JAVANESE OBJECT VOICE AS AN UNDERGOER TOPIC CONSTRUCTION: INSIGHTS FROM PPs[*]

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The syntactic status of the preverbal constituent in object voice construction has been an ongoing debate. Two alternative analyses have been competing to provide answers. The split ergative analysis sees the preverbal constituent as a subject and considers object voice as an ergative pattern. The accusative analysis considers the preverbal constituent as a topic and thus object voice construction is an accusative pattern. By using Surabaya Javanese data, I argue that this construction is best analyzed an undergoer topic construction in three important regards: (1) it can surface as a reflexive of the initiator; (2) it can be a DP or PP; and, (3) it carries definiteness constraints.

1. Introduction

Surabaya Javanese,[1] like many other Indonesian-type languages, possesses an object voice (OV) construction characterized by (i) null voice morphology, (ii) fronting of the theme, and (iii) an initiator proclitic obligatorily attached to the verb; the proclitic shows restrictions in person and number: it can only be a first or second person singular pronoun, as seen in (1b).

(1) *Surabaya Javanese*
    a. Siti *ng*-rangkul arè' iku.   *actor voice (AV)*
       Siti AV-hug   child DEM[2]
       'Siti hugged that child.'
    b. Arè' iku   *ta'/mbo'/ *ḍi* =rangkul.   *object voice (OV)*
      child DEM 1SG/2SG=hug
      'I/you hugged that child.'
    c. *Ta'/mbo'*=rangkul arè' iku.   *object voice (OV)*
      1SG/2SG=hug   child DEM
      'I/you hugged that child.'

[1] Surabaya Javanese, also known as *arekan* [aɾɛʔan] dialect is the dialect used by by Javanese people living in Surabaya (a city in the northeastern part of Java island and along the edge of Madura strait) and its neigboring cities. A characteristic of Javanese is its speech levels: *kromo* (high), *madya* (middle), and *ngoko* (low). Some dialects actually have more than three levels. Surabaya dialect is characterized by its highly-frequent use of the low speech level (*ngoko*) and therefore considered as the least polite dialect among other dialects of Javanese. In this paper, all examples are in the *ngoko* speech level.
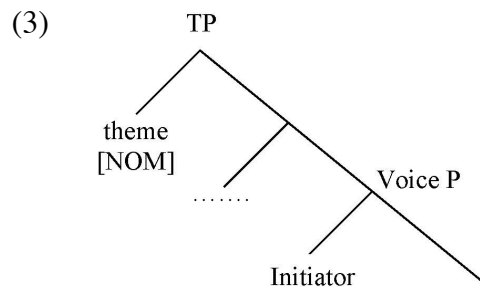
[2] The abbreviations used in this paper are: AV (actor voice), OV (object voice), SG (singular), DEM (demonstrative), DEF (definite), APPL (applicative), NEG (negative), PREP (preposition), PERF (perfect), RED (reduplication), REL (relativizer)

In (1a) the actor voice (AV) is indicated by a nasal prefix *ng-* attached to the verb *rangkul* 'hug'. The actor *Siti* is in the preverbal position and the theme *arè' iku* 'that child' is the postverbal position. In the object voice (OV) construction example (1b), there is no voice morphology. However, an initiator proclitic, either first or second person, needs to be attached to the verb *rangkul*. The theme *arè' iku* appears in preverbal position. However, in OV construction, the theme may also take the postverbal position without any change in meaning as exemplified in (1c). Therefore, the structures of AV and OV in Surabaya Javanese can schematized as follows.
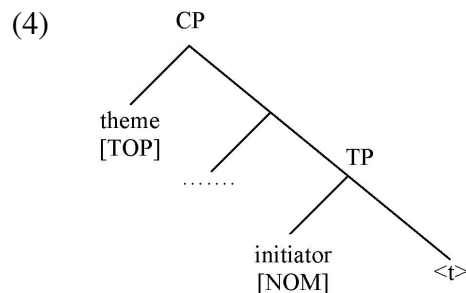
(2) Actor Voice: initiator   V   theme
    Object Voice: theme   initiator=V   (theme)

In AV, the initiator precedes the verb, while the theme follows it. In OV, the proclitic initiator is attached to the verb with the theme can either be a preverbal or postverbal constituent.

      Based on the behavior of the theme, which I refer to as pivot in this paper, there are two competing hypotheses that should be considered. Hypothesis A, which has been the traditional one, treats the pivot as a subject and the proclitic as an ergative agent. Under this split-ergative analysis, AV construction, as (1a), is considered as accusative aligned, while OV constructions like (1b) and (1c) exemplify an ergative pattern. Such analysis has been applied by, among others, Suhandano (1994) for Javanese, Aldridge (2004) for Indonesian, Legate (2014) for Acehnese, and Nurhayani (2014) for Central Javanese. Hypothesis B analyzes the pivot as a topic which occupies an Ā-position. Under this analysis, AV and OV constructions demonstrate the same accusative pattern. The proclitic, in this analysis, has the potential to be a subject. Topic analysis was proposed by, for example, Durie (1985) for Acehnese and Davies (1993) for Javanese. The structural differences between the two analyses are ilustrated by the tree diagrams in (3) and (4).

(3)

```
            TP
           /  \
          /    \
     theme      \
     [NOM]      /\
           /\  /  \
          .....   Voice P
                 /      \
                /        \
           Initiator      \
```

Hypothesis A
- pivot as a subject
- proclitic as an ergative agent

(4)

```
            CP
           /  \
          /    \
     theme      \
     [TOP]      /\
           /\  TP \
          ..... /\  \
               /  \  \
          initiator  <t>
           [NOM]
```

Hypothesis B
- pivot as a topic
- proclitic as a subject

Drawing on new data, in this paper, I argue that OV construction in Surabaya Javanese is best analyzed as an undergoer topic construction, whereby the fronted theme or the pivot is a topic located in a Ā-position, contra previous subject analyses for the pivot in typologically similar languages. In addition, I also argue that the proclitic in OV construction is a subject instead of an ergative agent.

This paper is organized as follows. In section 2, I present evidence from Surabaya Javanese in favor of the pivot as a topic. The claim of proclitic as a subject is discussed in Section 3. In Section 4, I briefly talk about the implication of Javanese OV as a mirror of Philippine-type non-Actor Voice. Section 5 is the analysis. Finally, I wrap up the paper with a conclusion in Section 6.

2. Pivot as a Topic

In this section, I present evidence to support the the analysis of pivot as a topic. The evidence includes the binding relation facts, definiteness constraints in topic, and the topic's ability to take prepositional phrases.

In Surabaya Javanese, the reflexive is expressed by the word *ḍéwé* 'self' that accompanies a certain word carrying the person information. Therefore, the reflexive for first person is *awa'ku ḍéwé* 'myself'; and for the second person reflexive, it is *awa'mu ḍéwé* 'yourself'. Crosslinguistically, a reflexive pronoun cannot be a subject. Therefore, the actor voice construction in (5) is ungrammatical because the position preceding the verb *nyenengi* 'AV like' is a subject position. In (5), the reflexive pronoun *awa'ku ḍéwé* does not have any antecedent.

(5) *[Awa'-ku   ḍéwé]$_i$ *ny*.eneng-*i*   aku$_i$.
     [body-1SG self]   AV.like-APPL 1SG
     (intended: 'I like myself.')

(6) a. [Awa'-ku   ḍéwé]$_i$ *ta'*$_i$=seneng-*i*.
        [body-1SG self]   1SG=like-APPL
        'I like myself.'
    b. [Awa'-mu   ḍéwé]$_i$ *mbo'*$_i$=seneng-*i*.
        [body-2SG self]   2SG=like-APPL
        'You like yourself.'

In an object voice construction, on the contrary, a reflexive pronoun may take the preverbal position. In (6a), the reflexive *awa'-ku ḍéwé* 'myself' takes the position before the verb *seneng* 'like'. Similarly, the reflexive *awa'-mu ḍéwé* 'yourself' in (6b) is also able to occupy the position prior the verb *benci* 'hate'. The reflexive themes in (6a) and (6b) have the opportunity o occupy the pre-proclitic-verbal position because a topic is an Ā-element. Since Ā-elements are expected to show reconstruction effects, their binding relation should be interpreted in their theta position. In (6a) and (6b), the reflexives are originally internal arguments. Therefore, the initiator proclitics can serve as antecedents. Accordingly, the pivot in Surabaya Javanese OV construction behaves more like a topic rather than a subject.

114

The second argument for the pivot as a topic is the definiteness constraint. In OV construction, a pivot has to be definite. In (7a) and (7b), the sentences are only grammatical when the object pivot *tas* 'bag' and *oman-omah* 'houses have the definite marker *é*.

(7) a. Tas-*(é)   *ta'*=guwa'.   *(OV)*
        bag-*(DEF)   1sg=throw
        'I have thrown the/*a bag.'
    b. Omah-omah-*(é)   *ta'*=bangun'.   *(OV)*
        house-RED-*(DEF)   1sg=build
        'I built his/her/*some house.'

In AV constructions, this definiteness constraint does not apply for the objects since they do not bear a pivot status. Therefore, in (8a) and (8b), the definite marker *é* is optional for the object *tas* and *tahu* 'tofu'.

(8) a. Aku *ng*-guwa'   tas-(é).   *(AV)*
        1SG AV-bring   bag-(DEF)
        'I brought a/the bag.'
    b. Aku *m*.angan   tahu.   *(AV)*
        1SG AV.eat   tofu
        'I ate some tofu.'

In AV, the definiteness constraint applies to the subjects, similar to the pivots in OV. The preverbal argument *wong* 'man' in (9a), which is a transitive sentence, must have a definite marker like the demonstrative *iku* 'that', otherwise the sentence will be ungrammatical. Likewise, *wong* in (9b) which precedes the unergative *mencolot* 'AV jump' needs to have the demonstrative *iku* as well.

(9) a. Wong   *(iku)   *n*-delo'   ḍemit-(é).   *(AV)*
        person *(DEM) AV-see   ghost-(DEF)
        'The/*a man saw the/a ghost.'
    b. Wong   *(iku)   *m*.encolot.   *(AV)*
        person *(DEM) AV.jump
        'The/*a man jumped.'

This shows that the Javanese AV construction are possibly subject topic constructions and the OV construction an object topic construction (Davies 1993; Durie 1985).

    Previous examples fo OV constructions are all transitives or two predicate sentences. Two predicate sentences have been typically involved in OV analysis, but not three predicate ones. Here, I will present data of three predicate sentences in which the third participant, other than agent and theme is available. Unlike the agent/initiator and theme, the third participant can be a prepositional phrase. This can provide new information about OV construction from Surabaya Javanese data.

    In examples (10a—10e), the preverbal constiuents are all prepositional phrases. The themes, on the other hand, remain in situ.

(10) a. Ambè' paku *ta'*=pasang gambar opo aé.   (instrument PP)
     with   nail 1sg=hang   picture   what AE
     'I hung any picture with a nail.'
   b. Nang Jakarta *ta'*=kirim surat opo aé.   (locative PP)
     to   Jakarta 1sg=send   letter what AE
     'I sent any letter to Jakarta.'
   c. Gara-gara alkohol *ta'*=tenḍang sopo aé.   (reason PP)
     cause-RED alcohol 1SG=kick   who   AE
     'I kicked any person because of alcohol.'
   d. Kanggo koen *ta'*=buka'-no   lawang ndi   aé.   (beneficiary PP)
     for   2SG   1SG=open-APPL door   which AE
     'I opened any door for you.'
   e. Ambè' Maria *ta'*=resi'-I   omah ndi   aé.   (comitative PP)
     with   Maria 1SG=clean-APPL house which AE
     'With Mary I cleaned any house.'

As for the definiteness constraint, the themes in (10a—10e) can be indefinite marked as indicated by the WH and *aé*, which simply mean 'any'. In (10a), the pivot position is filled by an instrument PP *ambè' paku* 'with nail' and the in situ theme is the indefinite *gambar opo aé* 'any picture'. In (10b), the pivot is filled by a locative PP *nang Jakarta* 'to jakarta'; the in situ theme is the indefinite *surat opo aé* 'any letter'. In (10c), the reason PP *mergo alkohol* 'because of alcohol' becomes the pivot while the in situ theme in the indefinite *sopo aé* 'any person'. In (8d), it is the beneficiary PP *kanggo koen* 'for you' that serves as the pivot, and the in situ theme is the indefinite *lawang ndi aé* 'any door'. In (10e), the comitative PP *ambè' Maria* 'with Mary' takes the pivot position, while the in situ theme is the indefnite *omah ndi aé* 'any house'.

     Since the pivot bears the definiteness constraint, when taking the pivot position, a prepositional phrase needs to be definite.

(11) a. Nang kebun *ta'*=tanḍur jagung opo aé.
     PREP garden 1SG=plant corn   what AE
     'I planted any corn in the/*a garden.'
   b. Nang omah *ta'*=simpen lading opo aé.
     PREP house 1SG=keep   knife what AE
     'I kept any knife in the/a* house.'

In (11a), even with absence of a definite marker, e.g. demonstrative, the *kebun* 'garden' in the prepositional phrase *nang kebun* has to be interpreted as definite. Therefore, the only acceptable reading is definite 'the garden', not the indefinite one 'a garden'. Likewise, *nang omah* 'in house' in (11b) has to be interpreted as definite as well, which is 'the house', instead of the indefinite 'a house'.

     With the prepositional phrase occupying the pivot slot and the theme DP remains in situ, the theme DP can be indefinite marked, as illustrated by (12a) and (12b).

(12) a. Nang kebun *ta'*=tanḍur sembarang kembang.
     PREP garden 1SG=plant any   flower
     'I planted any flower in the/*a garden.'

b. Nang omah *ta'*=simpen lading opo aé.
   PREP house 1SG=keep   knife   what AE
   'I kept any kind of knife in the/a* house.'

In (12a), the postverbal theme *kembang* 'flower' is indefinite as indicated by the word *sembarang* 'any'. The postverbal theme *lading* 'knife' in (12b) does not refer to any definite or specific one either. The WH and the word *a*é indicates that the knife can be any knife.
 Surabaya Javanese possesses a hanging topic position that precedes the pivot slot. The hanging topic position can be filled by a PP or DP.

(13) a. Nang kebun aku *n*.anḍur   pirang-pirang kembang.   *(AV)*
        PREP park   1SG AV.plant some   flower
        'In the garden I planted some flowers.'   In AV
    b. Arè' iku,   aku *ny*.ilih   buku-é   wingi.   *(AV)*
        child DEM 1SG AV.borrow book-DEF yesterday
        'That boy, I borrowed his book yesterday.'

Sentences (13a) and (13b) are both AV constructions. In (13a), the hanging topic is a PP *nang kebun* 'in garden' which precedes the subject pivot *aku* '1SG pronoun'. The hanging topic of (13b) is a DP *arè' iku* 'that boy' which is positioned before the subject pivot *aku*. When two phrases, i.e. hanging topic and pivot, appear preverbally, only the later must be occupied by a definite phrase. A hanging topic is not strictly subject to the definiteness constraint for not occupying the pivot slots.

(14) a. Nang   omah   montor-*(é) *ta'*=dandan-i   *(OV)*
          PREP   house car-(DEF)   1SG=fix-APPL
          'In a/the house I fixed the/*a car.'
      b. Ambè' karung   suket-*(é)   *ta'*=aḍah-i   *(OV)*
          PREP sack grass-(DEF)   1SG=place-APPL
          'With a/some/the sack I stored the/*a grass.' (I put the grass into a/the sack)

Sentences (14a) and (14b) are both OV constructions. Both sentences have two phrases which appear preverbally: a hanging PP topic and a pivot DP. In (14a) the hanging PP topic *nang omah* 'in house' does not have to have a definite marker and, thus, can be interpreted as an indefinite 'a house'. The theme pivot *montor* 'car', to the contrary, must be interpreted as a definite theme 'the car' so that it needs to have a definite marker, e.g. the definite suffix *é*. In the same way, the theme pivot in (14b) *suket* 'grass' must have a definite marker so that the only acceptable reading for it is 'the grass'; the hanging PP topic *ambè' karung* 'with sack' does not have to appear with a definite marker so that it can interpreted as 'with a sack' or 'with some sacks'. Even when the pivot is a PP, the definiteness constraint still applies as exemplified by (15).

(15) Sembarang kembang nang   kebun (*nḍi aé)   *ta'*=tanḍur.
      any   flower   PREP   garden (WH AE) 1SG=plant
      'In the/*any garden, I planted several flowers.'

In (15), the hanging topic is filled by a DP *sembarang kembang* 'any flower', while the pivot is occupied by a PP *nang kebun*. As indicated by the word *sembarang* 'any', the hanging DP topic does not have to be definite. The pivot PP, however, cannot be indefinite as demonstrated by the ungrammatical use of WH and *aé*, which force an indefinite reading.

A pivot PP can also take a postverbal position. With its presence, the postverbal theme can be indefinite marked.

(16) a. *Ta'*=tanḍur kembang opo aé gawé ḍè'é/*wong.
   1SG=plant flower what AE for 3SG/*person
   'I planted any flower for him/*someone.'
b. *Ta'*=tanḍur gawé ḍè'é/*wong kembang opo aé.
   1SG=plant for 3SG/*person flower what AE
   'I planted any flower for him/*someone.'

When both PP and the theme DP appear postverbally, their order is free; the PP may follow the theme or vice versa. As shown by (16), the PP pivot *gawé ḍè'é* 'for him', or *gawé wong* 'for someone' are in postverbal position. In (16a) the PP follows the theme DP *kembang opo aé* 'any flower', while in (16b), the PP precedes the theme DP. Regardless of its exact postverbal position, the PP needs to be definite. Therefore, *gawé wong* 'for someone' is not an acceptable interpretation for the sentence. On the contrary, the theme DP *kembang opo aé*, either preceding or following the PP pivot, can be indefinite marked as indicated by the WH and the word *aé*.

As an interim summary, there are three points to learn about the Surabaya Javanese OV construction. First, only the pivot phrase in Surabaya Javanese OV is subject to the definiteness constraint. Second, the pivot phrase can be either a theme DP or PP. Third, the pivot can be a reflexive bound by the initiator. These three features indicate that the pivot in Surabaya Javanese OV is more like a topic rather than a subject. Table in (17) is a summary of the feature comparison between subject and topic.

(17)

Feature	Subjects	Topics
a. Definiteness constraint	No	Yes
b. Can be a reflexive pronoun	No	Yes
c. Can be a PP	No	Yes

I assume therefore that the fronted theme is actually an internal argument that moves upward to the spec CP or topic position, and not the subject position. Consequently, we can expect that the spec TP or subject position is available for something else. This is illustrated by the tree diagram in (18).

(18)
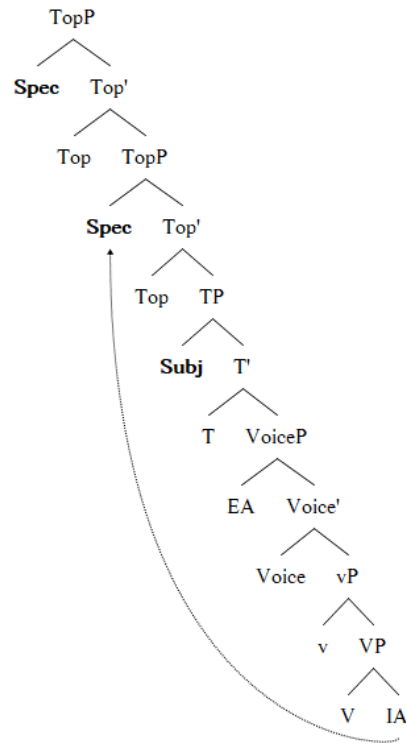
Supporting evidence for the a bar movement of the theme comes from quantifier float as exemplified by (19).

(19) a. *Mbo'*=tapu' kabèh arè'-é.
 2SG=slap all youngster-DEF
 'You slapped all the boys.'
 b. Arè'-é *mbo'*=tapu' kabèh.
 youngster-DEF 2SG=slap all
 'You slapped all the boys.'

In (19a), the quantifier *kabèh* 'all' and the DP *arè' iku* 'the boys' are in postverbal position. In (19b), *arè' iku* moves to the topic position which is the preverbal position and leaves the quantifier stay in postverbal position. There is no change in meaning when the DP *arè' iku* leaves the quantifier to move to the topic position.

3. Proclitic as Spec TP

This section presents evidence to support the claim that proclitic is not always an ergative esternal argument and, therefore, has the opportunity to become a subject. Data which includes unaccusatives and constructions with psychological verbs show that the proclitic can be an internal argument in OV constructions.

 In OV constructions with unaccusative verbs, the proclitic can an undergoer.

(20) *Ta'*=tibo aé   nang   jurang   mau.
     1SG=fall AE PREP ravine Past
     'I should have fallen into the ravine.'
(21) Nang kamar manḍi   aé   *ta'*=ke-pelèsèt
     PREP room   shower AE 1SG=PASS-slip
     'I should have slipped in the bathroom.'
(22) Nang kamar manḍi aé   *ta'*=semaput
     PREP room   shower AE 1SG=faint
     (If you don't give me the medicine,) I will faint in the bathroom.

In example (20), the first person proclitic is attached to the unaccusative verb *tibo* or 'fall'. The verb is followed by a locative prepositional phrase *nang jurang* or 'into the ravine'. Here, it is clear that it is the first person proclitic who is undergoing the effect of the unaccusative verb 'fall'. In (21), the locative prepositional phrase *nang kamar mandi* 'in the bathroom' takes the sentence initial position. The first person proclitic is attached to the passive verb *kepelèsèt* or slip. Therefore, the only interpretation of this sentence is that it is the first person proclitic that slipped in the bathroom. In (22), the first person proclitic is attached to unaccusative verb *semaput* or faint. Hence, it is only the first person proclitic who can interpreted as the one who fainted. As expected, the proclitic can first or second person as illustrated in (23) and (24).

(23) *Ta'*=tibo aè   teko genṭèng.
     1SG=fall AE from roof
     'I will fall from the roof.'
(24) *Mbo'*=tibo nang   jurang mau.
     2SG=fall   PREP ravine Past
     'You should have fallen into the ravine'

In (23), the proclitic is a first person, while in (18), the second person proclitic *mbo'* is attached to the unaccusative verb 'fall'. Therefore, the ability of proclitics to take unaccusative verbs indicates that the proclitic cannot always be analyzed as an external argument licensed with ergative case, as ergative case is supposed to be unavailable in unaccusative clauses and cannot be assigned to internal arguments.

Undergoer-like experiencers can also be licensed as a proclitic as exemplified by (25—27).

(25) Lindu   sing *ta'*=kuatir-no
     earthquake REL 1SG=worry-APPL
     'The thing that worries me is earthquake.'
(26) Udan   sing *ta'*=mangkel-no.
     rain   REL   1SG=irritate-APLL
     'The thing that irritates me is the rain.'
(27) Macan sing *ta'*=wedèn-i,   dudu' ulo.
     tiger   REL 1SG=afraid-APPL NEG   snake
     'The thing that frightens me is a tiger, not a snake.''

In example (25), the first person proclitic *ta'* is attached to the psych verb *kuatir* 'worry'. Therefore, the one who worries about the earthquake is the first person proclitic *ta'*. In (26), the first person proclitic is attached to the psych verb *mangkel* 'irritate'. In (21), the first person proclitic is attached the psych verb *wedi* 'afraid'. The ability of psychological verb to take a proclitic reinforces the current claim that the proclitic cannot be an ergative agent.

Furthermore, the stimulus of the event can be modified by an agent-oriented adverb.

(28) Sopo meneng-meneng sing *mbo'*=seḍih-no?
  who quiet-RED   REL 2SG=sad-APPL
  'Who secretly saddened you?'

(29) Sopo meneng-meneng sing *mbo'*=wedèn-i
  who quiet-RED   REL 2SG=afraid-APPL
  'Who secretly frightened you?'

In (28) and (29) the agent oriented adverb *meneng-meneng* 'secretely' modifies the wh agents *sopo* 'who', while the second person proclitics take the psychological verbs *seḍih* 'sad' and *wedi* 'afraid' respectively. This confirms that the proclitic is indeed an undergoer, rather than an initiator or agent.

The proclitic, therefore, is able to be an external argument as in (31) and (32) or an internal argument as in (30).

(30) Nè' ngono *ta'*=tibo nang jurang mau.   [Undergoer-like proclitic]
  if that.way 1SG=fall PREP ravine Past
  'If so, I should have just fallen into the ravine'

(31) *Ta'*=njogèt   nang jurang.   [Agent-like proclitic]
  1SG=AV.dance PREP ravine
  'I had jump from the hill'

(32) *Ta'*=tenḍang watu-né.   [Agent-like proclitic]
  tak=kick   stone-DEF
  'I kicked the stone'

Based on the evidence that the proclitic is able to take unaccusative verbs and psychological verbs, I conclude that the proclitic is a subject, not only an ergative agent.

4. Javanese OV as a mirror of Philippine-type non-Actor Voice

The current observation reveals several intriguing parallels between Surabaya Javanese OV constructions and the non-Actor Voice constructions in Philippine-type languages. In examples (10), Surabaya Javanese OV constructions have demonstrated the ability of pivot to take various PPs. These examples imply that the Javanese OV construction might preserve the Philippine-type syntax. In Tagalog, for instance, the pivot can also be such phrases as theme, instrument, location, beneficiary, reason, or purpose.

(33) *Tagalog*
  a.b<um>ili si   ivan ng keyk mula kay viktoria para kay amber.
   <AV>buy PN.PIVOT Ivan ID.Y cake from PN.Y Victoria P   DF.Y Amber

       'Ivan bought cake from Victoria for Amber.'

    b.bi-bilih-in   ni   ivan ang   keyk mula kay viktoria para kay amber.

       CONT-buy-PV PN.X Ivan PIVOT cake from PN.Y Victoria P   PN.Y Amber

       'Ivan will buy the cake from Victoria for Amber.'

    c. bi-bilh-an   ni   ivan ng   keyk si   viktoria para kay amber.

       CONT-buy-LV PN.X Ivan ID.Y cake PN.PIVOT Victoria P   PN.Y Amber

       'Ivan will buy cake from Victoria for Amber.'

    d. i -bi-bili   ni   ivan ng   keyk mula kay viktoria si   amber.

       CV-CONT-buy PN.X Ivan ID.Y cake from PN.Y Victoria PN.PIVOT Amber

       'Ivan will buy cake from Victoria for Amber.'

       (Chen 2017, p. 8)

The voice alternation correlates with the change of the pivot marker position. The pivot marker *si* indicates an agent pivot as *si ivan* in (33a), location/source pivot as *si viktoria* in (33c), and benefactor/instrument pivot as *si amber* in (33d). The pivot marker *ang* tells us that the patient *keyk* 'cake' in (33b) is the pivot. It suggests that Philippine-type undergoer voices may be the diachronic source of OV construction in Javanese and perhaps some other Indonesian-type languages, with the three undergoer voices collapsed in one through the loss of voice morphology, in line with previous views (e.g. Cole et al. 2008; Donohue 2008), while the 'pivot-only' extraction constraint and the mapping between voice and specific thematic roles remain intact. Future investigations of OV constructions in other Javanese varieties may shed further light on how stable this pattern is preserved.

5. Analysis

The two basic constructions in Surabaya Javanese are best analyzed as subject topic construction and object topic construction, respectively. In actor voice, the theme stays in situ and gets its accusative case from little v, while the external argument moves to spec TP to gets its nominative case and subsequently moves to spec CP. This is illustrated in (34).

(34)   *Actor Voice*
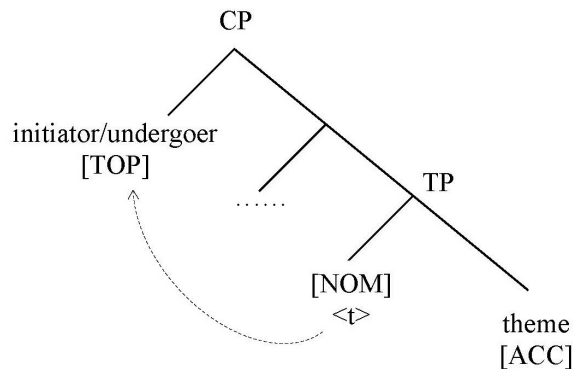
In object voice, the element that moves to spec CP is not the subject, but can be internal argument or a PP argument. Meanwhile, the initiator or undergoer proclitic will occupy the subject position. This is illustrated by the diagram in (35).

(35) *Object Voice*
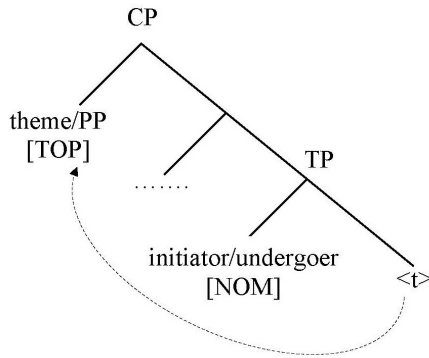
Since the pivot in AV is the subject DP, a PP can occupy the hanging topic position. However, it may not occupy the pivot position as shown by (36) in which the PP nang omah 'in the house' is between the first pronoun subject and the active voice verb moco 'read', indicating that the PP is in the pivot position. Sentence (36) is only acceptable if interpreted as a complex sentence and read as 'I was in the house, reading a book.' On the contrary, since the pivot in OV is a topic and not a subject, the pivot can be a PP. Therefore, in (37), the PP nang omah can precede the verb moco and follow the theme DP bukué 'the book'.

(36) *Aku nang omah m.oco   buku.   (AV)
       1SG   PREP house AV.read book
       'I read a book in the house.'
(37) Buku-é   nang   omah   ta'=woco.   (OV)
       book-DEF PREP house   1SG=read
       'I read the book in the house.'

The second asymmetry between AV and OV is informed by quantifier float as illustrated by (38) and (39).

(38) Wong   wèdo' iku   kabèh wis   *ng*.è'-i   arè'-arè' cili'   ḍui'. *(AV)*
       person female DEM   all   PERF AV.give-APPL children small   money
       'All the women have given the children money.
(39) *Wong   wèdo' iku   kabeh wis   *ta'*=kè'-i   dui'.   *(OV)*
       person female DEM   all   PERF 1SG=give-APPL money
       'All the women have given the children money.'

A quantifier float is possible in pre-auxiliary or pre-aspect position in AV construction, indicating a movement from spec TP to spec CP. In 38, the quantifier kabèh 'all' precedes the perfect aspect wis and follows the DP wong wèdo' iku 'the women'. The pivot in OV cannot have a quantifier float in the pre-auxiliary or pre-aspect position because the pivot never stops in the subject position. This is demonstrated by the ungrammatical (39) where the quantifier kabèh follows the pivot theme DP 'the women', but precedes the perfect aspect.

6. Conclusion

In conclusion, the two basic constructions in Surabaya Javanese are best analyzed as subject topic and object topic constructions. Surabaya Javanese object voice constructions are not ergative aligned. Surabaya Javanese object voice constructions might be structurally different from those in Acehnese and Indonesian, which have been argued to possess a theme subject with ergative proclitic.

References

Aldridge, Edith. 2004. Ergativity and Word Order in Austronesian Languages. Ph.D. thesis: Cornell University.

Chen, Victoria. 2017. A Reexamination of the Philippine-Type Voice System and Its Implications for Austronesian Primary-Level Subgrouping. Ph.D Thesis: University of Hawai'i at Mānoa

Cole, P., Hermon, G., & Yanti. 2008. Voice in Malay/Indonesian. *Lingua*, 118, 1500–1553

Davies, William D. 1993. Javanese subjects and topics and psych verbs. *Linguistics* 31 (1993), 239—277.

Donohue, Mark. 2008. Malay as a mirror of Austronesian: Voice development and voice variation. *Lingua* 118 1470–1499

Durie, M. 1985. *A grammar of Acehnese on the basis of a dialect of North Aceh*. Dordrecht: Foris

Legate, J. 2014. *Voice and v: Lessons from Achenese*. MIT Press.

Nurhayani, I. 2014. A Unified Account of The Syntax of Valence In Javanese. Ph.D. thesis: Cornell University.

Suhandano.s 1994. Grammatical Relations in Javanese: A short description. MA Thesis. Canberrra: ANU.