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The Syntax of Kikai: A Preliminary Study

Masaru Honda and Yusuke Imanishi

Introduction

This paper attempts to describe the syntactic properties of the Kikai language in terms of complementizers, NP ellipsis, and the Case marking system.

Kikai Island is a small island located 69 km northeast of Amami City, Kagoshima prefecture (see the map in (1)), and has an area of 57 square kilometers. The island has 43 local communities, with a total population of 7,621 (August, 2014). The Kikai language is one of the endangered languages in Japan; only people aged above 60 speak the language. Though communities are not far apart from each other, dialectal variation is not small. They are interestingly distinct in phonology, syntax and vocabulary.

The National Institute for Japanese Language and Linguistics (NINJAL) conducted large-scale fieldwork in 2010, which covered 10 communities on the island. Their purposes include the description, preservation and enlightenment of the Kikai language.

In this paper we aim at revealing the syntactic properties, which definitely distinguish the Kikai language from Standard Japanese. We focus on the Nakazato dialect spoken in the southern part of the island (see the map in (2)) in order to explore distinctive grammatical structures. The following research questions can be raised:

A. Does a complementizer play any role in syntactically distinguishing the Kikai language from varieties of Japanese?
B. Does NP ellipsis exist in the Kikai language as it does in Standard Japanese?
C. What are grammatical patterns of the Case marking system of the Kikai language?

To address these questions we conducted interviews with two informants, who grew up and live in the Nakazato community. Both of them are bilingual in the Kikai language and Standard Japanese.

1. Phonological properties of Kikai

According to Kibe (2011), phonological properties differ considerably between the northern and the southern dialects. The Nakazato dialect is spoken in the southern part, and has the following vowel system:

(3) Short vowels:
   i (i / ɪ) u
   a

(4) Long vowels:
   i: (i:/ɪ:) u:
   e: o:
   a
Kibe shows that distinction in tenseness in both short and long high front vowels is fluctuating in the Nakazato dialect, but the informants in our survey appear to distinguish between high front tense and lax vowels.

What is characteristic in the consonant system is the existence of the glottal stop \( \ddot{\text{ʔ}} \), which manifests in words such as \( \ddot{\text{ʔ}}\text{Nŋa} \) ‘man’ and \( \ddot{\text{ʔ}}\text{Nŋa} \) ‘dog’. In this paper we follow phonetic/phonological descriptions adopted in Kibe, et al. (2011).

2. Complementizer

It has been argued that a complementizer plays an important role in dialectal variation. In particular, a complementizer agrees with subject of a subordinate clause in dialects in Germanic and Romance languages (Carstens 2003, Poletto 2001, among others).

In Japanese, Saito (1984) and Fukuda (2000) claim that the complementizer drop is possible in some dialects. Consider the following examples.

(5) Mary-ga kinoo John-ni Kobe-ni iku to itta.
Mary-Nom yesterday John-Dat go Comp said ‘Mary said to John that she was going to Kobe yesterday.’

In Standard Japanese, the complementizer to cannot be deleted, as shown in (5). In the western dialect of Japanese (e.g., the Kobe dialect), however, complementizer deletion is possible. (6) is an example of the Kobe dialect.

Mary-Nom yesterday John-Dat Kobe-to go Comp said ‘Mary said to John that she was going to Kobe yesterday.’

b. Mary-ga kinoo John-ni Kobe-ni iku Ø yuuteta (koto).
Saito (1984)

Even in this dialect, the sentence becomes ungrammatical if the embedded clause is moved.

(7) *Mary-ga kinoo Kobe-ni iku Ø John-ni yuuteta (koto).
Mary-Nom yesterday Kobe-to go Ø John-Dat said.
Saito (1984)

Fukuda (2000) argues that deletion as in (7) results in a well-formed sentence in the Hiroshima dialect.

(8) a. Omae sensei-ni [Taroo-ga manuke ja] yuuta rooga?
You teacher-Dat Taroo-Nom stupid be said don’t you?
‘You said to the teacher that Taroo was stupid, didn’t you?’

b. Omae [Taroo-ga manuke ja] sensei-ni yuuta rooga?
Fukuda (2000)

A complementizer does not exist in (8a) or (8b), but both sentences are fully grammatical. These examples show that a complementizer is not needed in the Hiroshima dialect even when the embedded clause is moved from the position adjacent to the governing verb.

It is curious to see whether a complementizer can be deleted in Kikai in the base position as in the Kobe dialect or in the moved position as in the Hiroshima dialect. Consider the following examples.

(9) a. \( \ddot{\text{ʔ}}\text{un mıtgi jie hirusa nentar\(\ddot{\text{i}} \text{ʔ} \)umujui.}
this road-Top wide not was-that think ‘I think that this road was not wide.’

b. *\( \ddot{\text{ʔ}}\text{un mıtgi jie hirusa nentan-Ø \text{ʔ} \)umujui.

As the (b) sentence shows, the complementizer cannot be deleted even in the base position. The complementizer system in Kikai is considered similar to the one in Standard Japanese, though its syntactic behavior has to be tested with verbs other than epistemic verbs.

3. NP ellipsis

Another interesting syntactic phenomenon is one called NP ellipsis or NP deletion, which was first observed by Jackendoff (1971) and has been discussed by Saito and Murasugi (1990) and Maeda and Takahashi (2013). In English this is illustrated by the following example.

(10) Tom’s dog with one eye attacked Fred’s Ø.
Jackendoff (1971)

The Japanese counterpart is given as follows.

(11) Taroo-no kuruma-ha ookii-ga, Hanako-no Ø-wa tiisai.
Taroo-Gen car-Top big-but, Hanako-Gen Ø-Top small
‘Taroo’s car is big, but Hanako’s small.’
Standard Japanese extensively allows constructions like (11). However, Kikai does not allow NP deletion at all.

(12) a. ʔuɾe: ʔuttu:nu muŋkamu wakarə:.  
that brother-Gen one-might seem  
‘That might seem to be my brother’s one.’  
(Shimoji 2011: 0973)  
b. ʔuɾe: ʔuttu:nu ø-kamu wakarə:.  

(13) a. ṭun hasaŋa wa: munđəa.  
that umbrella my one-is  
‘That umbrella is mine.’  
b. ṭun hasaŋa wa: ø-ɗa.  
(Shimoji 2011: 0771)  

Grammaticality judgments in these examples indicate that the head noun is obligatorily required in Kikai while it is deleted in Standard Japanese.

4. The case marking system of Kikai

In the sections that follow, we will address several issues concerning the case marking system of Kikai. After sketching the basic case alignment of grammatical relations, we will present a set of novel data suggesting that Kikai exhibits typologically interesting case marking patterns. First, the two types of accusative case marker (= -ø and -(j)oba), which appear to freely alternate, are regulated by certain grammatical properties of the object. In this respect, object marking in Kikai displays behaviors that may be taken as an instance of differential object marking found in a wide range of languages such as Hebrew, Romanian, Turkish etc. (Aissen 2003; Comrie 1989; Silverstein 1976 inter alia). Second, subject marking in verbal predicate sentences displays split intransitivity, a phenomenon widely attested in the world’s languages (Dixon 1994; Mithun 1991 inter alia), in subordinate clauses, but not in main clauses. Another intriguing property of case marking in Kikai is that the subject of adjectival clauses requires differential case marking in certain type of aspect, depending on the semantic type of the adjective: case marking is sensitive to the distinction between stage-level and individual-level adjectives (Kratzer 1995).

4.1. Case marking in verbal predicate clauses

4.1.1. Subjects

Kikai is a dependent-marking language in the sense that nominals bear morphological case (Nichols 1986). Kikai is also a nominative-accusative language, just like Japanese and many other languages, in terms of the alignment between morphological case and grammatical relations: all subjects are marked the same way, to the exclusion of the transitive object. Subjects are marked with nominative case, whereas transitive objects are marked with accusative case. This is summarized as in Table 1. We will discuss case marking patterns that deviate from this basic alignment in 4.2. and 4.3.

Table 1: The case alignment of Kikai in verbal predicate clauses

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<tr>
<td>Transitive</td>
<td>Nominative</td>
<td>Accusative</td>
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S = subject; O = object

The case morphology of Kikai is given in (14) (see Shimoji 2011 for an exhaustive list of case morphology of the language).

(14) a. nominative = -ŋa  
b. accusative = ø or -jo:ba (or -o:ba)  
c. genitive = -nu  
d. dative = -nʔi  
e. topic = -ja

Let us first consider the case marking system of main or simple clauses in Kikai. As shown by (15), the subject of intransitive sentences is marked with nominative case. There is no difference between unergative subjects (=15a) and unaccusative subjects (=15b) with respect to case marking.

(15) a. ʔiNŋa-ŋa udutui.  
man-Nom     is.dancing  
‘A man is dancing.’  
b. ʔamiŋa φuttuNdoo:  
rain-Nom     is.raining  
‘It is raining.’  

Similarly, the transitive subject is marked with nominative case, as seen in (16).

(16) warabi-ŋa maNɛu:-ø kadi.  
child-Nom    red.bean.bun-Acc     ate  
‘The child ate a red bean bun.’

We limit our discussion to case marking of subjects and direct objects. We refer the reader to Shimoji (2011) for case marking patterns of other arguments such as obliques and possessors.
As pointed out by Shimoji (2011), genitive subjects are generally disallowed in main/simple clauses. While no negative data are provided in Shimoji, the following example confirms this.

(17) *ŋa-nu udutui.
    man-Gen is.dancing

‘(intended) A man is dancing.’

Example (17) shows that the genitive-marked unergative subject is ungrammatical. Likewise, unaccusative subjects resist genitive marking, as seen in (18).

(18) a. kuɾuma-ŋa/*nu tɕa:riti.
    car-Nom/Gen disappeared

‘The car disappeared’

b. tama-ŋa/*nu ma:tiɡzi.
    ball-Nom/Gen rolled.down

‘The ball rolled down.’

The ungrammaticality of (17) and (18) further suggests that the animacy of subjects does not affect case marking: neither the animate subject nor the inanimate subject allows genitive marking.

However, our survey has revealed that one unaccusative verb displays a behavior that contradicts the generalization made above. As shown in (19), the speakers allow the subject of the unaccusative predicate ḟuttuNdo: ‘is raining’ to be marked with genitive case in simple clauses.

(19) ʔami-ŋa ḟuttuNdo:
    rain-Gen is.raining

‘It is raining.’

A similar observation is made by Shimoji (2011) for variants of Kikai spoken in different regions such as Onozu. It is unclear whether this exception holds for other unaccusative verbs. We leave a detailed analysis of this exceptional behavior for future research.

4.1.2. Objects

What is remarkable about case-marking found in transitive clauses is that accusative case for the object may be either null (¼) as shown above in (16) or overt (= -jo:ba). The example with the overtly case-marked object is given in (20).

(20) waɾabi-ŋa maNзу-jo:ba kadi.
    child-Nom red.bean.bun-Acc ate

‘The child ate a red bean bun.’

As shown in (21), the position of the object seems to play no role in the distribution of the accusative markers. In (21), where the object appears clause-initially, both null and overt case markers are possible: grammatical elements may be scrambled in Kikai, just as in Japanese.

(21) maNзу-jo:ba/-ø waɾabi-ŋa kadi.
    red.bean.bun-Acc child-Nom ate

‘The child ate a red bean bun.’

As can be seen in (22), moreover, case marking is insensitive to the animacy of the object: the animate object (i.e., the proper noun Hanako) may appear either with or without the overt case marker, thereby patterning with the inanimate object as discussed above.

(22) wa-ŋa Hanako-jo:ba/-ø abiti.
    I-Nom Hanako-Acc called

‘I called Hanako.’

While the examples above give the impression that the two types of accusative marker alternate freely, there are several grammatical features that appear to regulate the use of the markers. First, the overt accusative marker seems to occur more frequently with modified nominals. As seen in (23), -jo:ba is preferred with the quantified object.

(23) waɾabi-ŋa puntu/mi:tu-ŋu maNзу-jo:ba kadi.
    child-Nom all/three-Gen red.bean.bun-Acc ate

‘The child ate all of the red bean buns/three red bean buns.’

Second, a focused nominal appears more preferably with the overt accusative marker than with the null marker. Given that the constituent functioning as an answer to a wh question receives focus, the object saɡimi in (24b) can be perceived as a focused element in the clause. Crucially, it co-occurs with the overt accusative marker.

(24) a. maNзу-jo:ba kadi.
    red.bean.bun-Acc ate

‘The child ate a red bean bun.’

b. ʔaŋa ʃaka-ɡimi maNзу-jo:ba kadi.
    rain-Gen/acc red.bean.bun-Acc ate

‘The child ate the red bean bun(s) while it was raining.’

2 A subset of Ryukyuan languages such as the northern variant/dialect of Amami (Matsumoto 1993) allows genitive subjects as well as nominative subjects in main/simple clauses.

3 Shimoji’s (2011) description seems to suggest that the genitive subject occurs with unaccusative or non-verbal (e.g., adjectives) predicates. She also observes that use of genitive case for subjects is subject to idiolectal variation, presumably because the function of nominative case and genitive case is in the process of disambiguation: the former is limited to subjects, whereas the latter is to possessors.

4 We abstract away from discussion of objects in ditransitives and causatives (see Shimoji 2011 for relevant discussion).
The range of properties of object case marking described above bear some resemblance to the phenomenon called differential object marking, or DOM (Aissen 2003; Comrie 1989; Silverstein 1976 inter alia). It is cross-linguistically common that within a language some objects are overtly case-marked, but not others, depending on semantic and pragmatic features of the object (Aissen 2003). Aissen notes that languages displaying DOM include the Indo-European family (especially in Indo-Iranian and Romance), Pama-Nyungan, Dravidian, Uralic, Afro-Asiatic among others. The general tendency of DOM can be stated as in (26), based on the functional/typological literature.

(26) The higher in prominence a direct object, the more likely it is to be overtly case-marked.

Prominence is assessed on the following two scales.

(27) Animacy scale:
Human > Animate > Inanimate

(28) Definiteness scale:
Personal pronoun > Proper name > Definite NP > Indefinite specific NP > Non-specific NP

Regarding the relation between (26) and the two scales, Aissen (2003: 437) states that “if in some language a direct object at some rank can be case-marked, then higher-ranked direct objects in that language can be case-marked, but not necessarily lower ranked ones”.

Hebrew is a typical example of DOM. The preposition ‘et- marks definite objects obligatorily, but not indefinites, as seen in (29): the indefinite object is ungrammatical with ‘et-.

(29) a. Ha-seret her’-a ‘et-ha-milxama.
   The movie showed Acc-the-war
   ‘The movie showed the war.’

b. Ha-seret her’-a (*‘et)-milxama.
   the-movie showed (Acc)-war
   ‘The movie showed a war.’

(Aissen 2003: 453)

Similar properties are observed in Turkish and other languages (see Aissen 2003 for a fully integrated optimality theoretic account of a diverse group of languages with DOM).

We have observed that in Kikai the animacy of the object does not seem to affect the choice between a null accusative marker and an overt accusative marker. In contrast, we have pointed out that other semantic/pragmatic features of the object may govern the distribution of the two accusative markers: i.e., modified objects and focused/contrasted objects favor overt case marking. To the extent that modification and focus/contrast could express specificity of the object, the definiteness scale given in (28) becomes relevant to object marking in Kikai. If an (indefinite) specific NP is a ‘cut-off’ point on the scale in Kikai, we would predict that higher-ranked objects such as definite NPs, proper names and personal pronouns are likely to favor overt marking by ‘jo:ba.

Since the data we could use as a testing ground for this prediction are not available at the moment, we leave it for our future research. While a detailed analysis of the correlation between object case markers and grammatical features of the object must await further research, object case marking in Kikai has the potential to fit into the typology of DOM.

4.2. Split intransitivity

We have noted in 4.1.1 that all subjects, including transitive and intransitive subjects, are marked with nominative case in simple/main clauses. By contrast, we will show below that the subject of intransitive sentences does not behave homogeneously with respect to case marking in subordinate clauses.

In subordinate clauses, unaccusative verbs may have a genitive-marked subject as well as a nominative-marked subject. This is shown in (30).

(30) [ʔami-ɾa/nu ɾuN-dukini] ʔani-ɾa ɾgi. rain-Nom/Gen was.raining-when old.lady came
   ‘When it was raining, an old lady came.’
On the other hand, unergative and transitive verbs can only have a nominative-marked subject in subordinate clauses, as seen in (31) and (32).

(31) [Taro-ŋa?nu udutun tokini]  ʔani-ŋa tgi. Taro-Nom/Gen was.dancing-when old.lady came
‘When Taro was dancing, an old lady came.’

(32) [Taro-ŋa/ŋa muN kadun tokini]  ʔani-ŋa tgi. Taro-Nom/Gen meal was.eating-when old.lady came
‘When Taro was eating a meal, an old lady came.’

This contrast may be taken as an instance of split intransitivity, a phenomenon found in various languages (Dixon 1994; Mithun 1991 inter alia). Split intransitivity refers to situations in which the subject of unergative and transitive verbs behave the same way, and differently from unaccusative subjects, which in turn share certain properties with transitive objects. However, the contrastive case marking in subordinate clauses of Kikai cannot be completely equated with split intransitivity in the following respect. The unaccusative subject does not behave on a par with the transitive object in terms of case marking, as in languages with split intransitivity: the object cannot be marked with nominative case, as seen in (33): it cannot be nominative-marked.

(33) a. un mitci-ŋa/*ŋa čirosa-jo.
   this road-Gen/Nom wide-Prt
   ‘This road is wide.’

b. Taro-ŋa/*ŋa ubisa-jo.
   Taro-Gen/Nom tall-Prt
   ‘Taro is tall.’

In contrast, the subject of stage-level adjectives may bear either nominative or genitive case, as shown in (34).

(34) a. mi-ŋa kajo:sa.
    eye-Gen/Nom itchy
    ‘I have itchy eyes.’

b. sa-ŋa ja:-*jajui.
    leg-Gen/Nom painful
    ‘My legs hurt.’

This contrastive case marking pattern is not predicted from the basic case alignment of the language.

However, investigation of sentences in a different type of aspect presents us with another puzzle. To be precise, different case marking patterns arise in the perfective aspect, compared to the sentences in the non-perfective aspect observed above. Consider the examples of individual-level adjectives in (35).

(35) a. mukače uN mitci/ŋa/hifosata muNaga.
    long.time.ago this road-Gen/road.Top was.wide ??
    ‘This road used to be wide.’

b. mukače uN ja:-*nj a ubisata muNaga.
    long.time.ago this house-Gen/Top was.big ??
    ‘This house used to be big.’

Unlike in the non-perfective aspect, genitive case-marking also applies to adjectival sentences in the perfective aspect. The semantic distinction between stage-level and individual-level predicates plays a number of salient roles in natural language (see also Carlson 1977 and Diesing 1992 among others). Stage-level predicates denote transient properties of a referent, whereas individual-level predicates denote inherent or enduring properties of a referent.

With this in mind, let us introduce case marking patterns of adjectival sentences in Kikai. Strikingly, the subject of individual-level adjectives must be marked with genitive case, as seen in (33): it cannot be nominative-marked.

5 However, Shimoji (2011: 94) notes that nominative case can be attached to the object of stative predicates such as psych and potential predicates.

6 While Shimoji (2011) analyzes sentences like those in (33) as exclamatives, one of our consultants reports that these forms (especially the ones with the sentence-final particle -jo) are used when an utterance involves the addressee. One might argue that the particle -jo has something to do with case-marking in adjectival sentences. However, we have confirmed that forms without -jo display the same case marking pattern as in (33).

7 For reasons unknown to us, the speakers prefer to use the phrase muNaga in sentence-final position of individual-level adjectival sentences. Further research is necessary on the function and semantic interpretation of this lexical item.
case may not be used for the subject of individual-level adjectives in the perfective aspect. The subject is instead marked with the topic marker -ja: mitɕe: in (35a) is a contracted form of mitɕe and the topic marker -ja. Likewise, the subject of stage-level adjectives in the perfective aspect seems to resist genitive-marking, as seen in (36): it is marked with nominative case.

(36) a. sa-??nu/ŋa jadi.
   leg-Gen/Nom was.painful
   ‘My legs hurt/was painful.’
   b. tɕinu:-ja mi:-??nu/ŋa kajoosati.
   yesterday-Top eye-Gen/Nom was.itchy
   ‘I had itchy eyes yesterday.’

Table 2 summarizes the case marking patterns found in adjectival clauses.

<table>
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<tr>
<th>Case Marking</th>
<th>Non-perfective</th>
<th>Perfective</th>
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<tbody>
<tr>
<td>Individual-Level Adjectives</td>
<td>genitive (-nu)</td>
<td>topic(-ja)</td>
</tr>
<tr>
<td>Stage-Level Adjectives</td>
<td>nominative(-ŋa)</td>
<td>nominative(-ŋa)</td>
</tr>
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</table>

While we do not attempt to develop an account of the case marking patterns in adjectival clauses, it is worth mentioning that the split between the non-perfective aspect and the perfective aspect with respect to case alignment found in Kikai is a by no means rare phenomenon. As has been cross-linguistically discussed, many ergative languages display aspect-based split ergativity. Split ergativity refers to a situation in which a language exhibits an ergative-absolutive alignment system in one portion of the grammar, and a nominative-accusative (or “non-ergative”) alignment system in another (Anderson 1976; Silverstein 1976; Comrie 1978; Moravcsik 1978; Dixon 1979, 1994; Tsunoda 1981; Salanova 2007; Coon 2013, Imanishi 2014 etc.). The ergative split is conditioned mainly by four factors, one of which is tense/aspect/mood (TAM) (see the references above for details). A well-known tendency found in languages with TAM splits is that an ergative system is found in the perfective aspect, whereas an accusative (or non-ergative) system is found in the imperfective (or non-perfective) aspect. Although Kikai is arguably not an ergative language, a closer investigation of its split case marking system found in adjectival clauses promises to add important insights into a theory of case in natural language.

5. Conclusion

We have investigated the syntactic properties of Kikai, which distinguish the language from Standard Japanese; the complementizer system, NP deletion, and the Case marking system. The research is based on the fieldwork that we conducted in the summer of 2014. More data should be collected and analyzed to confirm what has been presented in this paper.

Acknowledgements

We are indebted to Mr. Kazuma Hisano and Mr. Teihiko Kuramoto, our Kikai informants and teachers, for their assistance with our fieldwork research. This research is supported by Grants-in-Aid for Scientific Research (no. 23652094) from the Japanese Ministry of Education, Culture, Science, and Technology (PI: Masaru Honda). Unless otherwise noted, the Kikai data are drawn from our field notes.

A list of abbreviations

Nom; nominative
Gen; genitive
Dat; dative
Acc; accusative
Top; topic
Comp; complementizer
Prt; sentence-final particle
Neg; negation

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8 We acknowledge that it is necessary to investigate whether nominative case may be attached to the subject of individual adjectives in the perfective aspect.


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