

# XYLOPHONE: CULTURE SPECIFICITY AND A LINGUISTIC PROCESS TO RAISE CHILDREN CONSCIOUSNESS

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## Résumé

*La culture est une variable paradigmatique connue sous le nom de connaissance et qui sert de moyen de domination. C'est le véritable véhicule dont une communauté dispose pour transmettre sa langue d'une génération à l'autre. Connue comme un instrument de musique, le xylophone est généralement utilisé chez le sénoufo lors des célébrations et des cérémonies funéraires. Cependant, en dehors de son emploi habituel, il a été utilisé dans un contexte de sensibilisation des enfants de deux à cinq ans comme instrument de jeu et d'éveil. Par conséquent, la théorie générativiste et la théorie de la pragmatique, la sémantique de l'interaction humaine seront utilisées pour analyser ce phénomène. De plus, la façon dont la phénoménologie de la conscience se rapporte réellement à ses corrélats neuronaux et à ses causes antécédentes dans le cerveau, le corps et le monde extérieur en se concentrant simplement sur la connaissance endogène est primordial dans cette recherche. La corrélation culture et langue est l'enjeu dans le présent article. L'utilisation de produits locaux, les jeux de xylophone, ont contribué réellement à l'accroissement des connaissances des enfants de deux à cinq ans dans cette région.*

**Mots clés :** Culture, Enfants, Éveil de Conscience, Langue, Xylophone.

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## Abstract

*Culture is a paradigmatic variable known as knowledge means and domination. It is the important vehicle for a speech community to transmit its language from a generation to another. Known as a musical instrument, xylophone is usually used in Senoufo speech community during celebrations and funeral ceremonies. However, it was used outside of its customary employment. It has been used in a context of raising consciousness of children from two to five years old as a playing instrument. Therefore, the generativist theory and pragmatics theory, the semantics of human interaction will be used for analyzing this phenomenon. In addition, the way that conscious phenomenology actually relates to its neural correlates and antecedent causes in the brain, body and external world by merely focusing on endogenous knowledge should be investigated. The correlation culture and language is at stake in the present paper. The use of local products, xylophone gaming, really contribute to the growth of children from two to five years old knowledge in this area.*

**Keywords:** Children, Culture, Consciousness raising, Language, Xylophone

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## Introduction

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Language is essential for human beings life in a community. The way an individual acquired it before developing it through interactions impacts on the

competence of the speaker which moves to the individual performance. The early childhood is the appropriate period where any human being easily develops a language. But, a specificity should be mentioned in this context. Xylophone use is added to kids' language exposure. Children are more exposed to xylophone gaming instead of being to language as it could be seen everywhere in communities.

In Senufo community, percussion idiophone is a musical instrument well appreciated by people. This musical instrument is used for celebrations to encourage workers during the rainy season in farms or the harvesters. Vibraphone is also used for rejoicing in feasts and weddings, and in funerals. But, it has been used outside its common usage environment. Children from two to five years old play pitched percussion to another purpose which is "raising their consciousness". Consciousness raising consists in using xylophone to make kids more aware of their personal and social issues. The study is an explanatory research because it goes far beyond mere description to suggest the "how" of the manifestations of the phenomenon under study. I will employ a quantitative analysis of the pragmatic mappings which competent users deploy to unravel the hidden meaning of each pitch of percussion idiophone.

In addressing this research problem which is playing xylophone and raising kids' consciousness, leads to the hypotheses that playing xylophone actually raises kids' consciousness and the impactful effect of that action influence pupils' school results in depth. Secondly, the more kids play xylophone, the higher vocabulary increase in Nafara language. The objective of this research is to show that xylophone playing raises children's consciousness. I try to answer questions such as: how can playing xylophone impact children conscious? Why do people used xylophone in children education? For the explanation, I will refer to generative theory of Noam Avram Chomsky (1957, 2000, 2002, and 2006) which deals with the early childhood development of the first language also called language1. Generative grammar theory leads to pragmatics theory, the semantics of human interaction in this analysis. Pragmatics theory by Anna Wierzbicka shares light on the fact that any language can carve out an indefinable lexical elements of a certain representational system of properties known as natural semantic metalanguage (NMS).

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## **1. Theoretical and methodological framework**

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### ***1.1. Theories in this work***

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Two theories fit with the analysis of the present work. On the one hand, generative grammar theory by Noam Avram Chomsky will be used to explain the phenomenon. And on the other hand, pragmatic theory which high ups the language in use meanly the importance of mother tongue in children' studies.

According to Chomsky, a sound linguistic theory should try and explain how sentences are produced. So, a sound theory should describe the linguistic operations involved in the production of sentences. Then, he postulates the assumption that our mother tongue does not come from the outside world, but it originates from inside the addresser. That shows the tacit knowledge of language rules that the speaker uses to produce correct sentences in his language that is also called the Competence of the speaker. Chomsky defines it as 'the ideal speaker-hearer's knowledge of his language or what an ideal speaker of the language intuitively knows. The Innateness feature of Language states that generative grammar is not created by people, but rather is the result of a natural process tied to the way the human brain works. Humans develop grammar because of the way the mind works and processes information.

Noam Chomsky 2006, Locke (1975, p.541, Book IV, Chapter 3, Section 6) quoted by Chomsky (2000, p.1) as follows: "understanding of "mind/brain interaction" is not the only respect in which progress has been limited since the origin of the modern scientific revolutions...higher mental faculties has achieved a great deal in some areas." Hence, the interaction between mind and brain highs up a process achieved by mental faculties which should be understood. Chomsky's work is about that bio-linguistic element. The existence of concrete facts indicating that kids rely on a built-in system to progressively master their native language as Language 1.

Once again, pragmatics theory developed by Anna Wierzbicka, the Cross-Cultural Pragmatics, the Semantics of Human Interaction will be the foundation of the second aspect of that analysis. She claims that, the tiny lexicon can frame reductive paraphrase explications for all the lexical items in any language, as well as for all language-specific grammatical constructions. For her, the semantic cores of all human languages coincide. From any language, one can carve out a certain representational system of indefinable lexical elements with combinatory properties known as natural semantic metalanguage (NSM). Wierzbicka's huge output of empirical semantic studies (1980, 1985, 1987, 1988, 1991, 1992a), as such percussion idiophone gaming and language development process by kids can be compared to the explanation of tautologies Wierzbicka (2003, p. 446) puts "Tautologies are like gestures or interjections: they seem 'natural', universal, and self-explanatory; and they are all that, to some extent; but they are also conventional, language-specific, and culturally revealing. They manifest both 'natural logic' and 'cultural logic'; and the more 'natural' they appear the more culturally revealing they are". The use of xylophone as an ordinary toy seems natural, conventional and a cultural fact. But, it reveals a language-specificity to the extent of generating language in that study.

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## ***1.2. Methodological framework***

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I become inquisitive on a day of January 2021 when seeing three men with xylophone's heap. That local musical instrument was for an implementation

of kids' project in the area. Only eleven (11) villages of Napié (a sub prefecture in the north of Côte d'Ivoire) were the recipients of the project. Xylophone will be played by low-income families' young children from two to five years old in order to raise their consciousness. Each village of the eleven is equipped with a playground's monitor and a manager. For a better understanding of the phenomenon under study, questionnaires were administered on threefold workings sessions in the rural and urban areas so that I could compare and contrast data. The first was the introductory session with monitors' supervisor. Significantly, that meeting solidified the aim to investigate the playground activities and it led to another meeting. Then, the second was with the main monitor. He has given some information about the use of xylophone in the project and its results on kids' psycho-mechanics growing. And, I also met the district general manager of the project, who asserted according to results xylophone has really a positive impact on kids' consciousness raising. Finally, I had an interview with the schoolmistress in charge of the first class level of a school band were most kids of the project attended primary class level. Because I am interested on the possible impact of xylophone pitches on those young children mental / brain state (language) and their school results. Three villages and their schools were randomly selected among eleven. Gender variable is taken into account as far as school results are concerned. Pupils' literacy skills, knowledge, understanding and thinking were designed as measurement instruments of that variable.

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## **2. Xylophone as a Culture Specificity**

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### ***2.1 Low-Income Families' Kids***

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The present article is done in the framework of an implementation of a multi-sectoral project based on early childhood nutrition. It is a funding of World Bank, Côte d'Ivoire's Government, and the Non-Governmental Organization Alliance- Côte d'Ivoire. The project started in 2019 in Côte d'Ivoire. The main reason for the project holding was corona virus infection which favored borders closing of countries. The closing borders led to the scarcity of foreign feeding products. During this period, it was very difficult to feed correctly kids from low-income families. So, the government has tried to solve the problem by holding the project on kids' nutrition.

The implementation of this multi-sectoral project was based on malnutrition kids. The Non-Governmental Organization Alliance- Côte d'Ivoire, the manager of the project has selected low-income families where kids are malnourished in each village according to some criteria. The project has been implemented in fourteen areas in Côte d'Ivoire. Pregnant women and the early childhood were the target groups selected from poorest families. Local products and materials were used to solve the problem of foreign products and materials shortage. Local products were used to feed young children properly and xylophone use to solve kids' shyness problem by raising their consciousness.

In addition, eleven (11) villages of Napié (a sub prefecture in the north of Côte d'Ivoire) were among the recipients of the project. To make it successful, all groups of each profitable village is associated to the project's implementation. The chief of the village, women, youth, and a supervisor. Supervisors regularly work with the selected families. Monitors were in charge to encourage pregnant women to be present during prenatal visits at the hospital. In beneficiaries' villages, women are trained to make mashed corn, porridge with local products for kids' welfare. A playground of several games is created in each village for kids from two to five years old. High jump, rope jump, hopscotch toboggan, traditional swings, xylophone playing were used at the playground. Most of the kids were really shy. Really influenced by bad living conditions of their parents.

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## ***2.2. Xylophone Function in Young Children' Life***

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Two to five years old children were concerned with playing xylophone regardless to gender. Kids from two to five years Language Acquisition Devise (LAD) or Universal Grammar (UG) is still unstable. During that period, a child can easily shift from a language to another. Xylophone use functions as a way of strengthening grammatical and ungrammatical structures in those children' mind. Sounds from xylophone or the prosodic rhythm is language. That language is the first language spoken in kids' environment. Therefore, that language 1 is their mother tongue which still practicing in another form throughout playing xylophone. It is in that context that Chomsky (1957, 1988, 2000, 2006) states that generative grammar is not created by people, but rather is the result of a natural process tied to the way the human brain works. Humans' brain develops grammar because of the way the mind works and processes information merely. Because no one writes how language must function and the laws for grammar. For those who speak more than one language, they mention that each language has its own way or particularity in term of functioning.

Xylophone is the best esteemed local musical instrument in Senufo community and it belongs to that people culture. Its particularity remains a singing language. It is made of wood. That instrument is used as an ordinary toy for children of two to five years old for many reasons. The first reason is to maintain pitched percussion gaming as an ordinary toy. Another reason might be xylophone's tones and pitches can stimulate kids' mind on a completely different way to an ordinary toy as they learn the different sounds of each key. It serves as an educational toy because it can teach a child different tones and pitches. For that reason, Kabiru (2014, p.1) argues "Africans traditional cultural values are being replaced by the global cultural values". Today, xylophone is used everywhere in the world as a teaching and educational child toy for children of different culture.

Then, according to the Non-Governmental Organization Alliance Côte d'Ivoire, the use of xylophone in the project helps with kids' development. How does xylophone help with kids' development? Playing xylophone

promotes the development of fine motor skills and other functions like dexterity, hand-eye coordination, manipulation, arm movement, cause and effect. It also establishes musicality and encourage musical development and exploration, and audio recognition by children.

Other reasons of playing xylophone has many benefits for a child. Research has shown that it helps to improve kids' social skills such as solidarity and sharing what they have with other kids. When they adopt sharing, selfishness will be avoided. The final benefit is to improve children's academic skills and, promotes discipline, and boosts self-esteem. Kids are more likely to stick to music when they like playing xylophone

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### **3. Xylophone as a Linguistic Process to Raise Children Consciousness**

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#### ***3.1. Effects of xylophone on mind***

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According to David Chalmers (1996) and psychologists, consciousness is a product of how densely neuronal networks are connected across the brain. The more neurons that interact with one another, the higher the degree of consciousness. So, consciousness is described as a process of brain. It is a brain process resulting from neural mechanisms. The representation by patterns of firing in neural groups, binding of these representations into semantic pointers are crucial mechanisms for consciousness. Some researches show that babies display glimmers of consciousness and memory as early as five (05) months old. In this sense, David Hume (1748, 1947, 1983) has remarked there is no reason why "thought, being a secretion of the brain". The scientist Chomsky (2006, p.89) asserted in the same way "we cannot now say anything particularly informative about the normal creative use of language in itself. But I think that we are slowly coming to understand the mechanisms that make possible this creative use of language, the use of language as an instrument of free thought and expression". The relationship between playing xylophone and the effects of pitches on kids' mind is at stake in this section.

Firstly, kids start playing randomly. The more frequent children visit the playground and regularly play pitched percussion, the higher they perform in and their consciousness is raising too. So, that repeatedly action of playing frequently vibraphone leads to bright performance in developing language. Hence, the equation frequency in playing xylophone = quantitative and qualitative increase of vocabulary (language) + a brightness mind (consciousness raising). The musical instrument toy makes practice more fun for children and they become regardful to the pitches. In addition, parents set this practice as a reminder and make it part of kids routine. In this sense, most music teachers recommend that kids of this age practice for 15 to 30 minutes about five time a week. The presence of parents was required as a stimulus to really encourage kids when performing their playing activity. Those stimuli have beaten back young children shyness.

Consequently, Chomsky (2006, p. 88) added "It is not a novel insight that human speech is distinguished by these qualities, though it is an insight that must be recaptured time and time again. With each advance in our understanding of the mechanisms of language, thought, and behavior, comes a tendency to believe that we have found the key to understanding man's apparently unique qualities of mind." As said above, the more kids are exposed to percussion idiophone playing, the higher their language increase is. This activity leads to the process of internalizing xylophone sounds as language / grammar (mother tongue). The internalization of sounds is defined by Chomsky as Input. Then, the Input is the process of internalizing grammatical rules of a language. Here Senufo language grammatical rules are internalizing throughout a constant and intensive vibraphone playing. Linguistically, the coherence mind-body matter could be understood in the sense of Chomsky (2006, p. 173) as "the biolinguistic perspective views a person's language in all its aspects – sound, meaning, structure – as a state of some component of the mind,... we can only regard aspects of the world "termed mental," as the result of "such an organical structure as that of the brain". Therefore, xylophone pitches are meaningful sounds well-structured in real life. They also influence the creativity or productivity activities of young children and have a positive impact on kids' education results.

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### ***3.2 xylophone Sounds as Mother Tongue's Impact on Education***

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Generally, each pupil has his first language (L1) which may be his mother tongue as prerequisite before attending primary school first level class in Côte d'Ivoire. In this case study, the mother tongue (Senufo) rules internalization has been motivated and strengthened by the constant and permanent pitched percussion playing. The pitches have a depth impact on kids' mind so that all low-income families selected kids for the implementation of that project can easily express themselves in Senufo language compared to those who did not. By the same token, Ricablanca (2014) identical viewpoint postulates "at the beginning of education, mother tongue instruction is very important not only to develop a strong educational foundation, but also to strengthen the cognitive development of learners." As Ricablanca (2014) explains, education helps strengthen the first language and provides a smooth transition from L1 (first language: Senufo) to L2 (national language: French).

Moreover, Adeleye and Ogunremi (2017) think that "mother tongue is the local language which an individual possesses consciously or unconsciously. It is an indispensable cultural legacy with which all forms of human interactions are carried out, it is the most effective engine of a people's culture." The cultural engine action on mind can motivate language development inside the individual. One and the same, the results of pupils attending class in Lofiné's school band, who have taken part in kids' project, and come from lower-income families, have demonstrated particularly impactful results for those children. This year kids who have effectively attended to vibraphone game were in the first year at primary school. So an inquiry in that school band, shows that during the different examinations, the fifteen best pupils of all

first year have really attended xylophone playing game from two to five years old.

To the same token, discoveries of Bustamante et al (2023) has shown implications for policy and practice positioning caregivers' cognitive stimulation and sensitivity in early childcare and education (ECE) settings across the first 5 years of life as a promising lever for bolstering the science, technology, engineering, and mathematics (STEM) pipeline for children from lower-income backgrounds. Therefore, percussion idiophone influence on kids' mind is an impactful action on pupils' school results coincides with Bustamante Andres, Bermudez Vanessa, Ochoa Karlena, Belgrave Ashlee and Vandell Deborah discoveries. Then, Olaoye (2013) concludes "mother tongue is the key to the heart of the people, if we lose the key, we lose the people, if we treasure the key and keep it safe, it will unlock the door to wealth and affluence." Authorities of African countries can favor education through the indigenous languages and cultures in order to stimulate learners' productivity of foreign languages, and making learning more functional.

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## **Conclusion**

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Xylophone game emerged in Senufo community decades before. In this article, gaming and learning or developing a language at the same time constitute an idea to realize an educational project which focuses on knowledge transfer and traditional values to children. In addition, the implementation of this project in the area shown that kids' consciousness could be stimulated through tradition and cultural heritage. As regards to results and the success of the project based on the external stimulus of the language (xylophone) leads us to this proverb "practice really makes perfect". This learning process has bluntly underlined keys points during the implementation of the project. The presence of parents during children performing session deeply influences their results of creativity and productivity of language. On the one hand, the sounds produced by children are the grassroots of any language development. And on the other hand, the cultural transmission from a generation to another. The effects of the environmental game (xylophone) on the mind or brain bring brightness to their conscious because of the summation of imagination, creativity, productivity and learning that offer an opportunity for children of two to five years old involved in the project to really develop their educational, communicational skills and social aspects. The endogenous xylophone could be used as an innovation in kids' education because its results stimulate and raise kids' consciousness, and their language creativity, productivity and performance as Chomsky claimed in generative grammar. We notice that when children develop their mother tongue, they are simultaneously fostering a whole host of other essential skills, such as critical thinking and literacy skills. Those speaking a mother tongue language had a fixed mindset on how to communicate what they want or need. And, a mother tongue foundation equips children with the skills they need to learn additional languages,

allowing them to transfer their understanding of the structure of language to several new languages.

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