

# Sluicing Analysis in Sundanese

Ardi Mulyana Haryadi\*, Dadang Sudana, Iwa Lukmana

Prodi Linguistik Sekolah Pascasarjana

Universitas Pendidikan Indonesia

Bandung, Indonesia

\*ardimulyana87@yahoo.com

**Abstract**—The study aims to analyze the sluicing structure form process in Sundanese. The analysis was conducted towards data in Sundanese. The language data used were written language and intuition language data. The intuition language data were contributed to substantiate written language data. Necessarily, the language data were sorted out based on its potential to form a sluicing structure. Sluicing structure in Sundanese will be revealed by the approach of six diagnostic tests. Those are *adjuncts*, *implicit argument*, *'mention some' modification*, *'mention all' modification*, *'else' modification*, and *attributive adjectives*. Each test explains whether the sentence structure is sluicing or not.

**Keywords**—*diagnostic test; ellipsis structure; interrogative words; generative minimalist*

## I. INTRODUCTION

This article is related to the phenomenon of ellipses in a sentence structure, particularly sluicing. In general, sluicing is an interrogative sentence contained in a sentence structure that is not a question. The main language object in this study is Sundanese. Sundanese is a regional language with one of the most speakers after Javanese. Geographically, the use of Sundanese and Indonesian as national languages is close since Sundanese people usually understand Indonesian. In searching of literature about sluicing phenomenon, Fortin in his dissertation has conducted a research about sluicing and verb phrase analysis in Indonesian [1]. By reason of that, this article will try to address the issue about sluicing in Sundanese and try to find a gap between Sundanese and Indonesian. Sundanese and Indonesian is coexistence and have similarities with the word order pattern. Both of them have SVO pattern. Nevertheless, in addition to the similarities it is believed that there are different linguistic features. Universally, speakers of any language must use the economy principle in language, although unconsciously.

Ellipsis structure or construction focuses on the components of grammar, either on phonology-syntactic interaction or syntactic-semantic [2]. Therefore, the components of grammar become the main issue in linguistic economy principle. At least this article aims to reveal some of the ellipsis process, particularly sluicing process in Sundanese. The economy principle in language is believed to appear naturally. Because it is the basis of the ellipsis phenomenon in the use of language. Language speakers commonly and express naturally in their languages, includes ellipsis. In a conversation, the language structure pattern or the sentence structure doesn't

have to be complete because it will be understood naturally. For example, when someone asks and it is answered only by a word or a phrase. However, a brief form can represent a complete language structure. In other words, the economy principle in a language structure is comprehended and understood in a deep structure in the human mind. Thus, the language structure is only a form, while understanding of meaning is a universal essence.

### A. Sluicing Structure

Ross stated the term of sluicing is to accommodate a clause form indicating the existence of an indirect interrogative sentence [3]. The study of sluicing is a generative grammar tradition about ellipsis phenomenon. In general, the sluicing structure is different from the common sentence structure. The sluicing structure is usually indicated by question words. But that is not a guarantee that each question word in a structure is potential to be sluicing. Sluicing is closely related to the ellipsis condition of a reference that is referred by a question word. For example, the following structure as stated by Ross [3].

Somebody just left—guess who just left

Somebody just left—guess who

He is writing, but you can't imagine what/where/why he is writing

He is writing, but you can't imagine what/where/why

From the structure above, the potential answer to a question is pronoun or person. It can be referred by the question word who. The study of sluicing draws attention of Chomskyan linguists. These days, sluicing study has been analyzed among others by Merchant [4], Culicover and Jackendoff [5], Fortin [1], and Sato [6].

Craenenbroeck illustrated sluicing as follows [7].

Ed invited someone, but I don't know who.

Ed invited someone, but I don't know who<sub>pro</sub>.

From both structures above can be seen that the question word who refers to someone marked by a pronoun. The question word indicates that the sentence is a sluicing structure. Therefore, the sluicing structure has its own characteristics. In addition to that, PF-Deletion approach can reveal a sluicing structure. In other words, the ellipsis process can be considered happening in the deep structure level. Craenenbroeck illustrated as follow [7]:

Ed invited someone, but I don't know who ~~Ed invited who.~~

The mark ~~Ed invited who~~ implies that the phonetic form that disappears or becomes a question form from "who was invited by Ed." Therefore, PF-Deletion approach gives an understanding about the process of understanding meaning from the sluicing structure. In other structure, this approach can be seen as stated by Kim [8].

*Mimi-ka nwukwunka-lul manna-ss-nuntey, na-nun nwukwu-i-nci molu-keyss-ta.*

'Mimi met someone, but I don't know who.'

On the other hand, Fortin's dissertation has a close relationship with this article. It becomes the benchmark or the basis of study because of his research about the sluicing structure. Fortin illustrated the sluicing in Indonesian as follows [1].

*Saya tahu Ali membeli sesuatu, tapi (saya) tidak tahu apa*

'I know Ali bought something, but (I) don't know **what**'

The word 'something' becomes the reference of the question word what which means the answer to the question "what Ali bought." The position of the question word becomes the crucial thing in the phenomenon of forming a sluicing structure. Universally, each language has a question form. Particularly in this article, question words in English, Indonesian and Sundanese will be revealed. The form of the question word will be mapped as follows as stated by Gumilar [9].

TABLE I. THE FORM OF THE QUESTION WORD

Wh- Form	Question Words	Existential	Universal
Naon What Apa	Naon what	Naon-naon anything	Naonwae Anything
Saha Who Siapa	Saha who	Saha-saha anybody	Sahawae Anybody
Iraha When Kapan	Iraha When	Iraha-iraha some day or other	Irahawae Anytime
Di mana Where Di mana	Di mana Where	Di mana-mana Everywhere	Di manawae Anywhere
Kumaha How Bagaimana	Kumaha How	Kukumaha anyhow	Kumahawae Anyway
Naha Why Mengapa	Naha Why	*Naha-naha Why	*Naha wae Why else

The structure forms of interrogative sentence associated with sluicing process can be seen in Sato's article [10]. The article is related to interrogative sentence form in Indonesian. Sundanese and Indonesian have their similarities and distinctions in the form of interrogative sentence. Hence, aside from geographical, Sundanese and Indonesian are close in terms of speaker bilingualism. Usually, the Sundanese speaker has at least the ability to understand Indonesian. In this article, sluicing structure in Sundanese can be said as basis to fill in the gap in Sundanese sluicing structure, mainly in terms of

interrogative words and sentences. However, in terms of interrogative words, Sundanese is relatively more varied than Indonesian. The combination of the question word, especially in Sundanese has the uniqueness because it can be widened and modified. It reminds of the modification function of diagnostic test stated by Merchant [2].

**B. Six Diagnostic Tests of Sluicing [2]**

Merchant proposed six tests to determine a sluicing structure [2]. The six tests are *adjuncts*, *implicit argument*, *'mention some' modification*, *'mention all' modification*, *'else' modification*, and *attributive adjectives*.

1) *Adjuncts*: this process gives (some) information after the question word. A modified structure with various information to find out how the structure is accepted or not.

2) *Implicit argument*: this process adds variation which accompanies either before or after the question word, there is also information such as arguments on the mark accompanying the question word. For example 'what car', 'what type', etc.

3) *'Mention some' modification*: this process is a modification of some question words in the form of a direct interrogative sentence. So, the consistency of the sluicing structure is examined by the interrogative sentence. It is surely the sentence related to the previous sluicing structure.

4) *'Mention all' modification*, this process is almost similar to 'mention some' process. However, the difference is the form of the interrogative sentence modification comprehensively. Hence, there are some variations of the interrogative sentence structure.

5) *'Else' modification*: this process modifies the part of a question word's expression. The question word is clung by various expressions in the interrogative sentence. The form of expression depends on the sluicing structure.

6) *Attributive adjectives*, this process modifies sluicing structure by adding various adjectives. However the addition of adjectives should relate to the disappearance of the object which usually refers to the pronoun.

**II. RESEARCH METHODS**

This part will briefly describe on how the procedure and short description about the language data. This article tries to reveal the sluicing structure forms in Sundanese. It takes six diagnostic tests to reveal the sluicing structure forms.

**A. Procedure**

The initial research procedure is by observing several types of sluicing structure. Then, choosing a theory related to the aim of the research. The theory is chosen based on the basic analysis knife so that it can maintain the focus of the research. It also includes a short description of six diagnostic tests proposed by Merchant [2]. The theory is used surely to reveal the sluicing structure in Sundanese.

### B. Data

The data in the research is various written Sundanese data. Various written Sundanese data are chosen based on the structure consistency. The language data were obtained from various Sundanese magazines both print and online. Besides that, the intuitive language data is included to strengthen the available language data. Sundanese data was obtained sufficiently to fulfill the ideal criteria that represents the sluicing structures.

## III. FINDINGS AND DISCUSSION

In this section, the search of linguistic data as described in method part will be outlined one by one to analyze and explain. Linguistic data will be analyzed one by one based on the potency as a sluicing structure. The discovery of the language data searching is also strengthened by intuitive language data analyzed by using Merchant [2] approach which was also used by Fortin in his dissertation [1]. In general, the discovery in this article is that Sundanese accommodates any sluicing form as mentioned in the theory. For example, sluicing structure forms such as *adjuncts*, *implicit argument*, *'mention some' modification*, *'mention all' modification*, *'else' modification*, and *attributive adjectives*.

Each test is illustrated by Sundanese data as revealed in the method part. The analysis process is surely adjusted to the chosen theory. The analysis process focuses on the acceptable analysis a sluicing structure by modifying the sentence structure. Thus, the sentence structure will be either grammatical or not. The justification of either grammatical or not an analyzed structure is based on intuitive justification or native speaker justification. Both ways can consolidate the result of analysis process. Each point of the six diagnostic tests explains different probability potencies to become sluicing or not. Therefore, this section conducts six diagnostic tests of sluicing structure in Sundanese. Those will be described as follows.

### A. Adjuncts

The analysis in this stage is as follows.

*Ujang ngomean sapedah, tapi kuring teu apal kumaha*

'Ujang repaired bicycle, but I don't know **how**'

Ujang membetulkan sepedah, tapi saya tidak tahu **bagaimana** (IND)

?*Ujang ngomean sapedah, tapi kuring teu apal kumaha éta*

?*Ujang repaired his bicycle, but I don't know **how it was***

*Ujang ngomean sapedah, tapi kuring teu apal kumaha carana*✓

'*Ujang repaired his bicycle, but I don't know **how to do it***'

In this process, adjunct applies to the sluicing structure in Sundanese. Adjunct is an additional word which explains the question word how in Sundanese. In the above sentence, the sluicing structure is marked with the question word how. Still, the interrogative sentence is structurally not direct, but indirectly. The examination process with adjunct in the next

sentence is indicated by the additional word "how is it" making the degree of acceptance in the sentence less. It is indicated by a question mark (?) to show less acceptable sentence. However, to some other Sundanese speaker the sentence '*Ujang ngomean sapedah, tapi kuring teu apal kumaha éta*' (Ujang repaired bicycle, but I don't know **how**) is considerably accepted. But, in sentence *Ujang ngomean sapedah, tapi kuring teu apal kumaha carana* (Ujang repaired his bicycle, but I don't know **how to do it**) it is grammatically accepted. The process of adding the adverbs after question word might be broadened considering many varieties of adverbs in Sundanese.

### B. Implicit Argument

The analysis in this stage is as follows.

*Manehna bogoh ka hiji istri, tapi teuing saha*

'He loves a woman, but I don't know **who**'

*Dia cinta kepada wanita, tapi tidak tahu siapa* (IND)

*Manehna bogoh ka hiji istri, tapi teuing saha eta* ✓

'He loves a woman, but I don't know **who she is**'

*Manehna bogoh ka hiji istri, tapi teuing saha jelemana* ✓

'He loves a woman, but I don't know **who the woman is**'

*Manehna bogoh ka hiji istri, tapi teuing mana jelemana* ✓

'He loves a woman, but I don't know **which one she is**'

In this process, the implicit argument applies to the sluicing structure in Sundanese. The process of adding the argument implicitly on the question words makes the variation of sluicing structure in Sundanese. Sluicing structure in the question words "who" can collocate into person. It can be seen in sentence *Manehna bogoh ka hiji istri, tapi teuing saha eta*' (He loves a woman, but I don't know **who she is**) and '*Manehna bogoh ka hiji istri, tapi teuing saha jelemana.*' But other form of it is found in sentence '*Manehna bogoh ka hiji istri, tapi teuing mana jelemana*' (He loves a woman, but I don't know **who the woman is**). The sentence has argument implicit indicator of question word showing a location or a place. But grammatically, it can considerably be accepted for Sundanese speaker.

### C. Mention Some' Modification

The analysis in this stage is as follows.

*Ujang kudu loba ngadahar bungbuahan*

'Ujang should eat more fruits.'

*Ujang harus banyak makan buah-buahan* (IND)

*Contona, naon?*

'For example, **what?**'

*Contona, naon wae?*

'For example, **what kind of fruit?**'

*Contona naon wae anu kudu didahar ku Ujang?*

'For example **what kind of fruit** should Ujang eat?'

In this process, ‘mention some’ modification applies to Sundanese. Some modifications are conducted towards some question words to indicate sluicing structure in this process. The modification is related to the direct question word form. The direct question word form is used for asking the first sentence. ‘*Ujang kudu loba ngadahar bungbuahan*’ (Ujang should eat more fruits). As a response, it can be asked using the sentence ‘*contona, naon?*’ (For example, **what**) dan ‘*contona, naon wae*’ (For example, **what kind of fruit**). Thus, the process can be applied in Sundanese. There is another possibility related to this process.

#### D. Mention All’ Modification

The analysis in this stage is as follows.

*Saha wae kamari anu teu sarakola?*

‘**Who** didn’t come to school yesterday?’

*Siapa saja kemarin yang tidak sekolah? (IND)*

*Cingan bejaan saha wae✓*

‘Let me know **who**’

*Cingan bejaan saha wae éta*

‘Let me know **who they were**’

*Cingan bejaan saha wae éta maranehna*

In this process, ‘mention all’ modification applies to structure in Sundanese, while in Indonesian doesn’t [1]. This process is actually the same as ‘some modification’ process. However, the distinction is in the variation of direct interrogative sentence and is responded by indirect interrogative sentence. For example, the interrogative sentence ‘*Saha wae kamari anu teu sarakola? (Who* didn’t come to school yesterday?) is responded by sluicing form ‘*Cingan bejaan saha wae*’ (Let me know **who**). In this process, ‘some modification’ is affirmative sentence or proposition and ‘all modification’ is interrogative sentence. This process applies in Sundanese as well.

#### E. ‘Else’ modification

The analysis in this stage is as follows.

*Ujang datang ka hajatan dulurna ....*

‘Ujang came to his family’s reception....’

*Ujang datang ke hajatan saudaranya ..... (IND)*

.... *tapi kuring teu apal saha deui éta\**

.... but I don’t know **who it was\***

..... *tapi kuring teu apal saha deui\**

..... but I do n’t know **who else it was\***

..... *tapi kuring teu apal saha deui éta anu datang✓*

.....but i don’t know **who else coming**

In this process ‘else modification’ Sundanese cannot fulfill well without adding information. This process is related to advanced structure from the previous one. But, in ‘else

modification’ process in Sundanese is rather complicated because on the form ‘*Ujang datang ka hajatan dulurna ....*’ (Ujang came to his family’s reception....) is responded with form .... *tapi kuring teu apal saha deui éta\** (.... but I don’t know **who it was**), ..... *tapi kuring teu apal saha deui\** ( ..... but I do n’t know **who else it was**), dan ..... *tapi kuring teu apal saha deui éta anu datang’* (.....but i don’t know **who else coming**). The second form is the ‘else modification’ is not acceptable in Sundanese due to the variation from the other modification. But in form .... *tapi kuring teu apal saha deui éta anu datang* (.....but i don’t know **who else coming**) is acceptable. But generally, the forms in both previous sentences in Sundanese are refused by the Sundanese speaker.

#### F. Distribution of Attributive Adjectives

The analysis in this stage is as follows.

*Kuring ngadenge Ujang kawin ka nu geulis, tapi kuring teu apal sageulis naon eta\**

‘I heard Ujang is married to a beautiful woman, but I don’t know **how beautiful she is\***’

*Saya mendengar Ujang menikahi wanita cantik, tapi saya tidak tahu secantik apa (IND)*

*Kuring ngadenge Ujang kawin ka nu geulis, tapi kuring teu apal sageulis naon\**

‘I heard that Ujang is married to a beautiful woman, but I don’t know **how beautiful\***’

*Kuring ngadenge Ujang kawin ka nu geulis, tapi kuring teu apal sageulis kumaha✓*

‘I heard that Ujang is married to a beautiful woman, but I don’t know **how beautiful**’

In this process, Sundanese can accommodate this concept well. It also applies to Indonesian as stated by Fortin [1]. In this section, the adding of adjectives makes the structure is acceptable or not grammatically. The adding of adjectives in sluicing process will show several different forms of sluicing in Sundanese. But in sentence ‘*Kuring ngadenge Ujang kawin ka nu geulis, tapi kuring teu apal sageulis kumaha*’ (I heard that Ujang is married to a beautiful woman, but I don’t know **how beautiful she is**) is grammatically not acceptable because the question word ‘what’ cannot refer to adjective. But, the question word ‘how’ can refer to the reference of adjective. For example, in sentence ‘*Kuring ngadenge Ujang kawin ka nu geulis, tapi kuring teu apal sageulis kumaha*’ (I heard that Ujang is married to a beautiful woman, but I don’t know **how beautiful**). The summary of the sluicing analysis can be seen in the table below.

**TABLE II. THE SUMMARY OF THE SLUICING ANALYSIS**

<b>Diagnostic</b>	<b>English [2]</b>	<b>Indonesian [1]</b>	<b>Sundanese</b>
Adjuncts	√	√	√
Implicit argument	√	√	√
'mention some' modification	√	√	√
'mention all' modification	X	X	√
'else modification'	√	X	X
Distribution of Attributive Adjectives	√	√	√

The table 2 above shows similarity in adjunct, implicit argument, mention some modification, and distribution concept of attributes adjectives. However, there are some distinctions on mention all modification and else modification. After all those six diagnostics, the result of sluicing structure analysis in Sundanese will be seen. Particularly, for Indonesian which becomes the reference of the analysis, although Sundanese and Indonesian are geographically close but the distinction is still found. The distinction is based on the linguistic features across Indonesian and Sundanese). Consequently, the distinction shows that Sundanese and Indonesian are two languages that live in close proximity dynamically.

#### IV. CONCLUSIONS

Overall, the analysis above shows sluicing structure in English, Indonesian and Sundanese. Based on the analysis of the six test diagnostic above, both similarity and distinction can be seen between English, Indonesian and Sundanese. Particularly, in Indonesian and Sundanese since the aim of the article is to analyze sluicing structure process based on the

sluicing reference in Indonesian. The aim of this article is to reveal the form of sluicing structure in Sundanese. However, in the term of analysis, Indonesian study from Fortin dissertation becoming the basic reference [1]. It is because there is similarity between Sundanese and Indonesian. Nevertheless, there is a possibility of differences that appear on the analysis result. Based on the analysis result, it can be concluded that there are some differences between Merchant's result English [2], Fortin Indonesian [1], and Sundanese.

#### REFERENCES

- [1] C. Fortin, Indonesian Sluicing and Verb Phrase ellipsis. Ph.D. Dissertation. University of Michigan, 2007.
- [2] J. Merchant, Voice and Ellipsis. *Linguistic Inquiry*, Volume 44 Number 1, Winter 2013, 77-108, Massachusetts Institute of Technology, 2013.
- [3] J.R. Ross, Guess who? In Binnick, R., Davidson, A., Green, G. & Morgan, J. (eds.) *Papers from the Fifth Regional Meeting of the Chicago Linguistic Society*, 252-286, Chicago Linguistic Society, 1969.
- [4] J. Merchant, *The Syntax of Silence: Sluicing, Island, and The Theory of Ellipsis*. Oxford: Oxford University Press, 2001.
- [5] P.W. Culicover and R. Jackendoff, *Simpler Syntax*. Oxford: Oxford University Press, 2005.
- [6] Y. Sato, "Sluicing in Bahasa Indonesia, P-stranding, and interface repair," In *Annual Meeting of the Berkeley Linguistics Society*, vol. 34, no. 1, pp. 269-280, December 2008.
- [7] J.V. Craenenbroeck, *The syntax of ellipsis: Evidence from Dutch dialects*. Oxford: Oxford University Press, 2010.
- [8] J-B. Kim, "Syntactic and Semantic Identity in Korean Sluicing: A Direct Interpretation Approach," *Lingua*, vol. 166, pp. 260-293, 2015.
- [9] D. Gumilar, *Kalimat Pertanyaan Bahasa Sunda: Sebuah Analisis Awal dari Perspektif Minimalis*. *Linguistik Indonesia* Th 27 no 1 Februari 2009.
- [10] Y. Sato, An In Situ Syntax of Sluicing in Indonesian. In Nomoto, H., Miyauchi, T., Shiohara, A. (eds). *Paper from AFLA 23: The Proceedings of The 23rd Meeting of The Austronesian Formal Linguistics Association*, 243-257, Asia Pacific Linguistics, 2016.