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.  
       \[ \text{consider} \quad \text{SC} \]
           \[ \text{Mary} \quad \text{intelligent} \]

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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})

a. I ___ Mary [consider intelligent]_{ComPred}

b. …

Mary  ComPred
      consider  intelligent (Irimia 2012, Chomsky 1975)

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.

(3)

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 \( \text{dare-mo} \) ‘anyone’, and the other is exceptive NPIs such as \( \text{NP-sika} \) ‘only NP’ (Shimoyama 2011). An example of each is shown below.
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.

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

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
   \[
   \begin{array}{c}
   \text{NegP} \\
   \text{XP} \\
   \text{YP} \\
   \text{X}
   \end{array}
   \]

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 \(-\text{na}(l)\) appears. There is another type of negation in Japanese \(-\text{ni}u\,(-\text{zu})\). However, since it is not relevant to the discussion of small clauses, it will be omitted.

(9) a. 
   \[
   \begin{array}{c}
   \text{John-wa} \\
   \text{kasiko-ku} \\
   \text{na}. \\
   \text{ Neg.Prs}
   \end{array}
   \]
   'John is not wise.'

b. 
   \[
   \begin{array}{c}
   \text{John-wa} \\
   \text{kasiko-ku} \\
   \text{na-ku mie-ru}. \\
   \text{Neg.P Prs}
   \end{array}
   \]
   'John looks wise.'

b'. 
   \[
   \begin{array}{c}
   \text{John-wa} \\
   \text{kasiko-ku} \\
   \text{mie-na}. \\
   \text{ look-Neg}
   \end{array}
   \]
   'John doesn’t look wise.'

c. 
   \[
   \begin{array}{c}
   \text{John-wa} \\
   \text{serori-o} \\
   \text{tabe-na}. \\
   \text{eat-Neg.Prs}
   \end{array}
   \]
   'John doesn’t eat celery.'

d. 
   \[
   \begin{array}{c}
   \text{John-wa} \\
   \text{kane-ga} \\
   \text{na}.^1 \\
   \text{missing.Prs}
   \end{array}
   \]
   'John does not have money.'

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\(^1\text{Nai can be used as an attributive adjective as in (i). However, this use is quite limited.}\)

(i) 
   \[
   \begin{array}{c}
   \text{Nai} \\
   \text{mono-wa} \\
   \text{na}. \\
   \text{missing}
   \end{array}
   \]
   'What’s gone is gone.'
(9a-c) are the examples where \( \textit{nai} \) negates a predicate. In (9d), \( \textit{nai} \) itself is used as a predicate. In (9a, b), \( \textit{kasiko(i)} \) ‘wise’ is negated whereas \( \textit{tabe(ru)} \) ‘eat’ is negated in (12c). As is clear, whenever \( \textit{nai} \) 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).

    ‘John felt that George was not suitable.’

b. Adjunct 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.
    ‘Anyone felt that George wasn’t suitable.’
    (Intended: ‘No one felt that George was suitable’)

    ‘Only John felt George was suitable.’
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.

    John-Nom who-NPI that.job-for suitable-P Neg-P feel-Pst
    ‘John felt that no one was suitable (for the job).’

    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\,-ga kako-no zibun,-o hurikaet-ta.
    John-Nom past-Gen self-Acc look.back-Pst
    ‘John looked back on his own past.’

    b. John\,-ga George,-o zibun\,-no batto-de nagut-ta.
    John-Nom George-Acc self-Gen baseball.bat-with strike-Pst
    ‘John struck George with his own baseball bat.’

(14) a. \[\begin{array}{c}
    \text{TP} \\
    \text{VoiceP} \\
    \text{John} \\
    \text{vP} \\
    \text{kako-no zibun,-o} \\
    \text{\textbackslash hurikae} \\
\end{array}\]

    b. \[\begin{array}{c}
    \text{TP} \\
    \text{VoiceP} \\
    \text{John} \\
    \text{vP} \\
    \text{George,-o} \\
    \text{zibun\,-no batto de} \\
    \text{nagut} \\
\end{array}\]

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, Nom George, Agt Mary, Acc *self* Gen company at employ-Caus-Pst
   
   ‘John made George hire Mary at self’s company.’

   b. **Adversity**
   
   John_i-ga George_j-ni Mary_k-o zibun_i/*j/*k-no busho kara hazus-are-ta.
   
   John, Nom George, Agt Mary, Acc *self* Gen department from remove-Pass-Pst
   
   ‘John was affected by George transferring Mary from self’s department.’

(16) a. **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, Nom George, NI Mary, Acc *self* Gen convenience-for entrust-Pst
   
   ‘John entrusted Mary to George for (his) selfish reasons.’
John-Nom George-NI zibun-generator identity-Acc reveal-Pst  
‘John, revealed his identity to George.’

John-Nom Mary-Acc self-Acc camera-NI store-Pst  
(Lit.) ‘John, stored Mary in his camera.’  
(= ‘John, took a picture of Mary with his 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-Nom Mary-Acc self-to;facing strict P feel-Pst  
‘John thought that Mary was strict with herself/him.’

b. Full embedded clause  
John-Nom Mary-Nom/Acc self-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).
Under the complex predicate analysis, the two predicates are combined to form one larger predicate as in (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.’

    teacher-Nom John-Acc Hon-praise P become-Pst
    ‘The teacher praised John.’

    John-Nom teacher-Acc praise-Pst
    ‘John praised the teacher.’

    ‘The teacher thought that the principal returned.’

    ‘John thought that the teacher returned early.’

    ‘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 \textit{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.
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 clauses\(^2\), 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.

References


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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 Circumstancial

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 iontach sásta leis féin.  
came and him very satisfied with himself

‘He came in (although he was) very satisfied with himself.’