

## Plural infix *-ar-* in Sundanese

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This paper discusses the infix *-ar-* in Sundanese, an Indonesian language. It is typically attached to verbal bases and indicates plurality. The paper shows the following points on the basis of elicited and written data. (i) Only a few *-ar-* infixed nominals are lexicalized (e.g., *budak* “child” > *b-ar-udak* “children”). Other nominals may host the infix *-ar-*, but most of them are not lexicalized. They may be used predicatively, that is, denoting a state, not an entity. (ii) When attached to a verbal base, the infix *-ar-* generally indicates the plurality of the referent of the subject or that of the actor in the UV (undergoer voice) construction. (iii) As suggested in previous studies, the *-ar-* infixed form derived from a verbal base may function as an “emphasizer.” We could say that this function developed as a semantic extension of the “pluralness” of points within an entity that are attributed to the property. (iv) As Robins (1959: 343) points out, indication of plurality by the infix *-ar-* is not obligatory, and it seems that conditions under which *-ar-* occurs are not completely predictable.

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2. Morpho-phonology
3. Derivation from a nominal base
4. Derivation from a verbal base
5. Frequency and conditions
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### 1. Introduction \*

This paper discusses the infix *-ar-* in Sundanese, an Indonesian language. The infix *-ar-* is typically attached to verbal bases and indicates plurality, as in the following examples:

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The data presented in this paper were obtained in elicitation sessions with five Sundanese speakers in Japan (Dikshie, Inu, Yuniarsi, Dewi, Rina Puharningsih Dyah Kusumaningrum), and one in Bali (Regina). We appreciate their sharing of knowledge about Sundanese. This research is supported by the LingDy project of the Institute for Language and Cultures of Asia and Africa (ILCAA), Tokyo University of Foreign Studies.

*d-ar-iuk* “to sit (plural agent)” ← *diuk* “to sit”  
*d-ar-atang* “to come (plural agent)” ← *datang* “to come”  
*b-ar-odas* “to be white (of plural entities)” ← *bodas* “to be white”  
*t-ar-iis* “to be cold (of plural entities)” ← *tiis* “to be cold”

The infix may also be attached to few non-verbal bases, for example

*b-ar-udak* “children” ← *budak* “child”  
*m-ar-anéh* “you”(2PL) ← *manéh* “you”(2SG)

In reference grammars of the Sundanese language, such as Robins (1959), Ardiwinata (1984), Hardjadibrata (1985), Müller-Gotama (2001), and Sudaryat et al. (2007), functions of the suffix *-ar-* are listed, but detailed discussion is missing.

This study seeks answers to the following questions about *-ar-*:

- i. The infix occurs with only a limited number of nominal bases. Under what conditions does the infix occur with a nominal base?
- ii. With which constituent does the infix exhibit agreement: grammatical subject or agent?
- iii. Some of the previous studies such as Coolsma (1904: 114) and Ardiwinata (1984: 103) discuss a function other than plural marker, what may be called an “emphatic” use of the infix *-ar-*. How can we analyze this function?
- iv. As Robins (1959) states, the indication of plurality by *-ar-* is not obligatory. How often and in what conditions does the infix occur?

This study is mainly based on elicitation sessions with five Sundanese consultants in Japan. In addition, novels written in Sundanese were also used as source material, specifically to find an answer to question (iv) above. Below is a list of the written texts. They are all part of a collection of short stories.

Amilia (2008). *Layung* (Sunset Glow)  
 Iskandarwassid (1989). *Halimun Peuting* (Mist at Night)  
 Mulyana and Latief (2009). *Dongeng Uwa* (Tales of Uncle)

## 2. Morpho-phonology

This section will illustrate the morpho-phonology of the infix *-ar-*. The position in which *-ar-* occurs is described in 2.1, and the allomorph is discussed in 2.2. Robins (1959: 344, 368) points out most of the rules that will be presented here.

### 2.1. The position of *-ar-*

The ordinary phonological structure of the syllables of Sundanese is (C)V(C)<sup>1</sup>. Segments in parentheses are optional; in other words, a vowel is the only obligatory segment in a syllable.

Most roots consist of two syllables. Roots with more than two syllable may be observed to some extent, while monosyllabic roots are rarely observed. Thus, the structure of the root may be denoted as follows:

$$(C_{I-1}) V_I (C_{I-2}) (C_{II-1}) V_{II} (C_{II-2}) (C_{III-1}) V_{III} (C_{III-2}) \dots$$

The position of the consonant within a syllable is indicated by Arabic numerals (1, 2...), while the position of the syllable within a root is indicated by Roman numerals (I, II, III...).

The infix *-ar-* typically occurs in the first syllable. When a syllable begins with a consonant (C<sub>I-1</sub>), *-ar-* occurs after the initial C (e.g., *t-ar-iis* “cold (of plural entities)” < *tiis* “cold”). When a syllable begins with a vowel, *-ar-* occurs in the initial position of the base (e.g., *ar-indit* < *indit* “go,” *ar-ulin* < *ulin* “play”).

The infix *-ar-* may be attached to a derived word. When the word is prefixed, *-ar-* occurs in the first syllable of the root and not of the prefix. Below are examples of *-ar-*

<sup>1</sup> A syllable with a consonant cluster before a vowel (C1C2V) is observed in only a few words. The attested combination of C1 and C2 is as follows; C2 is liquid in most cases.

p, b + l, r  
t, d + l, r  
c, j + l, r  
k, g + l, r  
s+ p, t, k, l, r

They are observed in an onomatopoeic word or a special kind of adverb called a “verb conductor” (*kecap panganteur pagaweane* in Sundanese). Some examples of each category are shown below:

- Onomatopoeic words:

*bleg* “boom!” (description of the sound of a heavy object that comes crashing down with a thud)  
*prét* “onom.” (for the sound of car horn, breaking wind, etc.)

- Verb conductors:

*bral* “conductor” which occurs with a verb expressing “go, set out for, depart for”  
*jrut* “conductor” which occurs with a verb expressing “getting down, getting off, jump down/off.”

attached to an already derived verb with the prefix *nga-*, which functions to form a verb from a bound root; both *ruing* and *jepat* are bound roots, which are not used as independent words.

e.g.,            *nga-r-ar-iung* < *nga-riung* “gather around in a circle”  
                   *nga-j-ar-epat* < *nga-jepat* “stretch out, lie (at) full length”

When the infix *-ar-* is attached to words with reduplication, it occurs in the first syllable of the word, following the basic rule above.

Two types of reduplication occur in Sundanese: partial reduplication of the first syllable (e.g., *seuri* “laugh” > *seuseurian* “laugh continuously”), and full reduplication (e.g., *hayang* “want” > *hayang-hayang* “want very much”). The infix *-ar-* simply occurs in the first syllable, as in *s-al-euseurian*<sup>2</sup> in the reduplicated word in the former process, while it occurs in each of the reduplicated roots in the latter process; thus, *h-ar-ayang-h-ar-ayang* is derived from *hayang-hayang*.

## 2.2. Allomorph

The infix *-ar-* has another form, *-al-*, as its allomorph. There are two conditions in which the form *-al-* occurs. They are related to the occurrence of the sound *l* or *r* in a specific position within a base, which can be denoted as follows (see 2.1):

(C<sub>I-1</sub>) V<sub>I</sub> (C<sub>I-2</sub>) (C<sub>II-1</sub>) V<sub>II</sub> (C<sub>II-2</sub>) (C<sub>III-1</sub>) V<sub>III</sub> (C<sub>III-2</sub>) ...

There are two conditions in which the form *-al-* occurs:

(a) Assimilating process: *-al-* occurs in bases with / *l* / at the initial (C<sub>I-1</sub>).

e.g.,            *leumpang* “walk” > *l-al-eumpang*  
                   *leutik* “small” > *l-al-eutik*

(b) Dissimilating process: *-al-* occurs in bases containing / *r* / in the position other than the first consonant of the first two syllables, that is, (C<sub>I-1</sub>) and (C<sub>II-1</sub>) (see Robins (1959: 343), Sakiyama and Shibata (1989: 393)).

e.g.,            *hor<sub>mat</sub>* “honor” > *h-al-or<sub>mat</sub>*     (*r* is C<sub>I-2</sub>)  
                   *dahar<sub>at</sub>* “eat” > *d-al-ahar<sub>at</sub>*     (*r* is C<sub>II-2</sub>)  
                   *gumbira<sub>a</sub>* “cheerful” > *g-al-umbira<sub>a</sub>* (*r* is C<sub>III-1</sub>)

<sup>2</sup> Here an allomorph of *-ar-*, *-al-*, is observed. The rule in which the allomorph occurs will be discussed in Section 2.2.

When /r/ occurs as C<sub>II-1</sub>, an unmarked form *-ar-*, not an allomorph *-al-*, occurs.

e.g.,           *ruksak* “broken, damaged” > *r-ar-uksak* (*r* occurs in C<sub>I-1</sub>)  
                   *resik* “clean” > *r-ar-esik* (*r* occurs in C<sub>I-1</sub>)  
                   *sare* “sleep” > *s-ar-are* (*r* occurs in C<sub>II-1</sub>)  
                   *seuri* “laugh” > *s-ar-euri* (*r* occurs in C<sub>II-1</sub>)

Thus, the attachment of *-ar-* exhibits assimilation for the syllable that precedes it and dissimilation for part of the syllables that follows it.

Certain exceptions are found for the occurrence of the allomorph *-al-*<sup>3</sup>.

e.g.,           *gedé* “big” > *g-ar-edé* and *g-al-edé*.  
                   *tungtik* “investigate (base form)” > *t-al-ungtik* “investigate”

Some studies (Sudaryat et al. (2007: 115), Ardiwinata (1984: 103)) refer to one more allomorph, *ra-*, which is only attested in the following words:

e.g.,           *ra-cleng* < *cleng* “jump”  
                   *ra-jol* < *jol* “emerge, appear, turn up”  
                   *ra-jleng* < *jleng* “jump in, up, away, on”

The condition under which the allomorph occurs is not clear, but the words are all monosyllabic, a condition that rarely occurs and is presumably the condition in which *ra-* occurs.

### 3. Derivation from a nominal base

Robins (1959) suggests that *-ar-* may be attached to nominal bases and indicates plurality of the referent, providing the following examples:

*budak* “child” > *barudak* “children”  
*manéh* “2SG” > *maranéh* “2PL”  
*manéh-na*<sup>4</sup> “3SG” > *m-ar-anéhna* “3PL”

<sup>3</sup> Robins (1959: 344) suggests that the exception presumably occurred from by analogy with *l-al-eutik* < *leutik* “small.”, the meaning of which semantically makes a pair with *gedé* “big”. Concerning *nungtik* > *n-al-ungtik*, no explanation has been found at the current stage of research.

<sup>4</sup> This is a combination of *manéh* “2SG” and the definite marker “-na.”

The examples above are rather idiosyncratic in that they are lexicalized and often observed in spontaneous utterances. Plurality of the referent of the nominal is usually indicated by the combination of reduplication and attachment of the suffix *-an* ‘plural’:

*tangkal* “tree(s)” > *ta-tangkal-an* “trees”  
*batur* “friend(s)” > *ba-batur-an* “friends”

Indication of number by reduplication is not obligatory in Sundanese. The unmarked form may refer to either a singular entity or plural entities; *tangkal* may indicate a single tree or plural trees.

In contrast, the indication of number seems obligatory in the pair of an *-ar-* prefixed nominal and its base, for example, the pair of *b-ar-udak* “children” and *budak* “child”. A single child must be referred to by the unmarked form *budak* and plural children by the *-ar-* infixed form *b-ar-udak*.

Derivation from a nominal base other than certain frequently used examples shown above is limited. According to one Sundanese consultant, *-ar-* may be attached to some countable nouns other than the examples above, but the derived forms are not used in spontaneous utterances. For example, the forms *k-ar-uku* and *m-ar-anuk*, from the nominal base *kuku* “nail” and *manuk* “bird,” respectively, are possible forms, but the consultant never used them, and another consultant did not accept the form at all. We could say that few countable nouns may potentially be the hosts of the infix *-ar-*, but the derived forms are not recognized as an established word.

Some *-ar-* infixed forms, other than the exceptional *-ar-* nominals above, are observed in written text. We could say they are all used predicatively, that is, referring to a state of an entity and not an entity itself. Some examples are provided below.

In example (1), the *-ar-* infixed form of *anak* “child” is used in the second clause. The form *ar-anak-na* refers to the state of the two sheep mentioned—being young—and not to the children as entities.

- (1) *Dua domba pideudeuhan bibi: Si Manis jeung si Danten*  
 two sheep favorite aunt NAME and NAME  
*si Danten nu dipiara ti baréto*  
 NAME REL UV.look after from the past  
*ti keur ar-anak-na kénéh.*  
 from PROG AR.child-DET yet  
 “The aunt liked the two sheep. She had been looking after si Manis and si Danten since long time ago, when they **were kids**.”

(“Kosongna Kandang Si Manis,” *Halimun Peuting*)

In example (2), the *-ar-* infixed form of *pangkat* “position, status” is used in the last clause. Here the infixed form *p-ar-angkat* refers to the children’s state of obtaining an established position and higher status, not the position or status itself.

- (2) *Nu Cikal jadi gegedén, nu kadua*  
 REL first child become bigwig REL second  
*jadi pemréd setasion télévisi swasta,*  
 become chief editor station television private  
*nu bungsu jadi wakil diréktur rumahsakit swasta,*  
 REL last born become vice director hospital private  
*dokter kasohor tur payu. J-ar-eneng, p-ar-angkat.*  
 doctor famous and thriving AR.hold a position **AR.position**  
 “The first child became a bigwig, the second became a chief editor of a private TV station, and the last child became the vice director of a private hospital; famous and thriving. (They are all) in an established position and **of higher status.**” (“Kupat Keur Lebaran,” *Layung*)

In example (3), the *-ar-* infixed form of *sakola* “school” is used. Here, the *-ar-* infixed word *s-ar-akola* refers to the action of going to school and not to a school as an entity.

- (3) *Cék Umi, bayuan barudak téh Apa, sina*  
 it is said Mom livelihood AR.child TOP Dad in order to  
*s-ar-akola luhur; Umi mah bagian ngurus.*  
**school** high Mom TOP part AV.manage  
 “The mother said, ‘As for your livelihood, your father is responsible for the fund to be used for **(your) going to school** (for your higher education), your mother will take care of you (your daily life).’” (“Kupat Keur Lebaran,” *Layung*)

Considering what we have seen so far in this section, we could say that (i) only a limited number of the *-ar-* infixed nominals are recognized as an established word and frequently used, and (ii) other nominals may potentially host the infix *-ar-*, but most of them are not recognized as an established word. They may be used predicatively, referring to a state but not to an entity.

Some exceptional *-ar-* infixed nominals, such as *b-ar-udak* “children,” are used referentially, as in example (4).

- (4) *B-ar-udak-na l-al-eumpang.*  
 AR.child-DET AR.walk  
 “Children are walking.”

#### 4. Derivation from a verbal base

Robins (1959: 368) shows that verbals may host the infix *-ar-* commonly, indicating the plurality of the participants. However, previous studies have not clarified which participant may be a target. Robins (1959: 368) gives the sentence (5) and points out that the target is usually the subject, as in example (5).

- (5) *Urang geus m-ar-euli béas.*  
 1PL PERF AV-AR.buy rice  
 “We have been buying rice.”

He also argues that the constituent expressing the actor may also be a target, as in example (6).

- (6) *Béas geus di-b-ar-euli ku urang.*  
 rice PERF UV-AR.buy by 1PL  
 “Rice has been bought by us.”

As Robins implies, this issue matters primarily in transitive clauses, in which case the question arises whether the target is the subject or the agent.

Before investigating this issue, let us look at the intransitive construction and actor voice transitive construction, which are less problematic.

Sentences (7a) and (7b) are examples of an intransitive construction with a pair of intransitive verbs: *leumpang* “walk” and its *-ar-* infixed form *l-al-eumpang*.

In (7a), in which the subject is singular, the unmarked verb *leumpang* “walk” is used, while in (7b), in which the subject is plural, the *-ar-* infixed verb *l-al-eumpang* is used.

- (7a) *Budak leumpang ka sakola.*  
 child walk to school  
 “A child is walking to school.”

- (7b) *B-ar-udak l-al-eumpang ka sakola.*  
 AR.child AR.walk to school  
 “Children are walking to school.”

In this language, core constituents such as subject and object occur in the form of a noun phrase without any case marking, as *budak* and *b-ar-udak*, respectively, while peripheral constituents occur in the form of a prepositional phrase with a preposition indicating the semantic role, such as *ka sakola* “to school,” in (7a) and (7b).

In a canonical word order, the subject occurs before the predicate, the object occurs after the predicate, and the position of a prepositional phrase is relatively free: it may occur in either the pre-predicate position or the post-predicate position.

The *-ar-* infixed verb *l-al-eumpang* may not occur with the subject referring to a single actor. Example (7c) was not accepted by the consultants.

- (7c) \**Asep l-al-eumpang.*  
 NAME AR.walk  
 “Asep is walking.”

In examples (7a) through (7c), the subject refers to the actor. A subject of the intransitive construction may refer to the undergoer, as in (8a).

- (8a) *Tantara maot di médan perang.*  
 army die in field battle  
 “Soldiers died in the battlefield.”

In this case, too, the *-ar-* infixed verb exhibits agreement with the subject; that is, *-ar-* indicates the plurality of the subject referring to the undergoer, as in (8b).

- (8b) *Tantara m-ar-aot di médan perang.*  
 army AR.die in field battle  
 “Many soldiers died in the battlefield.”

Sundanese has no independent word class of adjectives, and words denoting a state may be grouped into intransitive verbs. (9a) is an example of *anyar* “new,” denoting a state.

- (9a) *Éta buku anyar.*  
 this book new  
 “This book is new.”

(9b) is an example of the corresponding *-ar-* infixed verb *ar-anyar*. In this case, the plurality of the subject (*buku* “book”) is indicated.

- (9b) *Éta buku ar-anyar.*  
 this book AR.new  
 “These books are new.”

Next, we look at the transitive construction<sup>5</sup>. Two transitive constructions occur in Sundanese: actor voice construction (AV construction) and undergoer voice construction (UV construction). Let us look at the example of the transitive verb *pesék* “peel.” (10) is an example of AV construction. Here, the prefix *N-* indicating AV construction is attached to the base, and the form *mesék* occurs. When the base begins with a consonant, the prefix *N-* is realized as a homorganic nasal; however, when the base begins with a vowel, it is realized as the sound *nga-*, (e.g., *injeum* “borrow” > *nga-injeum*).

Constituents referring to the actor and the undergoer both occur in the form of unmarked NP. Among the two NPs, the actor NP appears in the subject position, that is, the pre-predicate position, and the undergoer NP in the post-predicate position.

- (10) *Asép mesék buah.*  
 NAME AV-peel mango  
 “Asep peels a mango/mangos.”

(11) is an example of UV construction. Here, the prefix *di-*, indicating UV construction, is attached to the base, and the form *di-pesék* occurs. The constituent expressing the undergoer appears in the form of an unmarked NP in the pre-predicate subject position, while the constituent expressing the actor occurs in the form of a PP, which is introduced by the preposition *ku* “by.”

<sup>5</sup> A transitive base normally occurs in either the *N-* prefixed form or the *di-* prefixed form, in av construction or uv construction, respectively. The base form is only used in an imperative sentence.

- (a) *Buka panto.*  
 open door  
 “Open the door!”

- (11) *Buah di-pesék ku Asep.*  
 mango UV-peel by Asep  
 “Asep peels a mango/mangos.”

As mentioned above, the indication of number in a nominal is not obligatory. Thus, the undergoer NP *buah* in (10) and (11) may be interpreted either as singular “a mango” or plural “mangos.”

Now we investigate the *-ar-* prefix form of the verb *pesék*, *p-ar-esék*. Example (12) is AV construction. As mentioned above, an unmarked form may indicate either singular or plural. However, in this case, according to one consultant, the actor is always interpreted as plural while the undergoer may be interpreted as either singular or plural.

- (12) *Jelema m-ar-esék buah.*  
 person AV-AR.peel mango.  
 “People peel a mango/mangoes.”

Example (13), in which the actor is indicated by a proper noun, and therefore interpreted as singular, is not permitted, according to the consultants.

- (13) \**Asép m-ar-esék buah.*  
 NAME AV-AR.peel mango.  
 (Intended meaning) “Asep peels a mango/mangoes.”

Example (14) is UV construction. Here, according to the consultants, either (i) the actor, (ii) the undergoer, or (iii) both may be interpreted as plural.

- (14) *Buah di-p-ar-esék ku jelema.*  
 mango uv-AR.peel by person  
 “People peel a mango,” “A person peels mangos,” or “People peel mangos.”

From what we have presented in this section, we could say that the *-ar-* infix verb may indicate the plurality of (i) the subject of the sentence, or (ii) the actor of the situation expressed by the UV transitive construction.

From the view of grammatical agreement between the subject and the predicate, the subject is obligatorily agrees with the *-ar-* infix predicate only in the AV transitive construction, but not in the UV transitive construction. In UV construction, either the patient, the referent of the subject, or the agent, the referent of non-subject may agree with the predicate. That means that as long as the agreement to the predicate with an *-ar-*

infixing verb is concerned, the primacy of the agent over the patient is observed in this language.

Regarding the intransitive verb, especially when it expresses a state, some deviation from the principle is observed. Consider example (15) below. In this sentence, the *-ar-* infixing verb *m-ar-eungkak*, which is derived from *beungkak* “swell,” indicates the plurality of the seat of swelling within the arm, the referent of the subject *panangan* “arm,” not the plurality of the subject itself.

- (15) *Panangan abdi m-ar-eungkak.*  
 Arm 1SG AV-AR.swell  
 “My arm swells here and there.”

Example (16) is similar. In this sentence, the *-ar-* infixing verb *h-ar-eurin*, which is derived from *heurin* “narrow,” is not typically interpreted to indicate the plurality of the subject *bumi Pak RT* “Pak RT’s house<sup>6</sup>,” but to indicate the plurality of the rooms within it.

- (16) *Bumi Pak RT h-ar-eurin.*  
 house TTL RT AR.narrow  
 “In Pak RT’s house, every room is narrow.”

Another example is (17). In this sentence, the *-ar-* infixing verb *t-ar-iris*, which is derived from *tiris* “feel cold,” does not indicate the plurality of the subject *ieu awak* “this body,” but rather of the points feeling cold within the body.

- (17) *Ieu awak meuni t-ar-iris.*  
 this body even AR.cold  
 “I am feeling cold in everywhere in my body.”

According to the consultants, the *-ar-* infixing form in examples (15) through (17) may indicate the plurality of the subject, e.g., the plurality of the Pak RT’s house in (16), but the interpretation presented above is more natural.

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<sup>6</sup> RT is a neighborhood association in Indonesia. It functions as the lowest administrative unit. Pak RT is the head of the association.

Some previous studies<sup>7</sup> have pointed out an additional function of the infix *-ar-*, which may be referred to as “emphatic” use. The detail of the explanation provided by each previous study varies.

Coolsma (1904: 114) mentions “frequentatieve beteekenis” (frequentative meaning), using an example such as *sarieun* “vol vrees (full with fear)” from the base *sieun* “afraid.” Coolsma also points out that *-ar-* is sometimes reduplicated to strengthen the frequentative meaning, such as *s-ar-ar-ieun*.

Ardiwinata (1984: 103) uses the same examples as those of Coolsma and also notes that the infix *-ar-* in some verbs expresses not the plurality of the actors but only the meaning of “very” or “hard (or strong).”

Some examples from the written text are given below. In examples (18) and (19), the subject cannot be interpreted as plural, and *-ar-* infixed verbs are considered to play an emphatic role.

- (18) *Manéhna b-ar-eureum. Beuki manis.*  
 3SG        **AR.red**            the more    cute  
 “Her face **turned into red**. (She became) cuter.”  
 (“Kembang Tanjung,” *Halimun Peuting*)

In example (19), the infix *-ar-* occurs twice within the word *d-ar-ar-ines* “businesslike.”

- (19) ..., *mani d-ar-ar-ines naker nyaritana gé.*  
 even **AR.AR.businesslike**    very    speak-DET    also  
 “..., his way of speech also was even so **businesslike**.”  
 (“Ki Sobat jeung Ki Sobat,” *Layung*)

## 5. Frequency and conditions

In this section we attempt to clarify the frequency and conditions in which the infix occurs, mainly by investigating the written text.

<sup>7</sup> In addition to the studies referred to here, Sudaryat et al. (2007: 115) deals with the usage that may correspond to that dealt with here. They explain that adjectives with *-ar-* have two meanings, one of which is *tutuluyan* “continue,” or *rada* “rather,” and the other is *teu tangtu* “not sure,” with some word examples such as *ny-ar-eri* from *nyeri* “have pain,” but they don’t provide a translation for each example, and therefore the detail of the usage is not necessarily clear.

### 5.1. Frequency

We examined how often *-ar-* occurs in the written text, which consists of two short story collections: *Layung* (Amilia (2008)) and *Dongeng Uwa* (Mulyana & Latief (2009)). Table 1 presents the relevant token counts of the infix *-ar-*. The words with *-ar-* comprise approximately 0.63% of the total number of words (or tokens) in both books. The number of the types of words with *-ar-* makes up approximately 1.1% and 1.3% in *Layung* and *Dongeng Uwa*, respectively.

**Table 1 Statistics regarding *-ar-* in two short story collections**

	<i>Layung</i> (Amalia 2008)	<i>Dongeng Uwa</i> (Mulyana and Latief 2009)
Total Tokens	15,601	9,615
Number of Tokens with <i>-ar-</i>	99 (0.63%)	61 (0.63%)
Total Types	7,033	2,865
Number of Types with <i>-ar-</i>	80 (1.14%)	38 (1.33%)

We chose the story “Kupat Keur Lebaran,” which appears in *Layung* (Amilia (2008: 37–44)), and examined the frequency of the usage of *-ar-* in relation to the plurality of the subjects or actors. This story was chosen because among the 10 stories in the book, *-ar-* is used most frequently in this one. Table 2 presents the results. The number of predicates corresponding with (assumed) plural subjects or actors is 123. In these cases, predicates with *-ar-* number 19 (approximately 15.5%), whereas those without *-ar-* number 104 (approximately 84.5%).

**Table 2 Statistics regarding *-ar-* in “Kupat Keur Lebaran”**

Total Tokens	1,614
Number of Tokens with <i>-ar-</i>	23 (1.18%) <sup>8</sup>
Predicates corresponding with (assumed) plural Subjects or Actors	123
Predicates with <i>-ar-</i>	19 (15.45%)
Predicates without <i>-ar-</i>	104 (84.55%)

These results confirm the observation made in the beginning of this section that the plural indication by the infix *-ar-* is not obligatory.

<sup>8</sup> Among the 23 tokens, 19 occurred in a predicate, as shown in the lower column, and the remaining 4 consisted of the lexicalized *-ar-* infixed nominals (*b-ar-udak* “children” (3 times) and *m-ar-aneh-na* “3pl”), mentioned in section 2.

Some examples in which *-ar-* does not occur in predicates corresponding with (assumed) plural subjects are given below.

- (20) *Loba anu maot ku panyaki éta téh.*  
 many REL **die** with disease that TOP  
 “There are many (people) who **died** of the disease.”

- (21) *Iraha putra putu badé ka lembur?*  
 when son/daughter grandchild(ren) **will** to home(town)  
 “When **will** your descendants come back home?”

At the same time, the results suggest that the infix *-ar-* occurs with considerable frequency and plays a plural-indicating role to a considerable extent in Sundanese.

## 5.2. Conditions

In the previous section, on the basis of the written text, we observed that the plural indication by *-ar-* is optional. This observation raises a question about the conditions in which *-ar-* is or tends to be used. However, we could not obtain any reliable answers from the consultants. Regarding the issue of whether or not the indication of plurality by the infix *-ar-* is obligatory, the consultants’ judgments vary. This issue matters, especially when the subject explicitly refers to plural entities, as in example (22). Here, the subject *b-ar-udak* explicitly refers to plural children. Two consultants judged that example (22) is grammatical.

- (22) *B-ar-udak leumpang.*  
 AR.child walk  
 “Children are walking.”

In contrast, three consultants determined that example (22) is ungrammatical because no indication of plurality occurs in the predicate. According to them, example (23) should be used instead of (22).

- (23) *B-ar-udak l-al-eumpang.*  
 AR.child AR.walk  
 “Children are walking.”

However, their judgments seem to have been affected by the normative consciousness regarding the indication of the plurality. We infer that this consciousness arose from their

knowledge of English, in which the plural indication on a nominal is the norm, and not from their reflections on their actual use of Sundanese. In fact, most consultants, including two of the three who judged example (22) as ungrammatical, commented that they often observe utterances such as (22) in actual utterances.

From what we have seen so far, we can say that the use of the infix *-ar-* as a plural indication is not obligatory in actual use, though some speakers recognize that the its plural indication is a norm. Robins (1959: 343) also points out that the indication of plurality by *-ar-* is not obligatory, and the results of examination of the written data shown below support this observation.

The examination of the written text supports this inference. Let us look at some examples from the text.

Example (24) is an utterance expressing a command to “give away” to more than two addressees. Here, the unmarked form *Nyingkah* and the *-ar-* infixed form *Ny-ar-ingkah* are used seemingly interchangeably.

- (24) *Nyingkah!*    *Ny-ar-ingkah,*    *sing*    *ny-ar-aah*    *kana*    *diri!*  
 give way    AR.give way    so as to    AR.care    to    self  
 “**Give way! Give way,** so as to care about yourselves!”  
 (“Panto Tajug,” *Halimun Peuting*)

The subject of sentence (25), *rombongan* “group,” refers to several people, but the form *datang* “come” is used in the predicate, not *d-ar-atang*. According to our consultant, both the unmarked word *datang* and *-ar-* infixed form *d-ar-atang* can be used in this environment.

- (25) *Rombongan calon panganten lalaki datang,* ...  
 group    candidate    bride(groom)    male    **come**  
 “A group of the bridegroom candidate **came,** ...” (“Panganten,” *Dongeng Uwa*)

The subject (or agent) of sentence (26), *dua prajurit* “two soldiers,” is obviously plural, but the form *nangtung* “stand up” is used.

- (26) *Dua prajurit keur nangtung ngaréndéng.*  
 Two    soldier    PROG    **stand up**    next to each other  
 “Two soldiers were **standing up** next to each other.”  
 (“Tapak Jasa Na Dadana,” *Halimun Peuting*)

Our consultants judged that the form *n-ar-angtung* can be used in addition to *nangtung*.

Sentence (27) has a sequence of two verbals in the relative clause, that is, *bareuki ngobrol* “like to chatter,” and a verbal as the predicate, that is, *balik* “go back.” The infix *-ar-* can be attached to these three words.

One consultant mentioned that the sequence of the verbals in the relative clause can follow all four possible patterns: *bareuki ngobrol* as in sentence (27), *beuki ngobrol* (without *-ar-*), *beuki ngarobrol* (with *-ar-* in the latter one), and *bareuki ngarobrol* (with *-ar-* in both).

He also said that the verb *balik* as the predicate can be replaced by the form with *-ar-*, *baralik*.

- (27) ..., *pasién-pasién nu b-ar-euki ngobrol geus balik*, ...  
 patient.REDUP REL AR.fond of chatter PERF go back  
 “Patients who **like to chatter** have already **gone back**.”  
 (“Kembang Tanjung,” Halimun Peuting)

In this stage of our research, it seems that no strict conditions exist that determines the occurrence of *-ar-*. However, further investigation of written and conversational texts will reveal certain semantic and stylistic conditions in which the use of *-ar-* is preferred. One factor that possibly relates to the preference is that in the utterances it is necessary to make a distinction of the number. Consider the following examples. The relative clause in example (28), which lacks the head, does not specify the number of the referent and may indicate either a single person or plural people. On the other hand, example (29) specifies the plurality of the referent; plural people are assumed to come in this sentence.

- (28) *karunya ka nu sumping*.  
 worry to REL come  
 “(I am) worrying about those who will come.”
- (29) *karunya ka nu s-ar-umping*.  
 worry to REL AR.come  
 “(I am) worrying about the people who will come.”

In other words, plural indication by the infix *-ar-* is not obligatory, and both (28) and (29) may be used to indicate plural people. However, when the referent is plural and the writer or speaker needs or wants to specify this, example (29) is the only option. The need to specify the number may be related to the condition in which *-ar-* is used. This potential condition should be further investigated in future research.

## 6. Conclusions

In this paper, we investigated the function of the infix *-ar-* in Sundanese and made the following points.

Regarding the derivation from a nominal base, (i) only a limited number of the *-ar-* infix nominal can be recognized as an established word and frequently used (e.g., *budak* “child” > *b-ar-udak* “children”), and (ii) other nominals may potentially host the infix *-ar-*, but most of them are not recognized as an established word. They may be used predicatively, that is, referring to a state and not an entity.

With verbal bases, the infix *-ar-* normally indicates the plurality of (i) the actor of the situation, or (ii) the undergoer of the situation expressed by the UV transitive construction.

As mentioned in the previous studies, the *-ar-* infix form derived from a verbal base may have a function of an “emphasizer.” We can say that this function arose as a semantic extension of the “pluralness” of points within an entity that are attributed the property.

As Robins (1959: 343) mentions, indication of plurality by the infix *-ar-* is not obligatory. Investigation of written data confirms this observation. At this stage of research, it appears that no strict conditions exist that determine the occurrence of *-ar-*.

This study aimed to mainly synchronic features of the infix *-ar-*. However, historical issues related to this infix may also be of interest. This infix dates back to Proto-Austronesian. Its cognate is attested in some Austronesian languages in Taiwan, the Philippines, and Indonesia, but it is no longer productive in all languages (Li and Tsuchida (2009)). Why does only Sundanese keep this infix as a productive plural marker? That still remains a mystery.

### Abbreviations

1	first person
2	second person
3	third person
AV	actor voice
DET	determiner
NP	noun phrase
PERF	perfect
PL	plural
PP	prepositional phrase
PROG	progressive
REDUP	reduplication
REL	relative
SG	singular
TOP	topic marker
TTL	title
UV	undergoer voice

## Transcription

The transcription adopted here basically follows the Sundanese orthography.

(Transcriptions that differ from IPA are *eu* [ɣ], *y* [j], *c* [tʃ], and *j* [dʒ].

The exception is *é* [e] and *e* [ə].

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