1. Introduction
This paper describes Javanese passive, ergative and adversative constructions. Even though the passive in Javanese, as in other Austronesian languages, does not have the same pragmatic properties as the passive in English and other European languages, Javanese seems to have genuine syntactic passive constructions. Recently, Verhaar (1988) has claimed that some Indonesian passives are in fact ergative, and extends his claim to Javanese. However, Davies (1990) suggests that Eastern Javanese is best accounted for by the use of passive analysis, hence rejecting an ergative analysis of Javanese. He further uses the passive analysis to describe Javanese adversatives (Davies 1995). I argue here that apart from having a passive construction, Javanese has another construction which can be analysed as ergative on the basis of properties of its agent and markedness. Further, the passive analysis is argued to be insufficient to account for the different types of Javanese adversatives.

2. Javanese passives
Javanese is an SVO language. In a sentence with a two-place predicate the preverbal NP and the postverbal NP cannot be swapped without changing its meaning. In a very highly marked situation, the preverbal NP can be extraposed, marked by an intonation break. These patterns are shown in the following examples.

(1) a. Kucing iku ng-oyak tikus iku
cat DEF N-chase mouse DEF
‘The cat chased the mouse.’
b. Tikus iku ng-oyak kucing iku
mouse DEF N-chase cat DEF
‘The mouse chased the cat.’
c. Ng-oyak tikus iku // kucing iku
N-chase mouse DEF cat DEF
‘Chased the mouse // the cat.’

The following examples show the contrast between the active and passive constructions.

(2) a. Kucing iku ng-oyak tikus iku
cat DEF N-chase mouse DEF
‘The cat chased the mouse.’
b. Tikus iku di-oyak (dening) kucing iku
mouse DEF DI-chase by cat DEF
‘The mouse was chased by the cat.’
(3) a. Yono n-(t)ulis surat iku
Yono N-write letter DEF
‘Yono wrote the letter.’

1 I would like to thank Barry Blake, Margaret Florey and Peter Austin for their valuable comments and suggestions regarding this paper.
b. *Surat iku di-tulis (dening) Yono*
letter DEF Di-write by Yono
‘The letter was written by Yono.’

Different terms have been used by different authors to refer to the construction with the nasal prefix, such as ‘actor focus’ (Naylor 1978), ‘actor trigger’ (Wouk 1986), and ‘active’ (Bintoro 1980, Ramelan 1983). Similarly, the construction with the *di-*prefix has been labelled as ‘non-actor’ or ‘object focus’ (Naylor 1978), ‘patient trigger’ (Wouk 1986), and ‘passive’ (Bintoro 1980, Ramelan 1983). It seems that these terms share the idea that the preverbal NP in nasal constructions is in control of the action indicated by the verb whereas the preverbal NP in *di-*constructions is not in control of the action indicated by the verb. However, the examples below with one-place predicates show that nasal constructions do not necessarily involve control of the action by the preverbal NP.

(4) a. *Bom-e m-bledhos*
bomb-DEF N-explode
‘The bomb exploded.’

b. *Mesin-e wis m-(p)ati*
machine-DEF already N-die
‘The machine has already stopped.’

(5) a. *Dheweke dolanan banyu*
3SG play.with water
‘She/he played with water.’

b. *Aku lungguh ing kursi*
1SG sit on chair
‘I sat on the chair.’

In (4) the nasal verbs *mbledhos* ‘explode’ and *mati* ‘die’ cannot be interpreted as having preverbal NPs (*bome* ‘the bomb’ and *mesine* ‘the machine’) which are in control of the action. The preverbal NPs are semantically the patients of the verbs. On the other hand, in (5) the non-nasal verbs *dolanan* ‘play with’ and *lungguh* ‘sit’ cannot be interpreted as having preverbal NPs (*dheweke* ‘she/he’ and *aku* ‘I’) which are not in control of the action. The preverbal NPs are semantically the agents of the verbs. Further, Javanese imperatives may be expressed by a nasal prefix plus -a suffix, by -en/nen suffix and by the *di-*construction, as in (6).

(6) a. *Ayo ny-(c)oba-a klambi iki*
come on N-try on-A shirt this
‘Come on, try on this shirt!’

b. *Ayo coba-nen klambi iki*
come.on try on-NEN shirt this
‘Come on, try on this shirt!’

c. *Ayo di-coba klambi iki*
come.on DI-try on shirt this
‘Come on, try on this shirt!’

The agents of imperatives are assumed to be the second person. So are the agents of these different forms of Javanese imperatives. There are of course differences of how these forms are used, but here I show that there is a situation in which the nasal prefix and the *di-*prefix do not necessarily refer to the dichotomy of actor versus non-actor and agent versus patient.
Furthermore, before discussing passive, it is important to look at transitive verb suffixes in Javanese. Javanese transitive verbs may take one of the three forms: a zero suffix, an -ake suffix and an -i suffix. The verbs ngoyak ‘chase’ in (1a) and (2a) and nulis ‘write’ in (3a) illustrate verbs with zero suffixes. Examples (7) and (8) below illustrate the verb suffixed with -ake and -i.

(7) a. Guru iku n-(t)erang-ake bab iku
    teacher DEF N-explain-AKE chapter DEF
    ‘The teacher explained the chapter.’

    b. Ardi n-(t)uko-kake simbah-e hadiah
       Ardi N-buy-AKE grandfather-3SG.POSS present
       ‘Ardi bought his grandfather a present.’

    c. Kowe m-(p)ecah-ake gelas iku
       2SG N-break-AKE glass DEF
       ‘You broke the glass.’

(8) a. Kowe ng-lungguh-i kursi rusak
    2SG N-sit-I chair broken
    ‘You sat on the broken chair.’

    b. Dheweke m-(p)aten-i lampu iku
       3SG N-die-I lamp DEF
       ‘S/he turned off the lamp.’

    c. Dheweke ng-ambung-i bojo-ne
       3SG N-kiss-I spouse-3SG.POSS
       ‘S/he kissed her/hi s spouse repeatedly.’

In (7) nerangake, nukokake and mecahake are all suffixed with -ake. Note that with nukokake the suffix becomes -kake because tuku ends in a vowel. Combined with the nasal prefix, the suffix -ake can function as a verbal marker (nerangake), as a benefactive marker (nukokake), and as a causative marker (mecahake). In (8) nglungguhi, mateni and ngambungi are suffixed with -i. Note that with mateni the suffix -i becomes -ni because the verb base ends in a vowel. The suffix -i can function as a locative marker (nglungguhi), a causative marker (mateni), and a repetitive marker (ngambungi).

There are different types of Javanese passives on the basis of both their morphology and their usage. I label them as di-passive, ka-passive, in-passive, and ke-passive, based on their differences in affixation. Each of them will be discussed separately.

2.1 The di-passive
The di-passive, as the name indicates, is characterised by the prefix di- on the verb. Sentence (3b) is an example of di-passive, repeated here as (9b):
In the nasal construction (9a) the NP *Yono* ‘Yono’ is subject and *surat iku* ‘the letter’ is direct object. In the *di*-construction (9b) there is a change where the object *surat iku* ‘the letter’ has been advanced to subject and, as a result, the initial subject *Yono* ‘Yono’ was demoted to a chômeur, optionally marked by the preposition *dening* ‘by’. Also, the nasal prefix in (9a) has been replaced by the prefix *di*.-

Relational Grammar defines a passive as the advancement of 2 to 1 in a transitive clause (Perlmutter 1983). In Relational Grammar, grammatical relations are indicated by the numerals 1, 2, and 3, indicating the relations of subject, direct object and indirect object respectively. The other relations are oblique, including benefactive, locative, instrumental, etc. The advancement of grammatical relations can be illustrated by a stratal network, so the sentences in (9a) and (9b) can be represented by (10a) and (10b) respectively.

(10) a. 
\[
\text{P} \quad \begin{array}{c} \\
1 \quad 2 \\
\end{array} \\
\text{nulis} \quad \text{Yono} \quad \text{surat}
\]

b. 
\[
\text{P} \quad \begin{array}{c} \\
\text{Cho} \quad 1 \\
\end{array} \\
\text{nulis} \quad \text{Yono} \quad \text{surat}
\]

In (10b) *surat* which bears the initial 2 relation has been advanced to assume the final 1 relation, hence demoting the initial 1 *Yono* to a chômeur relation. The consequence of *Yono* bearing the chômeur relation is that *Yono* may appear in a prepositional phrase preceded by *dening* ‘by’, as in (9b) or may be deleted, as in (11).

(11) 
\[
\text{Surat} \quad \text{iku} \quad \text{wis} \quad \text{di-tulis} \\
\text{letter} \quad \text{DEF} \quad \text{already} \quad \text{DI-write}
\]

‘The letter was already written.’
The preposition *dening* ‘by’ is optional when the agent immediately follows the verb, as in (12a), but is obligatory when it is separated by other words, as in (12b).

(12) a.  
Ali \textit{di-antem} (dening) wong \textit{iku}  
Ali \textit{hit by} man DEF  
‘Ali was hit by the man.’

b.  
\textit{Ali di-antem nganggo watu} *(dening) wong\textit{iku}  
Ali \textit{hit with stone by man DEF}  
‘Ali was hit with a stone by the man.’

There is a case where the preposition *dening* remains optional although other words intervene. This occurs in a sentence with a three-place predicate, like *weneh* ‘give’ (Badib 1980: 365) as illustrated in (13).

(13)a.  
\textit{Bagus weneh dhuwit marang Tono}  
Bagus \textit{give money to Tono}  
‘Bagus gave money to Tono.’

b.  
\textit{Bagus m-(w)eneh-i Tono dhuwit}  
Bagus \textit{give-I Tono money}  
‘Bagus gave Tono money.’

c.  
\textit{Tono di-weneh-i dhuwit (dening) Bagus}  
Tono \textit{give-I money by Bagus}  
‘Tono was given money by Bagus.’

d.  
\textit{Tono di-weneh-i dhuwit iku *(dening) Bagus}  
Tono \textit{give-I money DEF by Bagus}  
‘Tono was given much money by Bagus.’

e.  
\textit{Tono di-weneh-i dhuwit sing akeh iku *(dening) Bagus}  
Tono \textit{give-I money REL much DEF by Bagus}  
‘Tono was given much money by Bagus.’

In (13a) *Bagus* ‘Bagus’ is initial 1, *dhuwit* ‘money’ is initial 2, and *Tono* ‘Tono’ is initial 3. In (13b) *Tono* has been advanced to 2, as a result, the initial 2 *dhuwit* is demoted to a chômeur. Passivisation can only take place when the new 2, *Tono*, is advanced to 1, again demoting the initial 1, *Bagus*, to a chômeur. The final 1 chômeur is optionally preceded by the preposition *dening*, although the chômeur 2 intervenes, as shown in (13c). However, when the chômeur 2 is made definite by adding the definite marker *iku* or modified by a relative clause, the preposition *dening* is no longer optional but obligatory, as in (13d) and (13e). In short, the preposition *dening* is optional only when no word or a very short NP intervenes between the predicate and the final 1 chômeur. When a heavy NP separates the predicate from the final 1 chômeur, the preposition *dening* is obligatory.
2.2 The ka-passive

Apart from the prefix di-, a Javanese passive may also be marked with the prefix ka- as exemplified in (14b).

\[(14)\]
\[a. \text{Prabu Basudewa n-(t)itip-ake putra-ne marang Antyagopa}\]
\[\text{King Basudewa N-leave-AKE son.3SG.POSS to Antyagopa}\]
\[‘King Basudewa left his son to Antyagopa.’\]
\[b. Putra-ne ka-titip-ake marang Antyagopa dening}\]
\[\text{son-3SG.POSS KA-leave-AKE to Antyagopa by}\]
\[\text{Prabu Basudewa}\]
\[\text{King Basudewa}\]
\[‘His son was left to Antyagopa by King Basudewa.’\]

In many cases the prefixes di- and ka- are interchangeable. However, looking closely at these two types of passive, some differences can be discerned. As Bintoro (1980) has noted, the first difference between the di-passive and the ka-passive is that the di-passive occurs with both the suffix -ake and -i/ni whereas the ka-passive occurs only with the suffix -ake.

\[(15)\]
\[a. \text{Layang-e di-waca-ake Ali}\]
\[\text{letter-DEF DI-read-AKE Ali}\]
\[‘The letter was read by Ali (for someone).’\]
\[b. Layang-e di-waca-ni Ali}\]
\[\text{letter-DEF DI-read-NI Ali}\]
\[‘The letter was repeatedly read by Ali.’\]

\[(16)\]
\[a. \text{Layang-e ka-waca-ake Ali}\]
\[\text{letter-DEF KA-read-AKE Ali}\]
\[‘The letter was read by Ali (for someone).’\]
\[b. *Layang-e ka-waca-ni Ali}\]
\[\text{letter-DEF KA-read-NI Ali}\]
\[‘The letter was repeatedly read by Ali.’\]

Uhlenbeck (1978) claims that the ka-passive can be used with -i/-ni, but -an/-nan must be substituted for -i/-ni as in (17b).

\[(17)\]
\[a. \text{Adipati Semarang di-timbal-i dening Ingkang Sinuhun}\]
\[\text{Regent Semarang DI-call-I by King}\]
\[‘Regent of Semarang was called by the King.’\]
\[b. Adipati Semarang ka-timbal-an dening Ingkang Sinuhun}\]
\[\text{Regent Semarang KA-call-AN by King}\]
\[‘Regent of Semarang was called by the King.’\]

However, Uhlenbeck’s generalisation cannot be true of all types of the suffix -i. It seems that only the suffix -i attached to a precategorial - a rootword that cannot stand by itself without affixation - to form a transitive verb is replaced by the suffix -an in the ka-passives. So, in the case of the precategorial timbal ‘call’ in (17), -i is suffixed to it to produce the transitive verb timbali ‘call’.

When the suffix -i is used to express other meanings, like repetitiveness, or used to indicate advancement to direct object, passives with ka- and -an/nan do not exist. Consider the following examples.
In (18a), the suffix -i, realised as -ni because the verb waca ‘read‘ ends in a vowel, expresses repetitiveness. The verb diwacani ‘be repeatedly read‘ exists, as in (18b), but kawacanan does not, as in (18c). Similarly, in (19b) the suffix -i is used to indicate 3-2 advancement. As predicted, only the di-passive can be found, as in (19c), but ka-passive cannot, as in (19d).

The second difference is that modals, like durung ‘not yet‘, lagi/nembe ‘in the process of‘, wis ‘already‘ are more commonly used with di-passive than with ka-passive. So, (20a) is used more commonly than (20b).

Finally, Bintoro (1980) points out that the use of ka-passive and di-passive is related to Javanese speech levels, krama ‘high‘, madya ‘middle‘ or ngoko ‘low‘. Krama is the formal and polite level. Madya is the semi-formal level. Ngoko is the level of unmarked social
attitude (Poedjosoedarmo 1986: 67). High level is used among the old aristocrats or by anyone at the highest levels of society who wants to give the appearance of elegance. Middle style is used by town-dwellers and village dwellers who are not close friends, or by peasants addressing superiors. Low level is the style all children learn first regardless of social class origin, and everyone uses it on some occasion, even close acquaintances of the highest class (Wardhaugh 1992: 277).

The ka-passive is used when people are using high speech level whereas di-passive is used by people using low speech level. In (21), both asta and gawa are translated as ‘take’, but the former is more likely to occur with ka- and the latter with di- due to their speech level difference in which asta is a high level word while gawa is its low level counterpart. Similarly, in (22) the verb tuku ‘buy’ is likely to occur with di- because it is a low level verb whereas pundhut ‘buy’ is likely to occur with ka- because it is a high level word.

(21) a. Mobil-e ka-asta bapak
car-DEF KA-take father
‘The car was taken by father.’

b. Mobil-e di-gawa bapak
car-DEF DI-take father
‘The car was taken by father.’

(22) a. Dalem-e sampun ka-pundhut sederek-ipun
house-DEF already KA-take relative-3SG.POSS
‘The house has been bought by her/his relative.’

b. Omah-e wis di-tuku sedulur-e
house-DEF already DI-buy relative-3SG.POSS
‘The house has been bought by her/his relative.’

2.3 The in-passive
A much more formal Javanese passive is illustrated in (23) in which the verb is infixed with -in-, as in ginawe ‘be made’ from gawe ‘make’, but when the root word begins with a vowel, the prefix -in- becomes the prefix ing-, as in ingutus ‘be sent’ from utus ‘send’. As with the ka-passive, when the active form is suffixed with -i, this suffix is changed to -an/nan, for example timbali ‘call’ becomes tinimbalan ‘be called’. This type of passive is archaic and therefore used only in literary style, like poetry or traditional performance shows, such as wayang kulit ‘shadow puppet show’. It is very rare in daily conversation. Sentence (23b) illustrates its use.

(23) a. Kang Mahaagung wus ng-garis-ake kabe
God Almighty already N-determine-AKE all
kedadian mau
happening DEF
‘God the Almighty has already determined all of the happenings.’

b. Kabe kadei mau wus g-(in)-aris dening
all happening DEF already -IN-determine by
Kang Mahaagung
God Almighty
‘All of the happenings have been determined by God the Almighty.’
2.4 The *ke*-passive
The last type of passive in Javanese is *ke*-passive, as exemplified in (24c).

(24) a. Montor-e n-(t)abrak sepedha
car-3SG.POSS N-hit bike
‘Her/his car hit a bike.’
b. *Sepedha-ne di-tabrak (dening) montor-e
bike-DEF DI-hit by car-3SG.POSS
‘The bike was hit by her/his car.’
c. Sepedha-ne ke-tabrak (dening) montor-e
bike-DEF KE-hit by car-3SG.POSS
‘The bike was hit by her/his car.’

In (24a) *montore* cannot be the agent in the real sense. It has no control over the action of hitting. The use of *di*-passive for this sentence is unacceptable pragmatically, as shown by the ungrammaticality of (24b). The *ke*-passive, as in (24c), is used instead to show that the action performed is non-volitional, unintentional, or controlled by unspecified external forces. When the agent is in control of the action of the verb, both passive with *di* and that with *ke* may be formed, but they differ in intentionality, as exemplified in (25).

(25) a. Ali ng-antem aku
Ali N-hit 1SG
‘Ali hit me.’
b. Aku di-antem Ali
1SG DI-hit Ali
‘I was hit by Ali.’
c. Aku ke-antem Ali
1SG KE-hit Ali
‘I was accidentally hit by Ali.’

In (25) the agent *Ali* can clearly control the action of hitting the patient *aku* ‘me’. The *di*-passive implies that the agent has an intention to perform the action, as shown in (25b), whereas the *ke*-passive does not, as in (25c). In other words, the action of the *ke*-passive is accidental or non-volitional. So, in (25c) the patient *aku* ‘I’ was accidentally hit by *Ali*. The explanation might be that *Ali* wanted to hit someone else, but he missed and accidentally hit the speaker. Other verbs that behave like *antem* allowing both a *di*-passive and a *ke*-passive are given in (26). These verbs are formed from transitive bases.
<table>
<thead>
<tr>
<th>di-passive</th>
<th>ke-passive</th>
</tr>
</thead>
<tbody>
<tr>
<td>antem 'hit'</td>
<td>diantem 'be hit'</td>
</tr>
<tr>
<td>cekel 'catch'</td>
<td>dicekel 'be caught'</td>
</tr>
<tr>
<td>gawa 'take'</td>
<td>digawa 'be taken'</td>
</tr>
<tr>
<td>iris 'cut'</td>
<td>diiris 'be cut'</td>
</tr>
<tr>
<td>pangan 'eat'</td>
<td>dipangan 'be eaten'</td>
</tr>
<tr>
<td>tabrak 'hit'</td>
<td>ditabrak 'be hit'</td>
</tr>
<tr>
<td>pidak 'step on'</td>
<td>dipidak 'be stepped on'</td>
</tr>
</tbody>
</table>

The ke-passive never occurs with the suffix -ake. The suffix -ake may be used as a causative marker when it is affixed to intransitive bases, or as a benefactive marker when affixed to transitive bases.

(27) a. Kanca-ku ng-gawa-ake aku buku iku
   friend-1SG.POSS N-bring-AKE 1SG book DEF
   ‘My friend brought me the book.’

   b. Aku di-gawa-ake buku iku dening kanca-ku
      1SG DI-bring-AKE book DEF by friend-1SG.POSS
      ‘I was brought the book by my friend.’

   c. *Aku ke-gawa-ake buku iku dening kanca-ku
      1SG KE-bring-AKE book DEF by friend-1SG.POSS
      ‘I was accidentally brought the book by my friend (for him).’

(28) a. Bocah iku m-bledhos-ake balon iku
    child DEF N-blow up-AKE balloon DEF
    ‘The child blew up the balloon.’

   b. Balon iku di-bledhos-ake bocah iku
      balloon DEF DI-blow up-AKE child DEF
      ‘The balloon was blown up by the child.’

   c. *Balon iku ke-bledhos-ake bocah iku
      balloon DEF KE-blow up-AKE child DEF
      ‘The balloon was accidentally blown up by the child.’

Example (27a) shows that the suffix -ake is used as a benefactive marker. While passivisation with di- is possible (27b), passivisation with ke- is ungrammatical (27c). Similarly, in (28a) the suffix -ake is used to causativise the intransitive verb mbledhos ‘blow up’. Example (28b) illustrates that passivisation with di- is possible whereas example (28c) shows that passivisation with ke- is ungrammatical.

2.5 Summary

Javanese passives can be expressed with one of the following morphological markers: di-, ka-, -in-, and ke-. Passive with di- is the most productive construction in the language, as compared to passive with ka- and -in-, because the latter are used mostly in more formal situations or in certain registers, such as poetry and other forms of literary language. In terms of intentionality, passives with di- and -in- contrast with those with ke- in that the former normally refer to intentionality whereas the latter certainly refers to the unintentionality. When passives with di-, ka-, and -in- are to be used to express unintentionality, this must be expressed lexically.
3. Javanese ergatives

Ergativity is a term used to refer to a system where the subject of an intransitive predicate (S) is treated in the same way as the patient of the transitive counterpart in a language (P) or Object (O) in Dixon’s term (1994), and where the agent of the transitive (A) is treated differently. Ergativity can be found in case marking or agreement (morphological ergativity) and in syntax (syntactic ergativity) (Comrie 1978, Dixon 1994).

There is no case system or agreement in Javanese, so it seems difficult to explore morphological ergativity in Javanese. Verhaar (1988) suggests that there is some syntactic ergativity in contemporary Indonesian and extends the claim to other languages, like Javanese, Acehnese, and Tagalog. This claim is proven to be true for Javanese as described in the following.

Consider the following sentences.

(29)a. Bapak m-(w)aca buku iku
   father N-read book DEF
   ‘Father read the book.’

   b. Buku iku di-waca (dening) Bapak
      book DEF DI-read by Father
      ‘The book was read by Father.’

(30)a. Aku m-(w)aca buku iku
      1SG N-read book DEF
      ‘I read the book.’

   b. Buku iku dak-waca
      book DEF 1SG-read
      ‘I read the book.’ (lit. The book I read)

(31)a. Kowe m-(w)aca buku iku
      2SG N-read book DEF
      ‘You read the book.’

   b. Buku iku kok-waca
      book DEF 2SG-read
      ‘You read the book.’ (lit. The book you read)

The (a) examples are active sentences, characterised by the presence of a nasal prefix on the verb waca ‘read’, with Bapak ‘father’, aku ‘I’ and kowe ‘you’ as the agents of (29a), (30a) and (31a) respectively. The (b) examples are traditionally called passives (Bintoro 1980, Badib 1980). The di-passive (also called di-construction) is used with the third person agent and with a full NP whereas the construction with the proclitics dak ‘I’ and kok ‘you’ in (30b) and (31b), which I call the zero construction (i.e. there is no prefix on the verb as opposed to nasal and di-), is used with the first person and second person agent respectively. However, the view that the zero construction is passive can no longer be held. There are great
differences between the di-construction and the zero construction which will be examined below.

3.1 The difference between the di-construction and the zero construction

The zero construction differs from the di-construction in a number of ways. Here, three pieces of evidence against the view are proposed: their clause structure, markedness, and the properties of their agent.

3.1.1 Clause structure

In terms of clause-structure, the patient, verb, and agent of the di-construction constitute separate constituents although the verb and the agent fall within the verb phrase. On the other hand, in the zero construction the patient forms one constituent while the agent and verb together form another one. Two pieces of evidence for this, word order and aspectual marker, are given.

3.1.1.1 Word order

In the zero construction the normal order is PAV, where P stands for patient, A for agent and V for verb. P may be moved only to clause-final position, as in (32b). It may not be moved to other position, hence the ungrammaticality of (32c), in which P is placed between V and A, or (32d), in which P is placed between A and V.

(32) a. Mobil-e tak-cuci (PAV)  
car-DEF 1SG-wash  
‘I washed the car.’

b. Tak-cuci mobil-e (AVP)

c. *Cuci mobile tak (VPA)

d. *Tak mobile cui (APV)

In the di-construction, the normal order is PVA. However, P, V, and A may be swapped into any other positions as long as it is indicated by an intonation break, as shown in (33b), (33c), and (33d).

(33) a. Mobil-e di-tuku (dening) wong iku (PVA)  
car-DEF DI-buy by person DEF  
‘The car was bought by the person.’

b. Dituku (dening) wong iku // mobile (VAP)

c. Dening wong iku //mobile //dituku (APV)

d. Dituku //mobile //dening wong iku (VPA)

3.1.1.2 Aspectual Marker

In the zero construction, an aspectual marker, such as wis ‘already’, lagi ‘in progress’, arep ‘will’ is placed before the agent, as in (34a). (34b) is ungrammatical because arep ‘will’ precedes V.

(34) a. Kreteg-e arep kok-bakar  
bridge-DEF will 2SG-burn  
‘You will burn the bridge.’

b. *Kreteg-e kok arep bakar  
bridge-DEF 2SG burn will  
‘The bridge you will burn.’
In the di-construction, however, the aspectual marker is placed before the verb. In (35) lagi, a progressive marker, precedes the passive verb dibangun ‘be built’.

(35) Kreteg-e lagi di-bangun (dening) pemerintah
    bridge-DEF PROG DI-build by government
    ‘The bridge is being built by the government.’

3.1.2 Markedness
One of the criteria by which a syntactic derivation should be recognised as passive is its explicit formal marking as a passive construction, for instance be-en for English (Dixon 1994). While it is clear that the Javanese passive as described in the previous section is marked with such prefixes as di-, ka-, -in-, or ke- on the verb, there is no such marker used in the zero construction. As shown by (34a) above, for instance, the verb bakar ‘burn’ is unmarked and affixless. The agent is always either a pronoun dak/tak ‘I’ as in (32a) and mbok/kok ‘you’, as in (34a).

3.1.3 The properties of the agent in zero and passive constructions
While a third person and a full NP may appear as the agent of the di-construction, as in (36a), only first and second person proclitic, kinship terms or an NP used as a term of address may function as the agent of a zero construction, as exemplified in (36b) and (36c).

(36) a. Buku iku di-waca (dening) dheweke/Ali/mahasiswa
    book DEF DI-read by 3SG/Ali/student
    ‘The book was read by her/him/Ali/the student.’

    b. Buku iku lagi dak-/Bapak-waca
    book DEF PROG 1SG-/father-read
    ‘The book I am reading/the book Father (I) am reading.’

    c. Buku iku lagi kok-/Ibu-waca
    book DEF PROG 2SG-/mother-read
    ‘The book you are reading/the book Mother (you) are reading.’

An attempt to make a full NP as the agent of the zero construction results in an ill-formed sentence, as demonstrated in (37).

(37) a. *Buku iku lagi ibu-ne waca
    book DEF PROG mother-3SG.POSS read
    ‘The book, his/her mother is reading.’

    b. *Buku iku lagi murid-murid-ku waca
    book DEF PROG students-1SG.POSS read
    ‘The book, my students are reading.’

In addition, according to Relational Grammar passive is defined as the 2-1 advancement. Therefore, in the passive the agent is demoted into a chômeur relation, and in Javanese it is
normally postverbal and expressed by a prepositional phrase, as in (38a) and can be removed from the argument structure altogether, as in (38b).

(38) a. Mobil-e wis di-dandan-i (dening) paman-ku
car-DEF already Di-fix-I by uncle-1SG.POSS
‘The car was already fixed by my uncle.’

b. Mobil-e wis di-dandan-i
car-DEF already Di-fix-I
‘The car was already fixed.’

The zero construction cannot be passive because the agent of the zero construction *dak* ‘I’ or *kok* ‘you’ remains a core argument, not a chômeur. As in the active sentence, the agent of the zero construction is normally preverbal, cliticised, and undeletable. If the agent is omitted, the sentence will be ungrammatical, as shown in (39b). The agent is never expressed in the prepositional phrase, as shown by the ungrammaticality of (39c).

(39) a. Buku-ne wis kok-tuku
book-DEF already 2SG-buy
‘The book has been bought by you.’

b. *Buku-ne wis tuku
book-DEF already buy
‘The book has been bought.’

c. *Buku-ne wis dening kok-tuku
book-DEF already by 2SG-buy
‘The book has been bought by you.’

The fact the agent of the zero construction remains a core argument is also supported by its ability to be a controller of a reflexive. In the passive because the agent is a chômeur, it cannot control a reflexive. In Javanese the reflexive is *awak* ‘self’ with possessive marking.

(40) a. Awak-ku₁ arep tak-aso-ake dhisik.
Self-1SG.POSS FUT 1SG-rest-AKE first
‘I will rest myself first.’

b. Awak-mu₁ ojo kok₂-salah-ake
self-2SG.POSS not 2SG-blame-AKE
‘You must not blame yourself.’

c. *Awak-e₁ arep di-priksa dokter₁
self-3SG.POSS FUT Di-examine doctor
‘The doctor will examine himself/herself.’

In the zero construction, as shown in (40a), the agent *tak* ‘I’ controls the reflexive *awak-ku* ‘myself’ and in (40b) the agent *kok* ‘you’ controls the reflexive *awak-mu* ‘yourself’. However, in the passive construction, as shown in (40c), the underlying agent *dokter* ‘doctor’ cannot control the reflexive *awa-ke* ‘himself/herself’.

3.2 The zero construction as ergative

After showing that the zero construction is not passive, I propose that it is ergative. If ergativity is defined as the alignment of the patient of the transitive verb with the sole argument of the intransitive predicate, then the zero construction is ergative. Here I will demonstrate that the patient of the zero construction is aligned with the sole argument of the intransitive predicate. Typically an ergative system is manifested in case marking or bound
pronouns. In an ergative system A is marked whereas S and P are unmarked (Basque, Eskimo). With bound pronouns there is one set for S and P only (Northeast Caucasian) or one set for S and P and another for A (South Sulawesi languages).

3.2.1 Word order
In terms of word order both the patient of the transitive and the subject of the intransitive are in sentence-initial position. In (41a) the patient sepedane ‘the bike’ is sentence-initial, so is the sole argument of the intransitive in (41b) sepedane ‘the bike’.

(41) a. Sepeda-ne kok-rusak
    bike-DEF 2SG-break
    ‘You broke the bike.’

    b. Sepeda-ne rusak
    bike-DEF break
    ‘The bike broke.’

3.2.2 The integration of the agent into clause structure
The fact that the agent of the zero construction remains a core argument shows that the zero construction is basic. Furthermore, as previously described, the agent cannot be deleted, showing the greater integration of the agent into the clause syntax. This integration tends to be a characteristic of ergative rather than passive constructions (Comrie, 1988). In an ergative construction the agent is part of the core whereas in a passive it is on the periphery.

3.2.3 Coreferentiality of a deleted NP in a subordinate clause and in a complement clause
It is the patient, not the agent, of the zero construction which becomes the target of deletion in a co-ordinated sentence, as demonstrated in (42).

(42) a. Dheweke_i teka saka kantor, terus ∅ turu
    3SG come from office then sleep
    ‘S/he came from the office, then slept.’

    b. Dheweke_i tak-ojak terus ∅/i tiba
    3SG 1SG-run after then Ø fall down
    ‘I ran after him, then fell down.’

In (42a) both clauses are intransitive. The deleted NP in the second clause is interpreted as coreferential with the sole argument of the first clause, dheweke ‘she/he’. In (42b) the deleted NP is interpreted as coreferential with the patient dheweke ‘she/he’ and not the agent tak ‘I’ of the transitive clause.

As in a co-ordinated clause, a similar pattern of deletion can be found in a complement clause. The verb kepingin ‘want’, for example, takes a clausal complement. Observe the following examples.
In (43) we have an intransitive verb *lunga* ‘go’ in the complement clause. The sole argument of this verb is controlled by the argument of *kepingin* ‘want’. In (43b) the clausal complement contains a transitive verb *ambung* ‘kiss’. The deleted NP is the patient of the zero construction, hence controlled by the argument of *kepingin* ‘want’. In other words, the patient of the zero construction shares the same property as the sole argument of the intransitive clause.

In short, the referentiality of common NPs in co-ordinated clauses and in complement clauses demonstrates that the patient of the transitive clause is aligned syntactically with the subject of the intransitive clause.

### 3.2.4 Imperatives

Additional evidence that the zero construction is ergative comes from Javanese imperative. Javanese imperatives may be nasalised, unprefixed, or prefixed with *di-* . Note that the suffixes *-a, -en, -kna*, and *-ana* also have to be added to form the imperative. The suffixes *-a, -en* are used with simple imperatives whereas *-kna* and *-ana* are used to express imperatives with benefactive and repetitive or locative meaning.

Consider the following examples:

(44)a. *Ng-ade-g-a ing kiwa-ku*

N-stand-A in left-1SG.POSS

‘Stand on my left.’

b. *Teka-a mrene cepet-cepet*

come-A here quickly

‘Come here quickly.’

(45)a. *N-(t)ulis-a surat kanggo ibu-mu*

N-write-A letter for mother-2SG.POSS

‘Write a letter for your mother.’

b. *Ketik layang iki*

Type letter this

‘Type this letter.’

c. *Ketik-en layang iki*

Type-EN letter this

‘Type this letter (with emphasis).’

(46)a. *N-jupuk-na tas-ku*

N-bring-NA bag-1SG.POSS

‘Bring my bag for me.’

b. *Jupuk-na tas-ku*

bring-NA bag-1SG.POSS

‘Bring my bag for me.’
Both nasalised and unprefixed imperatives are found in intransitive predicates (44) and in transitive predicates (45a). However, there is a difference between the nasal and unprefixed verbs in the intransitive imperatives and in transitive imperatives. The nasal in the intransitive imperative is related to the lexical nature of the verb. A nasalised intransitive retains its nasal prefix in an imperative construction. The verb ngadeg ‘stand’ in (44a) is a nasalised intransitive. The addition of the suffix -a turns it into the imperative ngadega. Similarly, the unprefixed intransitive remains unprefixed in the imperative. The intransitive verb teka ‘come’ in (42b) is an unprefixed intransitive, and is turned to an imperative by the addition of the suffix -a to become tekaa.

In the transitive clauses, there are two options - to use the nasalised imperative or the unprefixed imperative. However, while the nasalised imperative is perfectly grammatical with a simple transitive, as in (45a), it is ungrammatical with a benefactive transitive, as in (46a), or a repetitive transitive, as in (47a). The unprefixed transitive imperative may take two forms, with or without the suffix -en, as in (45b) and (45c) respectively. So, we see unprefixed imperative has a wider distribution than the nasal prefixed one and it is more frequent. Both facts strongly suggest the zero construction is transitive, not a derived structure.

I take the zero construction to be an ergative construction, i.e. a transitive construction in which the patient, rather than the agent, is identified with the sole argument of a one-place predicate as the subject. However, as in Balinese, the fact that the zero construction is ergative does not necessarily mean that the language should be typed as ergative (Artawa & Blake 1997). The nasal construction should also be taken into consideration. In the previous section, the nasal construction and the di- construction with the third person agent have been described as active and passive respectively. If this is so, the nasal construction with the first person and second person agent should also be considered to be active, which leads to the expectation that the zero construction is passive. However, as I have demonstrated, the zero construction is not passive but ergative.

3.3 Summary
The zero construction, with the first and second proclitic agents, seems to exhibit the properties of being ergative, in which the patient, rather than the agent, is aligned syntactically with the sole argument of an transitive clause. This can be seen from the patient’s clause-initial position and its pivot role in a co-ordinated clause and a complement clause. In addition, the agent of the zero construction is integrated into the clause structure.
Finally, the high frequency of unprefixed imperative seems to indicate that the zero construction is more basic than the nasal construction.

4. Javanese adversatives
Javanese adversatives are formed by the prefix ke- and the suffix -an/nan. Generally, adversatives refer to the situation where the preverbal NP is adversely affected by the action of the verb. Consider the following examples.

(48) a. Bocah iku ke-tiba-(a)n klapa
    child DEF KE-fall-AN coconut
    ‘The child was (adversely) hit by a coconut.’

b. Kowe ke-(i)lang-an dhuwit
    2SG KE-lost-AN money
    ‘You lost your money.’ (Lit. You got lost your money)

c. Dweweke ke-copet-an dhompet
    3SG KE-steal-AN wallet
    ‘S/he had her/his wallet stolen.’

d. Aku k(e)-odan-an
    1SG KE-rain-AN
    ‘I was caught in the rain.’

As observed from these above examples, the verbs are prefixed with ke- and suffixed with -an. Except for (48d), a postverbal NP is present in each of the sentences. The postverbal NP in fact does not have the same grammatical relation in each sentence, demonstrating that these sentences do not come from the same derivation. In addition, the absence of the postverbal NP in (48d) also indicates its different derivation from other examples. Each of these different adversatives will be discussed in turn.

4.1 Adversative Type 1
The first type of Javanese adversative derives from an intransitive clause in which the locative NP has been advanced to a 2 relation. As shown in (49a), the verb tiba ‘fall’ is intransitive, followed by a locative preposition phrase ing bocah iku ‘on the child’. In (49b) locative to 2 advancement has taken place indicated by the nasal prefix and the suffix -i. As a result, passivisation of the advanced locative is made possible. Because the NP klapa iku ‘the coconut’ has no control over the action, the accidental passive prefix ke- is used. The locative suffix -i is then replaced by -an, as in (47c).

(49) a. Klapa iku tiba ing bocah iku
    coconut DEF fall on child DEF
    ‘The coconut fell on the child.’

b. Klapa iku n-(t)iba-ni bocah iku
    coconut DEF N-fall-I child DEF
    ‘The coconut fell on the child.’

c. Bocah iku ke-tiba-(a)n klapa iku
    child DEF KE-fall-AN coconut DEF
    ‘The child was adversely hit by the coconut.’

The verbs in (50) participate in this locative advancement and accidental passivisation.
The adversatives deriving from locative advancement are then similar to accidental passives. As correctly observed by Davies (1995), this type of adversative shares with accidental passives their accidental or non-volitional situation as well as the formal marker of the verb, ke-. However, Davies failed to identify other verb bases of Javanese adversatives. In fact, a closer observation of the verbs that participate in Javanese adversatives reveals that not all adversatives are accidental passives. Only those involving locative advancement match the accidental passive derivation.

In addition, only unaccusative verbs with locative NPs may participate in locative advancement. Intransitive verbs may be distinguished into two types: unaccusative and unergative (Perlmutter 1978, 1984). Unergative verbs are those in which the argument of the intransitive aligns semantically with the transitive subject whereas unaccusative verbs are those in which the argument of the intransitive aligns semantically with the transitive direct object. This distinction is also reflected in Javanese intransitives. Kana (1986) uses Intransitive-Transitive Causative Pair to distinguish unaccusatives from unergatives in Indonesian. Kana’s examples are given below. (The glosses of these examples are mine).

(51) a. *Orang itu meng-(k)erja-kan tugas-nya*  
      person DEF MENG-work-KAN duty-3 SG.POSS  
      ‘That person did his job.’

   b. *Orang itu bekerja*  
      person DEF work  
      ‘That person worked.’

(52) a. *Ibu men-(t)idur-kan anak itu*  
      mother MENG-sleep-KAN child DEF  
      ‘Mother put the child to sleep.’

   b. *Anak itu tidur*  
      child DEF sleep  
      ‘The child slept.’

In (51) the verb *mengerjakan ‘do’* is transitive, with the NPs *orang itu ‘that person’* and *tugas-nya ‘his job’* bearing the 1 and 2 relation respectively. Similarly, in (52a) the verb
menidurkan ‘put to sleep’ is transitive, with the NPs ibu ‘mother’ and anak itu ‘the child’ bearing the 1 and 2 relation respectively. With the intransitive verb bekerja ‘work’ in (51b), the only NP orang itu ‘that person’ aligns semantically with the 1 of the transitive mengerjakan ‘do’. On the other hand, with the intransitive verb tidur ‘sleep’ in (52b), the only NP anak itu ‘the child’ aligns semantically with the 2 of the transitive menidurkan ‘put to sleep’. In Relational Grammar an argument like orang itu ‘that person’ in (51b) is taken to be an initial 1, but an argument like anak itu ‘that child’ in (52b) is taken to be an initial 2. Intransitive verbs like bekerja are unergatives whereas those like tidur are unaccusatives.

Javanese unaccusatives can be distinguished by means of this causativisation test. Consider the following examples.

(53) a. Dheweke ng-(k)andha-ake bab iku
   3SG N-talk-AKE matter DEF
   ‘S/he discussed the matter.’

   b. Dheweke kandha marang aku
   3SG talk to 1SG
   ‘S/he talked to me.’

(54) a. Bocah iku m-(p)ecah-ake gelas
   child DEF N-break-AKE glass
   ‘The child broke a glass.’

   b. Gelas-e pecah
   glass.DEF break
   ‘The glass broke.’

In (53a) the verb ngandhakake ‘discuss’ is transitive, with the NPs dheweke ‘she/he’ and bab iku ‘the matter’ bearing the 1 and 2 relation respectively. Similarly, in (54a) the verb mecahake ‘break’ is transitive, with the NPs bocah iku ‘the child’ and gelas ‘a glass’ bearing the 1 and 2 relation respectively. With the intransitive verb kandha ‘talk’ in (53b), the only NP dheweke ‘she/he’ aligns semantically with the 1 of the transitive ngandhakake ‘discuss’. On the other hand, with the intransitive verb pecah ‘break’ in (54b), the only NP bocah iku ‘the child’ aligns semantically with the object of the transitive mecahake ‘break’. Therefore, the intransitive verb kandha is unergative whereas pecah is unaccusative. The intransitive verbs in (55a) are unergatives because they have the same pattern as kandha whilst those in (55b) are unaccusatives because they have the same pattern as pecah.

(55) Transitive                  Intransitive
   a. m-(p)ikir-ake ‘think of’    mikir ‘think’
      m-blanja-ake ‘spend’          blanja ‘buy’
      n-janje(t)-ake ‘promise’      janji ‘promise’

   b. n-(t)eka-ake ‘cause to come’ teka ‘come’
      ng-ambruk-ake ‘cause to fall over’ ambruk ‘fall over’
      n-(t)iba-ake ‘cause to fall down’ tiba ‘fall down’
      ng-(k)undur-ake ‘cause to reverse’ mundur ‘reverse’

The intransitive verbs which become the base of the locative advancement type of adveratives are unaccusative verbs, as shown by the possibility of forming adveratives from (57) and impossibility of forming adveratives from (56).
The second type of adversative is illustrated below.

(58) a. Kantor ke-(i) lang-an dhuwit
    office ke-get lost-an money
    ‘The office lost some money.’

    b. Sawah-e k(e)-akeh-an banyu
    ricefield-DEF KE-much-AN water
    ‘The rice field was affected by too much water.’

    c. Aku k(e)-entek-an dhuwit
    1SG KE-all gone-AN money
    ‘I was all out of money.’

    d. Desa kuwi ke-kurang-an pangan
    village that KE-lack-AN food
    ‘That village lacked food.’

Unlike the first type, these adversatives do not derive from intransitive verbs that have undergone transitivisation via locative advancement and subsequent passivisation. Instead, they derive directly from intransitive verbs. In (58) the preverbal NP derives from a locative NP which advances and pushes the initial subject into chômage, where it is realised as a postverbal NP. However, this type of adversative shares with the first type the requirement of an unaccusative base verb. The sentences in (58a-d) may be interpreted to derive from intransitive clauses in (59a-d) respectively.

(59) a. Dhuwit ilang ing kantor
    money get lost in office
    ‘The money was lost in the office.’
b. *Banyu-ne akeh ing sawah
   water-DEF much in rice field
   ‘The water was much in the rice field.’

c. Dhuit entek ing aku
   money run out in 1SG
   ‘I was running out of money.’ (lit. Money was all gone on me)

d. Pangan kurang ing desa kuwi
   food lack in village that
   ‘Food was lacking in that village.’

On the surface, the sentences in (59) are similar to the type 1 adversative in (49a), in that the locative NP follows their verbs, here no locative advancement to direct object is possible, as shown by the ungrammaticality of (60b) for the adversative kelangan ‘get lost of something’ in the following example.

(60a) a. Dhuit-e ilang ing kantor
   money-DEF get lost in office
   ‘The money got lost in the office.’

b. *Dhuit-e ng-ilang-i kantor
   money-3SG.POSS N-get lost-I office
   ‘His money got lost in the office.’

c. Kantor ke-(i)lang-an dhuit
   office KE-get lost-AN money
   ‘The office lost some money.’

In addition, while the postverbal NP in the first type of adversative is agent-like and can be preceded by the preposition dening/karo ‘by’, as in (61a), the postverbal NP in the second type of adversative cannot be agent-like. For example, dening/karo ‘by’ cannot be used before the postverbal NP dhuit ‘money’, as shown by the ungrammaticality of (61b).

(61a) a. Bocah iku ke-tiba-(a)n karo klapa
   child DEF KE-fall-AN by coconut
   ‘The child got fallen on by a coconut (on him).’

b. *Kantor ke-(i)lang-an karo dhuit
   office KE-get lost-AN by money
   ‘The office lost some money.’

Sentence (62) gives a further illustration of the second type of adversative.

(62) Wong lanang iku ke-pat(i)e-nan anak-e wedok
   person male DEF KE-die-AN child-3SG.POSS female
   ‘The man had his daughter die on him.’

4.3 Adversative Type 3
The third type of adversative derives from transitive bases, as in (48c) repeated here as (63).

(63) Dheweke ke-copet-an dhompet
    3SG KE-steal-AN wallet
    ‘S/he had her/his wallet stolen.’
At a glance, the sentence in (63) looks similar to the second type of adversative in (48b), but there is significant differences between them. Both the postverbal and the preverbal argument of the first two types of adversative undergo different derivation from the third type of adversative. Compare the examples below.

(64)a. Desa kuwi ke-kurang-an pangan  
    village that KE-lack-AN food  
    ‘That village was lacking food.’

    b. Pangan kurang ing desa kuwi  
    food lack in village that  
    ‘Food was lacking in that village.’

(65)a. Dheweke ke-copet-an dhompet  
    3SG KE-steal-AN wallet  
    ‘S/he had her/his wallet stolen.’

    b. [Unspecified] ny-(c)ope t dhompet saka dheweke  
    [Unspecified] N-pickpocket wallet from 3SG  
    ‘[Unspecified] stole a wallet from her/him.’

First, observe the postverbal argument of the examples in (64a) and (65a). Whilst the postverbal NP in the first and second type of adversative derives from an argument of intransitive verb, the postverbal NP in the third type of adversative derives from the direct object of the transitive verb. In (64b), the postverbal NP pangan ‘food’ derives from the argument of the intransitive verb kurang ‘lack’ whereas in (65b) the postverbal NP dhompet ‘wallet’ derives from the direct object of the transitive verb nyopet ‘steal’.

Secondly, compare the derivation of the preverbal NP in (64) and (65). In (64a) the preverbal argument desa kuwi ‘that village’ is derived from the prepositional phrase ing desa kuwi ‘in that village’ in (64b), functioning as a locative, whereas the preverbal dheweke ‘she/he’ in (65a) derives from the prepositional phrase saka dheweke ‘from her/him’ in (65b), functioning not as a locative but as a source.

This derivation rules out the claim that all adversatives in Javanese can be analysed as accidental passives as suggested by Davies (1995). It is true for the first type of adversative, but not true for the second and third type of adversative. Passivisation of (64b) will result in (66a) for di-passive, and in (66b) for ke-passive.

(66)a. Dhompet iku di-copet saka dheweke  
    wallet DEF DI-steal from 3SG  
    ‘That wallet was stolen from her/him.’

    b. Dhompet iku ke-copet saka dheweke  
    wallet DEF KE-steal from 3SG  
    ‘That wallet was accidentally stolen from her/him.’
In both (66a) and (66b) the NP *dhompet iku* ‘the wallet’ has been advanced from its original role as the direct object of the verb *copet* ‘steal’. As demonstrated in example (65a), it is the NP *dheweke* ‘she/he’ which bears the subject relation of the adversative. It is clear, then, that adversative with transitive bases does not derive from accidental passivisation. Other examples of adversative of the third type are given below.

(67) a. *Murid iku ke-colong-an potlot-e*  
student DEF KE-steal-AN pencil-3SG.POSS  
‘The student had his pencil stolen.’

b. *Paman-mu ke-maling-an radio*  
uncle-2SG.POSS KE-thief-AN radio  
‘Your uncle had his radio stolen.’

4.4 Adversative Type 4
The last type of adversative is illustrated in (48d), repeated here as (68).

(68)  
1SG KE-rain-AN  
‘I was caught in the rain.’

Example (68) is different from the first three adversatives. There is only one argument, the preverbal argument. This type of adversative involves intransitive verbs describing weather, like *adhem* ‘be cold’, and *panas* ‘be hot’, and parts of the day like *siang* ‘be afternoon’, and *wengi* ‘be night’ as the bases of the adversatives, as in (69).

(69)  
*adhem* ‘cold’  
1SG KE-rain-AN
‘to be affected by the coldness’

*panas* ‘hot’  
ke-panas-an  
‘to be affected by the heat’

*siang* ‘afternoon’  
ke-siang-an  
‘to be caught by the day’

*wengi* ‘night’  
ke-weng(i)e-(a)n  
‘to be caught by the night’

Kana (1986) suggests that for Indonesian the only argument of this adversative is also the argument of the verb in its corresponding unaccusative clauses, as in (70).

(70) a. *Saya ke-dingin-an waktu selesai berenang*  
1SG KE-cold-AN when finish swim  
‘I was (overcome with) cold when I had finished swimming.’

b. *Saya dingin*  
1SG cold  
‘I am cold.’

While this analysis is true for the adversative verbs *kedinginan, kepanasan* in Indonesian and their corresponding Javanese forms *kadhemen, kepanasan*, it does not apply to other adversatives in this category. For the adversative *kudanan, kewengen* and *kesiangan*, the single argument cannot become the argument of their unaccusative clauses, as shown by the ungrammaticality of (71b), (72b) and (73b).

(71) a. *Aku k(e)-udan-an*  
1SG KE-rain-AN  
‘I was caught in the rain.’

b. *Aku udan*  
1SG rain
4.5 Summary
Based on their derivation there are four types of adversative in Javanese. First, some adversatives are derived in the same way as accidental passives of active sentences with locative advancement. Second, some other adversatives are derived from unaccusative bases but have no active counterparts. Third, some adversatives are derived from transitive bases. Finally, there are adversatives without postverbal arguments which are used specifically with verbs describing weather or parts of the day.

5. Overall conclusion
Javanese uses different morphological markers to express the notion of passive: di-, ka-, -in-, and ke-, depending on the degree of formality, register, and intentionality. Passive with di-, the most productive construction in the language, is used in less formal situations than the ones with ka- and -in-, which are used mostly in more formal situations or in certain registers like poetry and other forms of literary language. In addition, passives with di-, ka-and -in- are likely used to convey the idea of intentionality whereas those with ke- express unintentionality or nonvolitionality.

Javanese constructions with the first and second proclitic agents seem to have ergative characteristics, in which the patient of a transitive clause is aligned syntactically with the sole argument of an transitive clause. Both the patient of the transitive and the argument of the intransitive are sentence-initial and may be deleted in a co-ordinated clause and a complement clause. The agent of the zero construction is integrated into the clause structure. It is a core argument, not an optional element in the periphery as the Agent of the passive is.
The accidental passive analysis proved to be insufficient to account for the different derivation of adversatives in Javanese. Among the four types of adversative, only those deriving from active sentences undergoing locative advancement can be analysed as accidental passives. The other three types of adversatives should be treated differently because the bases for them are different, the postverbal arguments do not reflect the same grammatical relation.

REFERENCES