Abstract
This study aims to analyze the construction of serial verbs in Sundanese using the X-bar theory. Data sourced from written Sundanese as the main data and spoken data as supporting data. The method used in this study is a descriptive qualitative method using the X-Bar theory introduced by Noam Chomsky. The results of the analysis show that the Sundanese serial verb construction (BS) has three constructions namely coordinate KVS, incoative KVS, and configurational KVS. Based on the structure of its construction, Sundanese as a language that is typologically classified as an SVO language. The construction of serial verbs in the BS has typological characteristics of a verb-framed language. In terms of syntactic structure, Sundanese serial verbs can have the X-KOMP or X-ADJ structure. These findings contribute to our understanding of serial verb constructions in Sundanese by delineating specific syntactic patterns and typological characteristics unique to the language. The implications of these findings extend to broader language studies, offering insights into the syntactic behaviors of SVO languages and providing practical applications for language preservation and educational frameworks.

Keywords: Serial Verb Construction, Sundanese Language, X-bar Theory

Introduction
Humans act speech with language, and language is a way for humans to express their desires in the form of language contact. The speakers use several languages. People from various regions should be able to use more than one language, both local languages and a second language, namely the language of unity (Nickless et al., 2024). In reality, the community of Undrus Binangun as a regional community has a language that is chaotic or does not follow language rules. Sundanese, the second largest regional language after Javanese, can also be pushed by Indonesian. In schools, Sundanese is given as a local content subject once a week in the province of West Java (Zein, 2020). This small number of hours is grossly inadequate. Languages are best learned naturally rather than in the classroom. The environment is also very supportive of language maintenance. If people in the neighborhood speak Sundanese, for example, the children there will also master Sundanese. The community itself plays an important role in language preservation.
BS is also widely spoken in parts of Jakarta (Errington, 2022). One of the characteristics of verbs is that they have the main function as predicates or as the core of predicates in sentences, although they can also have other functions (Iskandar et al., 2022; Qilin, 2024).

The verb is the main element that determines the syntactic relationship and semantic relationship with other units or roles in the sentence (Nickless et al., 2024). Verbs or verbs are words that express an action, process, motion, state, or occurrence of something. So, it is clear that verbs are words that indicate action or process and are central to the sentence (Fromont et al., 2020). Furthermore, the existence of verbs can be seen from three aspects, namely semantic characteristics, morphological characteristics, and syntactic characteristics (Xiaodong, 2024). Semantic characteristics are characteristics that can be seen from the meaning of the words contained in them; for example, the verbs approach, bathe, buy, and beat indicate a single action and serial verbs. Single-verb predicates are predicates with a main verb consisting of one, while serial-verb predicates are predicates with a predicative structure with more than one main verb (Cornish, 2023).

Serial verbs, also known as verb serialization, are predicative constructions whose form consists of two or more core verbs that appear side by side, and their presence is strong enough. They have the behavior of a single verb or a simple verb form. This form of verb serialization occurs when two or more verb forms co-occur, and both forms act as a single predicate (Raksachat, 2022). The following features characterize serial verb syntactic constructions: 1) a series of subsequent verb units form it, 2) the series of verb units do not use conjunctions, and 3) the sequence of verb units forms one clause with similar arguments and functional categories (Fan, 2021).

Based on the explanation, serial verbs differ from complex predicates in that serial verbs must have a single predicate. In contrast, complex predicates can have multiple predicates, with one acting as an argument to another. Serial Verb Constructions (SVCs) cannot have different agents if a non-agent is shared, and they describe a single event with shared arguments, where each verb can independently stand outside the SVC (Haspelmath, 2016). The research employs the X-bar theory, originally introduced by Noam Chomsky, which posits two levels and two projections for sentence structure: an X-bar projection and a maximal projection (Cho, 2020; Zein, 2020). This theory was developed to address limitations in Phrase Structure Syntax (PSS) and Phrase Structure Rules (PSR), recognizing lexical projections and phrase projections but lacking an intermediate category between words and phrases. Stowell's application of X-Bar theory to English phrase structure, highlighted by Lieber, led to the elimination of phrase structure rules in universal grammar and established five principles, including that each phrase is endocentric and specifiers and complements appear at specific levels. However, Lieber found that applying the X-Bar theory at the word level was insufficient for more complex words, as Haegeman's tree diagram illustrates (Haspelmath, 2016).

The figure above shows that the symbol X is a substitute for a lexical category such as a noun, verb, preposition, or adjective, and the dot is filled by three grammatical functions: complement, specifier, and adverb. Errington et al. (2022) categorize BS
sentences into two types: verbal and nonverbal. Verbal sentences have both transitive and intransitive verb predicates, and nonverbal sentences have a noun, adjective, or adverbial predicates. The study of BS verbs involves the relationship of the verb to the argument in the SVO (Subject-Verb-Object) order pattern, where S comes before V and O comes after V in transitive sentences and SV (Subject-Verb) order pattern in intransitive sentences (Helong & Xiaodong, 2024).

Verba, as the main role in Sundanese verbal sentences, can appear as a single verb in intransitive sentences, as in (1) and in transitive sentences in (2), or as a serial verb, as in (3). In Sundanese, sentences with serial verbs, as in (3), are common and very diverse. This research focuses on analyzing the construction of serial verbs in Sundanese by using the X-Bar theory. This research is not the first time this has been done. There are several similar studies conducted by other researchers with different language objects. In this section, several relevant studies are presented and can be used as reference materials that help in this research, both from the object of study (Sundanese/BS), the topic under study (Construction of Serial Verbs/KVS movement type), and the theory used (Typology Theory and X-Bar Theory).

From the explanation that has been presented in the introduction above, the reason the author chose the topic is to describe the constituent structure (str-k) in serial verb construction in Sundanese and see the patterns found in serial verb construction in Sundanese. Some studies used as reference materials in this research are as follows: Research conducted by Aziez (2020) examines verbs with complements in Sundanese (BS) in terms of syntactic and semantic behavior. Sobarna's focus in researching complemented verbs in BS includes four things, namely the form of complemented verbs in BS, types of verbs that can be followed and those that cannot be followed by complements in BS, constructions and categories that can fill complements in BS as well as the mobility of their position and the meaning carried by complements in BS.

Another study on the typology of motion verbs can be seen in an article entitled "The Typology of Motion Verbs in Northern Vietnamese," written by Tran et al. (2022) theory which categorizes motion verbs in the category of satellite-framed or verb-framed languages. In Pace's research, analysis for both verb-framed and satellite-framed patterns is presented, complemented by diachronic changes to examine word classes in Vietnamese with consideration of dual categories in the path verb lexicon, which can be considered as verbs and prepositions.

The next research study was conducted by Toan (2023) on the construction of Sasak language serial verbs, especially the meno-mene dialect, in terms of typology and functional lexical grammar theory. The research on Sasak language serial verbs identifies ten semantic types: movement, direction, instrumental, commutative, manner, aspectual and modal, benefactive, causative, causal, and synonym types. The serial verbs in the Sasak language's meno-mene dialect exhibit specific characteristics: they are spoken in one intonation unit, formed by core verbs, and the serial verb markers appear on only one verb or each verb that receives the same marker. Additionally, verbs forming complex
predicates can share aspect, mood, and negation markers, and they share the same argument.

From the explanation presented in the introduction above, the author chose the topic to describe the constituent structure (str-k) in serial verb construction in Sundanese and identify the patterns found in serial verb construction in Sundanese. The objectives of this research are to analyze the structure and typological characteristics of Sundanese serial verbs using X-Bar theory. The benefits of this research include a deeper understanding of Sundanese syntax and contributing to the documentation and preservation of the Sundanese language. The implications of this research extend to the fields of linguistic theory and language education, providing insights into the syntactic behaviors of SVO languages and informing practical applications for language teaching and preservation efforts.

**Research Methods**

On this sheet, researchers write about research methods and work steps. Data collection, data collection methods and techniques or often also called the approach used by researchers to research, data sorting, data analysis methods and presentation of analysis results.

Data collection for this research was obtained through interviews with native speakers who know Sundanese. All data were obtained using the method of listening and recording. Listen notes are done when the researcher conducts a question and answers session with native speakers and then native speakers answer and explain the questions given by the researcher. The researcher will write important things.

In this study, the researcher used a descriptive qualitative method using the X-Bar theory introduced by Noam Chomsky as a linguist in late 1928 in Pennsylvania, United States. This method is a research method that is solely based on facts or phenomena that are empirically alive in the speakers so that the data is produced as it is (Mertens, 2023). The approach used in the research is a qualitative approach. The qualitative approach in this case is a research procedure that produces descriptive data in the form of written or spoken words from people and behaviors that can be taken (Buckley, 2022). Thus, the data collected is data in the form of words or sentences or images (not numbers).

The research steps began with interviews with informants. Through interviews, it is expected to obtain data on the use of serial verbs in everyday language. The writer only records sentences containing movement-type serial verbs. The data that have been recorded are then grouped according to the needs of the research. Data that have been collected at this stage are analyzed using the commensurate and agih methods (Sudaryanto, 1992: 145) which are implemented in the techniques of expansion, deletion and change of form. The data obtained are then grouped based on the type of predicate whether it is transitive or intransitive. Furthermore, the data that has been grouped is analyzed using Noam Chomsky's X-Bar theory.

**Results and Discussion**

**Results**
Structure of serial verb construction in Sundanese

Sundanese, which on the one hand has many morphological markers, on the other hand, has serial verb constructions. The serial verbs found in this language are in the form of serial verb constructions (hereafter abbreviated as KVS). The description of the empirical facts about the existence of KVS in Sundanese as a language that is typologically classified as an SVO language, as stated above, supports the truth of Kroeger's opinion which states that serial verbs are most often found in SVO languages, but are also found in SOV languages. Furthermore, the following is a discussion of the behavior of Sundanese KVS.

a. The sorcerer comes and bewitches anjeunna dadi keong Mas

The sorcerer came to bewitch 2TG into NAME
“The sorceress appeared and bewitched him into a golden conch”.

The data above includes the serialization of the verb come nyihir 'come to bewitch'. It is different from complex predicates, where the verb relationship in verb serialization PRED1 with PRED2 is very strict and consecutive. In verb serialization, there are no limiters or markers in the form of other constituents.

b. Galuh ajeng lumpat indit leuweung,

NAMA ran away to the forest,
“Because she was afraid Galuh Ajeng ran away to the forest”

The data above includes the serialization of the verb lumpat indit 'run away'. The serialized verb lumpat indit is a matrix verb (core). lumpat indit is a main verb that does not have a dependency relationship between the two, but both are seen as one unit in filling a function. Serial verb constructions in Sundanese include coordinative KVS, incoactive KVS, and configurative KVS.

Coordinate Serial Verb Construction

Coordinate serial verb construction is divided into two types, namely sequential interpretation and simultaneous interpretation. Sequential interpretation consists of the first verb (V1) which is a non-stative verb and can mean action, while the second verb (V2) can mean action, state, or process. Meanwhile, the simultaneous interpretation consists of V1 which is a stative verb meaning a state, while V2 can mean action or process. Of the 160 KVS found, 135 KVS are coordinated KVS.

From the data analysis, it was found that the coordinate serial verb construction consists of two to three verbs arranged in a row. This construction is the most dominant type that predicates sentences in Sundanese. The first verb (V1) of the coordinate KVS mostly has the meaning of action, but some V1s are filled with verbs meaning state.

The difference in the meaning of V1 occurs due to different interpretations of the coordinate KVS. If the V1 of the construction is a non-stative verb meaning action, the resulting interpretation of the whole construction is sequential. This interpretation implies that the sub-activity described in V2 is a continuation of the sub-activity expressed by V1. In this interpretation, the filler verbs V2 and V3 can mean action, state, or process.
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The next interpretation that can occur in coordinate KVS is the simultaneous interpretation. This interpretation is produced when V1 means state or stative. This interpretation does not imply that the sub-activity described in V2 is a continuation of the sub-activity expressed by V1. However, it does imply that the sub-activity described in V2 occurs simultaneously or simultaneously, not as a progression of the sub-activity expressed in V1. In this interpretation, the filler verb V2 can mean action or process.

**Incoative Serial Verb Construction**

This construction is determined by V1 which is filled with the verb 'ragrag' or 'naek' and V2 is a verb that means locative. From the data analysis, it is found that the incoative serial verb construction consists of two verbs arranged in a row.

The incoative construction performs the complementary aspectual function. The verbs in this construction carry an inco-active aspect or an aspect that describes the starting action. V1 'ragrag' or 'naeg' in the incoative KVS is regarded as the starting point for the continuation of the activity depicted in V2. In the case of the incoative KVS, this indicates that movement and change are not seen as separate subactivities. The incoative KVS does not accept a sequential interpretation, so the verbs that come next are not a development of the subactivity of the verb that came before.

For Example, the reason is that the ceiling is now being built with two wooden beams so that it will not fall on the students who are about to be taught. (The reason is that the ceiling is now supported by two wooden beams so that it does not fall on the students who are studying). The KVS in this sentence is formed from two verbs present in a row, namely V1 murag and V2 kana. V1 murag is a process-meaning verb and V2 kana is also a process-meaning verb that shows the locative noun of the students' bodies that are studying. Both verbs perform complementary aspectual functions. In the case of the incoative KVS, this indicates that movement and change are not seen as separate subactivities. The incoative KVS does not accept a sequential interpretation, so its construction cannot be interpreted as 'falling and then overwriting'. Therefore, this KVS belongs to the incoative verb construction because it occurs in the form of a reference to a change of state. Based on the semantic relationship between the verbs that make up the construction, both verbs in this construction express the movement of participants who move from one place to another. V1 murag expresses the meaning of moving from V2 kana.

**Configuration Serial Verb Construction.**

V1 is a process verb and V2 is a locative verb. This configuration KVS plays an important role in the packaging of information in Sundanese as the verbs in this KVS perform complementary aspectual functions. In configuration KVS, process verbs occur to show the form of reference for a state.

From the results of the data analysis, it was found that the configuration-type serial verb construction consists of only two verbs arranged in a row. This construction consists of V1 which is a process verb or a state change verb. The activity shown by the verb in V1 in each sentence is a form of state that has changed from the previous state. The change of state can be seen through the context of the sentence as a whole. Then, V2 which is
present in the serial configuration verb construction is a verb that expresses location either explicitly or implicitly. The data analysis of verbs that are configuration serial verbs will be explained below.

For example, the two major political parties, Golkar and the United Development Party, are divided into two camps (The two major political parties, Golkar and the United Development Party, split into two camps). The KVS in this sentence is formed from two verbs that come in a row, namely V1 divided and V2 finished. V1 divided is a process-meaning verb and V2 finished is also a process-meaning verb that shows a locative noun, namely two camps. Both verbs perform complementary aspectual functions.

In KVS configuration, process verbs occur in the form of a reference to a situation. The situation in question is the split of the Golkar Party and the United Development Party into two camps. Therefore, this KVS is included in the construction of configuration verbs because this type of KVS is used as a form of reference for a situation. Based on the semantic relationship between the verbs that make up the construction, both verbs in this construction express a certain location. V2 thus expresses the meaning of the location of V1 divided.

The following is an example of the structure of serial verb constructions in a tree diagram (X-Bar Theory):

\[\text{Diajar masak lauk keur awewe} \] (Taught to cook side dishes for the women) IP
\[\text{I NP} \]
\[\text{VP N’ spec N’} \]
\[\text{V V’ N keur N} \]
\[\text{diajar masak lauk awewe} \]
1. Datang nelepon lalaki anu (Comes calling the man) IP
\[\text{I NP} \]
\[\text{I VP N’ Spec} \]
\[\text{V V’ N anu} \]
\[\text{V Ema} \]
\[\text{datang nelepon} \]

2. \text{Datang jeung indit jalma ka imahna} (Coming and going, many people came to his house) IP
\[\text{I’ PP} \]
\[\text{VP NP P’} \]
\[\text{V’ spec N’ P NP} \]
\[\text{indit} \]
\[\text{V V’ N ka N’} \]
\[\text{V jalma N} \]
\[\text{datang jeung imahna} \]

Then, the X-ADJ structure with the FV project is described in the following sentence using the constituent structure (str-k).

\[\text{Kuring lumpat ngadeukeutan walungan} \]
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‘I ran closer to the river’
1. Str-k
   FI
   I’
   FV
   FD V
   NP FV
   V’
   V FD

   N’ D’
   NP
   N V N’
   N
   Kuring lumpat ngadeukeutan walung
   The str-k of the serial verb above shows that FI contains a filler category. The FD category is NP, with the nucleus kuring "me". Then the category I’ is directly projected into the FV, with V’ in the first verb lumpat "to run" and V ngadeukeutan "to approach".

   The FV category is projected into the FD with the D’ nucleus in the form of N walung “river”.

2. Barudak lumpat ngariung tukang kaulinan
   ‘Children run around the toy seller’
   2. str-k
      FI
      FD I’
      FV NP
      N’ V V’

      N V N’
      barudak lumpat ngariung tukang kaulinan
      The str-k of the serial verb above shows that FI contains a filler category. The FD category is NP, with the nucleus N’ barudak anak-anak’. Then the l' category is directly projected into the FV, with V’ ngariung 'to surround' and V lumpat 'to run'. The NP category is the nucleus N' tukang kaulinan 'toy seller'.

      The results section contains a description of the main findings of the research, whereas the discussion section interprets the results for readers and provides the significance of the findings. This section should not repeat the results section. In the results section, you can use tables, figures, or texts (when you don’t have extensive or complicated data to present).

Conclusion
In conclusion, the analysis of Sundanese serial verb constructions based on X-Bar theory in colloquial speech reveals that these constructions are formed by more than one
verb, including core and auxiliary verbs. Sundanese serial verbs can function as single verbs in intransitive or transitive sentences, or as part of serial verb constructions. These constructions have distinctive phonological, morphological, and syntactic features: they can be formed by at least two verbs without coordinative or subordinative markers, pronounced in one intonation, and exhibit a side-by-side or split pattern with verbal affixes on core verbs. They can be transitive or intransitive and share the same argument. Following Dalrymple's 2001 framework, Sundanese serial verbs have a constituent structure (str-k) of X-KOMP or X-ADJ. The analysis identifies three types of Sundanese serial verb constructions: coordinate KVS, incoative KVS, and configuration KVS. Sundanese, a typologically SVO language, features serial verb constructions characterized by verb-framed language typology. In syntactic structure, Sundanese serial verbs can have an X-COMP structure when the first verb requires the second verb as part of its argument structure or an X-ADJ structure.

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