

# A Cultural Trans-generational Process on Low-Carbon Society in Family with Parents with Different First Language: Indonesian and Javanese

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**Abstract.** Building low-carbon society must be promoted from the earliest stage in life. This article aims at elaborating how to do it to a very small baby. This is done to a family whose parents with different first language. The problem is that how the parents can be successful in transferring the values since they have different first language namely Indonesian and Javanese. What language is exposed to the child will be another problem. Observation and interview supported by note-taking technique were used to collect the data. Referential and inferential methods were used to analyze them. The result indicates that language or culture comprehension happens in the first six months, then the production occurs in the second six months. Indonesian is exposed to the child. This is supported by the parents' policy supporting the strategy to raise the status and function of Indonesian. It is used for transferring the values of minimizing the use of carbon in life to support living environmentally healthy through developing children's vocabulary or speech. This study focuses on the child at the age of 0 to 1 year as the beginning of language and culture acquisition.

Keywords: **culture; language; low-carbon ; society**

## 1. Introduction

Language as part of culture carries values, knowledge, and norms. There are many types of genres which can convey all the aspects of life. Therefore, by language, the aspects can also be transferred to younger generation namely children.

In relation to global warming which is getting more alarming, people nowadays have big efforts against more severe effects on life. Internationally, people are getting more aware of the importance of preventing from the more and more severe conditions through education or schooling like what happened in Honduran rain forest people. The research conducted by [1] R. Godoy, S. Groff, K. O'Neill (1998) reported that education can reduce the dependence of the people toward the deforestation. The higher the education, the lower dependence toward the cutting old-growth rain forest. This indicates that education plays its importance role in minimizing people from deforestation.

This current study is trying to be involved in preparing children for taking part in building low-carbon society. They are societies who have a balanced use of energy. To build children's awareness must be started from beginning that is soon after children are born, meaning that the knowledge transfer is begun while children acquire language. Therefore, education can be done in a very small institution, that is family through cultural transgenerational process using language.

The cultural transgenerational process depends on the language exposed to children. As [2] A. Duranti (2000) said that language is part of culture, through participation, language is used for interaction among community members, which may allow people to share ideas, make negotiation, agreement, for example. While communicating, they involve others including children to take part. Gradually, children not only learn language but also values, knowledge, and norms implemented in the community.

This can encourage a process of language acquisition which can support cultural awareness of having low carbon use in life. This may happen if parents take important roles in developing children's language from the earliest age of life, that is from their birth. The role of parents is in providing them inputs which are suitable for promoting low carbon society. The inputs will be effective because parents are the first and the main environment that can influence very much on children. Furthermore, parents can determine what language the children have.

They can engineer to make children to be Javanese, Japanese, American, or another ethnic group depending on their parents or caretakers' language they are exposed to. If they are exposed to Javanese they will be Javanese. However, if they are exposed to Japanese, they will be Japanese. According to [3] D. D. Steinberg & N. V. Sciarini (2006), there are two basic steps in acquiring language namely pre-linguistic stage and

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linguistic stage. In pre-linguistic stage, all normal children in the world may have the same ability, i.e. cooing, babbling, but in the linguistic stage, children may have different abilities in terms of the language system they are exposed to. For example, they are exposed to Javanese, from the beginning, for instance, from phonological aspect, they are exposed to Javanese pronunciation, they acquire Javanese pronunciation. Then, when they are exposed to the system of Javanese morphemes or words, they will acquire Javanese morphemes or words. The ability of producing morphemes or words can characterize what language the children will have. Next, children will learn syntactical form that can be identified from what ethnic group they belong to.

Therefore, in studying an early stage of child language, I can study the linguistic stage comprising phonological and morphological aspects of the language in terms of its forms, meanings, and functions. Phonological aspect refers to what sounds that can be produced by the child, and how the sounds can differentiate meaning in the utterances the child produces. On the other hand, the morphological aspect deals with the words produced by the child and their meaning the child expects. The function refers to how series of sounds or words are used. They are used for calling, asking, and showing others the presence of animals, for example cats. By saying [push] [push], the child may mean that she told others that there is a cat, or the cat is cute, and any other referents the child knows.

Studying children's language development has been done by very many researchers or experts. For example, in Indonesia, [4] S. Dardjowijoyo (2003; 2005; 2008) studied an Indonesian child called Echa, his own grandchild. Other experts like [5] P. Cole, et al (2000) studied language development in Indonesian especially in WH-questions and indefinites. [6] N. L. P. S. Adnyani, and I. W. Pastika (2016) also studied an Indonesian-German bilingual child. However, studying Indonesian children's language development with Javanese parents having different first languages namely Indonesian and Javanese has not been done yet by any other writers. In addition, this study does not only deal with language acquisition but also culture acquisition in terms of healthy life values. This implies that this study does not only focus on the forms that the child can produce in every stage but also the bilingual or multilingual aspect influencing the development stage, for example, the influence of Javanese units or aspects in the utterances produced by the child and life values in minimizing global warming.

Acquiring a language happens when a child has got enough input which can be understood as [7] S. D. Krashen (1981; 2002) mentioned 'a comprehensible input'. S. D. Krashen (1981; 2002) proposed a formula  $i+1$ . This formula means that  $i$  refers to knowledge or experience the child has and  $1$  here refers to the input got by the child. This formula indicates that an input will be easily understood by the child if there is no far distance with what child has and the experience the child has.

[3] D. D. Steinberg & N. V. Sciarini (2006) mention that there are two processes in learning language namely comprehension and production. Comprehension

process happens when children are in the early age of birth when they can only listen and watch what they can listen to and watch. They use their ears to listen to and watch what their caretakers speak and do. This happens to the normal child. If there is a trouble in their hearing ability, this can affect the next process namely production process. Gradually, the comprehension process is followed by production process.

However, the production process may never happen if there is no comprehension process, meaning that without inputs children can never learn to produce speech. Therefore, the role of caretakers in exposing language to children is very important. This statement is supported by the psycholinguists proposing a critical age, meaning that there is an age limit to acquire a language. [3] D. D. Steinberg & N. V. Sciarini (2006) mention that there is a critical age in language acquisition. A critical age may happen when children are at the age of around seven. It means that when children do not get any inputs until they are seven years old, they never can speak a certain language. Therefore, if children are always exposed to Javanese, for example, it can be predicted that they will acquire Javanese.

In this research, the child investigated has parents whose first languages are different, the mother has Indonesian while the father has Javanese. However, their parents always speak Indonesian to the child, the grand daughter of the researcher. In order to show whether the parents' background can influence the language the child acquires, I would like to study the early stage of the Indonesian child language development especially the child whose parents are Javanese but have different first languages. The mother acquires her first language Indonesian but the father acquires his first language Javanese. From this background, I assume that the child will speak both Indonesian and Javanese that make her bilingual.

According to the theory of language acquisition, inputs have a big role in influencing the language production of the child. Therefore, in this research I would like to present what language forms can be produced by the child and what family language policy the parents have in exposing the language to the child. This was done due to the bilingual context of the child family.

From the above explanation, it can be emphasized that acquiring language is acquiring cultural values. According to [2] A. Duranti (2000), culture as knowledge can be divided into two namely propositional knowledge and procedural knowledge. Propositional knowledge contains what it is and why it is. However, procedural knowledge contains how it is done. Regarding the theme of the knowledge given to the child while acquiring language, the children may listen to both propositional and procedural kinds of knowledge.

Then, dealing with transferring values regarding building low-carbon society, I try to present what we mean by low-carbon society in order that I can present in the discussion the materials that must be transferred together with the language developed in terms of vocabulary items and knowledge of both propositional knowledge and procedural knowledge. According to [8]

S. Peake (2012) low-carbon society is the society having balanced use of energy and using the patterns of the local weather and other local conditions. Based on the definition, it can be inferred that to transfer propositional knowledge and procedural knowledge transferred to children regarding low carbon society, the parents or caretakers should find suitable vocabulary related to low carbon society taken from stories, pictures, or events. The materials must be suited with the children's age, interest, and habit.

Referring back to the theory proposed by [7] S. D. Krashen (1981; 2002), the cultural values regarding low carbon society can be transferred gradually parallel to children's language development. If we look at the theory given by [3] D. D. Steinberg and N. V. Sciarini (2006), language production must be supported by language comprehension. Therefore, cultural transfer regarding low carbon society must be started since a baby is born. The input can vary depending on the parents and the surrounding. Babies can be exposed to a situation which supports low carbon society in terms of facilities and life styles of families or parents. This can give experiences which can be stored in the children's mind. The experiences can be dealt with knowledge related to the characteristics of low carbon society or habits or ways to achieve low carbon society.

## 2. Method

In conducting this study, I investigated my grand daughter's language development from her birth to one year of age. From this, I can do a longitudinal study. As a developmental study, this study has taken 12 months or zero month to one year. In order to follow the development of the child language, I used observation method. The observation was done both participatorily and non-participatorily. The participatory observation was done by playing and conversing with the child. During the observation, note-taking technique was used in order to document the data. Since it took a long time, the sample was note-taken. Recording was rarely used since it took a long time, and sometimes the child did not produce what was expected in the research. Therefore note-taking technique was used instead.

The non-participatory observation was done when the child was in the far distance from the researcher. The child lives with her parents in Palembang, while the researcher lives in Semarang. To analyze the data, I used referential, inferential, and distributional methods. Referential was used to get the meaning of the sounds or speech produced, while the inferential method was used to get the meaning through its context comprising both linguistic and nonlinguistic segments.

## 3. Result and Discussion

There are five parts in this section namely the background that may influence the child language, the early development of the child language, the family policy, and the phenomena related to the language development in the bilingual context, and the inputs that can be used to help children's vocabulary promoting low carbon society life.

### 3.1 Early speech development of Indonesian child with Javanese mother whose first language is Indonesian

The development of the language of the child can be identified from the sounds and the linguistic units produced by the child. There are two stages which will be presented here namely the language production in the first six months and the language production of the second six months. In the first six months, the child listens to sounds produced by caretakers and tries to catch or comprehend the meaning of the sounds. In this stage, the parents or caretakers always talk to the child eventhough she has not been able to produce any single sounds. This is proposefully to give the child inputs. It is done when the child is awake. When the child is sleeping, the child is always to access the language spoken by the environment, in this case, father, mother, and sometimes grandfathers and or grandmothers or guests. In other words, the child can access the language spoken by other people.

From the observation, in the first six months, the child can produce sounds like [mam-mam-mam, mbah, aiya:] and [nda]. From what the child can produce, it can be indicated that some sounds have referents, while some sounds do not. The series of sounds [cacacaca] can be indicated that they do not refer to a certain entity. However, the series of the sounds [aiya:] refer to her father [ayah], and [nda] refers to her mother [bunda]. Her father trains her to call him [ayah] meaning daddy, and her mother [bunda] meaning mother. Instead of producing [bunda], she produces [nda]. In addition, she can produce [mam, mam, mam], [cacacaca], [tatatatata], [mmuah], [maem], [papapapa]. The other series of sounds which are meaningful among other things are [nda] meaning *bunda* or mom, [aiya:] meaning *ayah* or father, [mbah] meaning grandmother. She can also imitate her grandfather coughing. Besides, she can continue someone saying [cilub] with [ba:]. In feeding time, she produces [maθm]. When she heard a very strong sound, she produced [ba]. At the age of eleven months, she could call her grandmother with [mbah ti] meaning *mbah Ti/ eyang* or grandma. Furthermore, she can invite her mother with [nda], father [aya:], grandma [mbah]. She can ask others by saying [appa] with raising intonation meaning what? When there is a cat or another animal, she calls [pus].

From the form point of view, the child can produce consonants comprising bilabial, alveolar, and palatal sounds. Bilabial sounds that can be produced by the child's are those like [m] in [mam], alveolar sounds

like [n] in [nda] and [t] in [tatata], palatal sounds like [c] in [cacaca]. The vowel sounds comprise close front and central vowels namely [i] and [u], and open back vowel namely [a] and semi vowel [y]. In terms of their structures, the sounds produced can be classified into back + front vowels in [ai]; consonant + vowel sounds like [ta]; nasal alveolar+plosive alveolar+close back vowel sounds in [nda].

### 3.2 The scope of the referents the speech referring to

The speech spoken by the child refers to the entities surrounding her, like who her parents are, what she does. This finding can support the idea that language is affected by the experience human has. Since a child has an experience toward what is close to her, she can produce words referring to what is close to her. For example, [nda] means *bunda* or mom, [aiya:] means *ayah* or father, [mbah] means grandmother, [pus] means cat or other animal. She can also imitate her grandfather coughing. She can respond to a big sound by saying [ba]. These evidences imply that the referents the child can mention are those which are very close to her. Besides, the referents are produced repeatedly and prominently.

### 3.3 Family language policy

According to [9] K. King (2008), a family language policy is very influential in maintaining local language. This is supported by [10] C. Smith-Christmas (2016) saying that family language policy can support children to speak their minority language that can be automatically maintained. Both [9] K. King (2008) and [10] C. Smith-Christmas (2016) supported [11] D. Crystal (2000) saying that language can die not because of the death of the speakers but the attitudes for not using the language. Now, based on the interview, it can be concluded that family language policy can determine or affect the status of language. When the family exposes Javanese, the child will be Javanese. The language used at home is Indonesian. Therefore, the child should learn Javanese and maintain it by using it actively. Eventhough her father is totally Javanese in the sense that he acquired Javanese, he speaks Javanese to his parents, but when his daughter was born, he used Indonesian when he tried to expose a language to his daughter. Even he has used it until now—when his daughter is in her four years old.

Based on the fact that the daughter speaks Indonesian, the writer can infer that what the parents expose to determines what the children speak. In this case, what is exposed to is Indonesian, what is spoken is Indonesian.

### 3.4 A phenomenon related to bilingual community

From the explanation previously, it can be inferred that Indonesian is getting more dominant than Javanese as one of the local languages in Indonesia. The domination can be seen from the use of Indonesian in all situation even at home. It is exposed to be acquired as the first language. This may replace Javanese. The replacement may cause Javanese to shift into Indonesian in terms of its function and automatically its position. When the function changes, the position changes. This kind of phenomenon may result in Javanese displacement.

### 3.5 Introducing low-carbon society to children at the earliest age

A cultural transgenerational process is started as soon as a child is born. In the beginning of life, children are in the comprehension period. They are listening to the parents, caretakers speaking with the children or conversing among them. They are using language dealing with what they need, do, think, experience, or feeling. They may talk about their need today, tomorrow, or the future. There are various topics to discuss.

As stated before comprehension stage is very important to production stage. The process is realized while exposing language to children. The language they listen to becomes the input of the children, and the input will influence the language produced by the children. As [7] S. D. Krashen (1981 ; 2002) stated in his five hypotheses, input can determine the language produced by the children. If they do not get enough input, they will not be able to produce language. For this, there are a lot of accidents indicating this fact.

In transferring knowledge, there are two kinds of knowledge according to [2] A Duranti (2000), namely propositional and procedural knowledge. Propositional knowledge which can be transferred is like the knowledge about what good environment for life is, what effect The best time for transferring both propositional knowledge and procedural knowledge when they are playing, before sleeping, feeding time, or other activities that should be done in order to reduce the use of carbon. In playing, they are introduced to toys in which batteries are not used. Telling stories depicting healthy societies without carbon. Bring them to tourist destination introducing low carbon use.

In the family studied, the transfer is done by their parents in many ways. First, in the first six months, the child is exposed to language that is Indonesian. It deals with her needs dealing with food, clothes, and comfort. In any situation, the baby is listening to her mother and or father and or grandparents talking each other or other people. Second, in the second six months, the baby is still being exposed to the same environment like in the first stage, but she is more being encouraged to produce language exposed to. Since mother is the closest surrounding the child has, she is the most influential on the child's language. In this age, the baby can produce as described before. Then, she is exposed to toys relevant to

her age, and introduced to her surrounding including her own body. In her time line of her life, the baby is always introduced to the mother's activities even both the activities at home or outside housing area like shopping and meeting or attending seminar.

#### 4. Conclusion

In short, early language acquisition can also be used to both language and knowledge transfer. Language acquisition can be supported by exposing the language to the children and transferring culture in terms of both propositional knowledge and procedural knowledge for maintaining low-carbon life. Golden age period of language acquisition can also be golden age period of transferring life values to be green life. Acquiring language is not only acquiring linguistic system but also cultural system.

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