Exploring Language Sound and Structures

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Abstract
This journal article offers a thorough examination of language sounds and structures with a special emphasis on the complex interaction between phonetics and phonology. The study looks into how various grammatical structures and sound systems are used by various languages to improve communication and convey meaning. The study starts with a look at the basic units of language sounds, called phonemes, and explores the many articulatory processes involved in their generation. It investigates how phonetic traits like voicing, prosody, and place and manner of articulation contribute to the wide variety of sounds between languages.Furthermore, the article analyzes the organization and patterning of sounds within languages, highlighting the role of phonology. It explores phonological processes such as assimilation, dissimilation, and metathesis, which shape the sound structure of words and sentences. The study also discusses the importance of phonotactics, examining constraints on the combination and sequencing of sounds within a language. The research extends beyond the phonetic and phonological aspects of language to encompass larger linguistic structures. It investigates the syntax, morphology, and semantics of different languages, exploring how words are combined to form meaningful phrases and sentences. The study also examines grammatical phenomena such as agreement, tense, and aspect, shedding light on the ways in which languages express temporal and relational information. The article also examines how language change and language acquisition affect the sounds and structures of languages. It examines how sociolinguistic influences, such as dialectal variation, linguistic contact, and language evolution, have shaped and changed linguistic systems over time. This journal article provides a thorough overview of language sounds and structures, emphasizing how phonetics, phonology, and other linguistic elements interact. The research advances our knowledge of the complexity and diversity of human language, as well as how sounds and grammatical structures are employed to convey meaning and promote effective communication.
Keywords : phonologhy, language, sound, grammatical.

Abstrak
Artikel jurnal ini menawarkan pemeriksaan menyeluruh terhadap bunyi dan struktur bahasa dengan penekanan khusus pada interaksi kompleks antara fonetik dan fonologi. Studi ini melihat bagaimana berbagai struktur gramatikal dan sistem bunyi digunakan oleh berbagai bahasa untuk meningkatkan komunikasi dan menyampaikan makna. Studi dimulai dengan melihat unit dasar bunyi bahasa, yang disebut fonem, dan mengeksplorasi banyak proses artikulasi yang terlibat dalam pembentukannya. Ini menyelidiki bagaimana ciri-ciri fonetik seperti menyuarakan, prosodi, dan tempat dan cara artikulasi berkontribusi pada variasi suara antar bahasa. Selanjutnya, artikel ini menganalisis organisasi dan pola suara dalam bahasa, menyoroti peran fonologi. Ini mengeksplorasi proses fonologis seperti asimilasi, disimilasi, dan metatesis, yang membentuk struktur suara kata dan kalimat. Studi ini juga membahas pentingnya phonotactics, memeriksa kendala pada kombinasi dan urutan suara dalam suatu bahasa. Penelitian ini melampaui aspek fonetik dan fonologis bahasa untuk mencakup struktur linguistik yang lebih besar. Ini menyelidiki sintaksis, morfologi, dan semantik dari berbagai bahasa, mengeksplorasi bagaimana kata-kata digabungkan untuk membentuk frasa dan kalimat yang bermakna. Studi ini juga mengkaji fenomena gramatikal seperti kesepakatan, tegang, dan aspek, menyoroti cara bahasa mengekspresikan informasi temporal dan relasional. Artikel ini juga mengkaji

bagaimana perubahan bahasa dan pemerolehan bahasa mempengaruhi bunyi dan struktur bahasa. Ini mengkaji bagaimana pengaruh sosiolinguistik, seperti variasi dialek, kontak linguistik, dan evolusi bahasa, telah membentuk dan mengubah sistem linguistik dari waktu ke waktu. Artikel jurnal ini memberikan tinjauan menyeluruh tentang bunyi dan struktur bahasa, menekankan bagaimana fonetik, fonologi, dan elemen linguistik lainnya berinteraksi. Penelitian ini memajukan pengetahuan kita tentang kompleksitas dan keragaman bahasa manusia, serta bagaimana suara dan struktur tata bahasa digunakan untuk menyampaikan makna dan mempromosikan komunikasi yang efektif.
Keywords: Fonologi, Bahasa, Bunyi, Tata bahasa

INTRODUCTION

Exploring Language Sounds and Structures is a field in linguistic studies. They focus on exploring the sounds and structure of language. In Exploring Language Sound, they study phonetics, which is how sounds are produced in various languages. They analyzed the way we use our tongues, lips, and other organs to produce these sounds. It delves into the sounds, grammar, and structures of different languages around the world. In this area of study, linguists analyze phonetics (the sounds of language), phonology (how those sounds are organized in a particular language), morphology (word formation and structure), syntax (sentence structure), and semantics (meaning).

This field is very important because it provides a deeper understanding of how humans communicate through language. By studying these aspects, researchers can find common patterns between languages as well as differences unique to each linguistic system. By exploring these aspects, linguists can unravel the intricacies of human communication. They investigate similarities and differences between languages, uncover patterns within linguistic systems, and even discover how languages evolve over time. Overall, Exploring Language Sounds and Structures provides valuable insights into our own language abilities as well as diverse linguistic systems worldwide. So it's not just knowing how to speak or make sentences.

THEORY OF LANGUAGE SOUNDS AND STRUCTURES
Sound of language
a. Theory sound of language

There are many theories and frameworks that try to explain how sounds are employed in various languages. Language sound is a fascinating topic of study. Phonetics and phonology is a well-known subject that investigates the physical characteristics and creation of sounds as well as how they are arranged and behave in a language (phonology). This hypothesis contends that the vocal cords, tongue, lips, and teeth, among other speech organs, move to make the sounds of language. These motions produce various combinations that produce particular sounds, which are subsequently heard and understood by listeners. Phonetics is the study of how sounds are made, transported through the air, and perceived by the human ear. These physical components of sounds include their articulation (how they are formed), acoustic characteristics, and auditory perception. Consonants, vowels, tones, stress, intonation patterns, and other characteristics are examined.

On the other side, phonology explores how sounds are arranged within a certain language. Phonemes (distinctive units of sound), phonotactics (allowed sound combinations), and phonological processes (sound modifications that occur in particular linguistic contexts) are some of the concepts studied in this field.

Overall, the sound of language is a complex and multifaceted phenomenon, encompassing both physical and cognitive aspects. Various theories and frameworks continue to contribute to our understanding of how sounds are produced, organized, and interpreted within different languages and cultural contexts. Because of our linguistic

expertise, we can ignore nonlinguistic variations in speech (such as unique pitch levels, rates of speed, and coughing).

b. Identify of speech sound

a) We are able to produce sounds that are similar to speech sounds in other languages but are not speech sounds in English. in languages like Xhosa and Zulu, the speech sound equivalent to the English click-tsk that denotes dissatisfaction Where it is coupled with English t or k or similar sounds. What Speech Sounds They Are.

b) The goal of phonetics is to categorize every sound that exists in every language.

c) Acoustic phonetics is concerned with the physical characteristics of language sounds.

d) Auditory phonetics is the study of how language sounds are perceived by listeners.

e) Articulatory phonetics: examines the vocal tract's production of sound language.

c. Contrains on voicing

Voice in obstructions is subject to a well-known aerodynamic limitation. In languages like English that include both voiced and voiceless stops, the voiceless [R], [V], and [M] tend to occur more frequently in connected speech than the voiced [D], [F], and [I]. Some languages, like Korean and Mandarin, exclusively have voiceless stop phonemes. These factors result in this restriction: When there is an obstruction, air builds up in the oral cavity, causing the oral air pressure to rise. If the oral pressure gets close to or equals the subglottal pressure, air flow will drop below the threshold required to maintain vocal vibration, and voicing will be extinguished. By increasing the capacity of the mouth cavity, this limitation can be circumvented (within certain bounds).This expansion can be accomplished actively by lowering the tongue and jaw, lowering the larynx, etc., or passively due to the vocal tract walls' natural compliance or "give" to impinging pressure. The longer the obstruent is articulated, however, the less possibilities there are for vocal tract growth. In languages that use the voicing contrast in stops at other points of articulation, voiced velar stops are thus frequently absent; they may lose their voicing, their stop character, or both. This is the reason why languages like Dutch, Thai, and Czech lack the letter "I" in native lexicon. For more information reflecting this in terms of phonetics and phonology, see Maddieson 1984; Ohala 1983, 1994.

d. phonetics and phonologhy.

1. Segmental phonolghy

According to all reports, schizophrenia's segmental phonology is obstinately normal. Even the most difficult to understand utterances follow the permissible speech sound configurations in the patient's language. In fact, one assumes that the patient has actually made language use that one has missed since they are so compatible with the stress and phonemic rules of English (Chaika, 1974, p. 261). The words Chaika is describing are the sawendon saw turch faw jueri and the fooch with teykrimez, which she spells both phonetically and in regular English. Compare Cutting (1985) with Lecours and Vanier-Clement (1976), who both make similar points concerning larger amounts of data.

2. Voice quality

Prosody and voice quality in schizophrenia were subjects of Spoerri's groundbreaking research (Spoerri, 1961, 1964, 1966). He claims that the voice quality known as Gepresstheit distrained qualityT or Wqrgstimme dchoking voiceT, which may be an extreme variation of what English-speaking phoneticians refer to as creaky voice, is connected to catatonia. Stein (1993) examined speech musicologically and

discovered discernible pitch irregularities in nearly all of the schizophrenics investigated, but only a small number of patients with manic or reactive psychosis. She contends that the participants in the current study do not exhibit flat intonation as a sign of lack of emotion. Cmplained of their inability to convey emotion, but a lack of emotion (p. 61). Speaking softly motone demands significant effort; shortened pitch and negative signs of restricted timbre include need a lot of effort (ibid.).

2**. Structure of Language**
   a. Theory structure of language

The Noam Chomsky-proposed generative grammar theory is one theory concerning language structure. This theory contends that all grammatically appropriate sentences in a language can be produced by a set of fundamental rules and structures. The term "universal grammar" is frequently used to describe these basic principles.

According to generative grammar, there are various layers of representation in language structure. The abstract level of deep structure, which stands in for a sentence's meaning, is the level of structure that is the deepest. Surface structure, which is the actual form or arrangement of words in a sentence, is transformed from deep structure.

The constituent structure theory is an additional theory pertaining to language structure. It suggests that sentences are constructed from hierarchical parts or phrases. A hierarchical structure can be formed by dividing these constituents into smaller constituents. A sentence, for instance, can be broken down into smaller elements like nouns, verbs, and prepositions in each of its noun phrases, verb phrases, and prepositional phrases.The constituent structure theory highlights the significance of phrase structure principles that specify how words are put together to form longer units. These guidelines lay the groundwork for comprehending sentence construction and aid in determining if a sentence is grammatically correct. There are many theories that emphasize how semantics and meaning play a part in language structure.. It implies that our cognitive processes have an impact on language structure and that meaning is not only governed by formal grammar but also by our conceptual frameworks.

Overall, theories of language structure offer various viewpoints on the creation, arrangement, and understanding of sentences. These theories describe the basic ideas that underlie language structure by taking into account a variety of elements, such as grammar, syntax, semantics, and cognition.
   b. syntax
   - Normal structure
   Even when the semantics and discourse organization have totally collapsed, the syntax of schizophrenic speech is typically normal. Even word saladQ contains typical grammatical elements:
   My parents always thought they should buy pop when they went to buy fuel, but the best thing to do is to buy motor oil if we need soap when we can just plunge into a pool of water... Despite the fact that there are numerous topic shifts in (Andreasen, 1979a), there is nothing grammatically incorrect about it. After all, people are not required to speak in whole sentences.

RESEARCH METHODS

1. Data pre-processing

In this paper, some word suffixes of sentences depend on how that word can arrange itself to make another word class, and beside that, the word stress derivation of another word can

create new sentences. Word stress involves preparing the data before conducting any analysis or modeling tasks related to word stress patterns. Because of the large sample size, this paper adopts the approach of some exercises when word stress derives from words.

Data preprocessing To make an example for the observation that a senior high school or college person answers and makes a derive of a word that becomes like a noun, but if they put some suffix that changes the basic into another, like a verb or adjective, what it can change into a negative form is just adding some -un and any other, for example, divided into a training set and a test set in a 6:4 ratio. This process is repeated five times, and the test set with the highest accuracy is considered the final result.

2. Extraction of kind word stress

After dividing the test set and training set, style features are extracted from the samples, and a style vector is obtained for each sample. Teammate. Do some observation and explanation to increase the participant's knowledge of word stress. It must be analyzed to determine what the biggest difference was when the basic was changed and also how to derive the word to get something like that.

3. Word Stress of Derived Word Analysis

This analysis involves a kind of suffix, a prefix iftix, and sparse representation. There are differences in how speakers place the stress in a number of other words, regardless of where the stress falls in the base. Some speakers place the stress on the syllable before, while others place it on the syllable before. That one. In derived words, the word stress is decided by the rules of English pronunciation and can change depending on the particular word and how it was formed.

Deep learning allows the extraction of both content and style features. The majority of neutral suffixes come from Old English. Other suffixes, which were originally components of words borrowed from French, Latin, or Greek, have generally made their way into English. However, these suffixes frequently take on a life of their own in English and are applied to create new words. For polysyllabic words, respelling includes a component that indicates stress. The dictionary's spelling for every word with more than one syllable identifies the stressed syllable: For instance, maintain.

RESULT AND DISCUSSION

In Attempting to learn the word stress of the derivatives expands our knowledge in the field of word derivation, including word suffixes and prefixes, not only to know the Indonesian derivatives we know but also to understand the derivatives. You will also try noun. Adjectives that need to be understood and used by other class members and in everyday conversational style English derivation word stress patterns can vary depending on the type of derivation and the word in question, following the general guidelines provided in previous answers. While these patterns are common, it's important to remember that there can be exceptions and differences in certain words and dialects. To find out the exact stress distribution of derived words, it's a good idea to consult a reputable dictionary or pronunciation guide.

CONCLUSION

Exploring the Sounds and Structures of Language (phonetics), as well as language structures like grammar (syntax), and word meanings (semantics), word formation and structure (morphology) , is known as researching the sounds and structures of language. In this area, we can learn about how languages are similar to one another, how linguistic systems differ from one another, how language has changed over time, and how people communicate using language. We may engage with individuals from diverse cultures more thoroughly and learn more about the variety of languages spoken around the world by having

this insight. In order to learn how people use sounds and structures to effectively communicate with one another, Exploring Sound and Language Structure provides a glimpse into the field of linguistics.

Because it is crucial to comprehending the structure and arrangement of phrases, sentence structure is a crucial topic to study in linguistics. Syntax allows us to know. Syntactic analysis is used in the study of the grammar of many languages to determine how these language systems are similar and different. It teaches us the rules that govern how words are arranged and linked to one another to form grammatically correct sentences, and it aids in the construction of meaning through the arrangement of words in a particular order. It also offers valuable insight into linguistic diversity as well as common patterns that exist between languages.

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