*, and honorifics all suggest that there are small clauses in Japanese. Although Irimia (2012) seems to suggest that there are no complement small clauses², but only complex predicate structures available in Universal Grammar, the arguments made here for Japanese suggest that such a conclusion is at least premature, and possibly incorrect.

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² Irimia (2012) does admit that we may need an approach different from the complex predicate analysis (possibly the small clause analysis) to account for circumstantials and “absolutes” such as (i-ii).

- (i) Romanian Circumstantial
 Ion a plecat, nervos.
 John has left angry.M.Sg
 ‘John left {because, although,...} he was angry.’
- (ii) Irish Absolute (cited in Irimia 2012; Chung and McCloskey 1987: (3a))
 Tháinig sé isteach agus é iontachsásta leis féin.
 came he in and him very satisfied with himself
 ‘He came in (although he was) very satisfied with himself.’

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