

METAPHORS OF LAND DIVISIONS FOR TRADITIONAL IRRIGATIONS AT TIPANG VILLAGE, LAKE TOBA AREA: AN ANTHROPOLOGICAL STUDY

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ABSTRACT

This present paper discusses metaphors as collective memory of land divisions created by the local native ancestors for conserving traditional irrigations. It aims at (1) inventarizing metaphors as collective memory of land divisions for conserving traditional irrigations at research location and (2) finding the cultural values or local wisdom from metaphors as cultural resources at local social situation. This research was conducted by qualitative design with ethnographic model from the view points of anthropological approach. The analytic parameters are interconnection, valuability, and sustainability.

Keywords: Folk Discourse, Metaphor, Local Wisdom, Land Division, Traditional Irrigation

INTRODUCTION

The local community has practiced and inherited the cultural management of traditional irrigations at Tipang Village, Baktiraja District, Humbang Hasundutan Regency, North Sumatera Province at Lake Toba area for hundred years. They practice and inherit management of irrigation because they need water to drain their land or rice field. It lasts long because it functions to irrigate the rice field as the local people's main life source. It can enhance the rice farmers' welfare as well as strengthen the local farmers' harmony (Sibarani & Robert, 2018a:1).

The pattern of cultural management of the irrigation is remembered and memorized in collective memory of the local inhabitants. It was not written, but has been "packed" in metaphors and inherited orally from one generation to the other. The metaphors were created by the native group leaders at Tipang concerning the irrigations. The metaphors as a part of local folk discourses are the cultural resources of irrigation management (Sibarani & Robert et al., :2020:4).

This paper aims at inventarizing the metaphors as collective memory for conserving traditional irrigation at research location and finding the cultural values from the metaphors as cultural resources at local social situation. The irrigations based on the cultural management may be utilized to as collective memory for the sustainably environmental management of irrigations at Tipang Village, Baktiraja District, Humbang Hasundutan Regency, North Sumatera Province, Lake Toba Area.

THEORETICAL REVIEW

Folk Discourses

The cultural concepts are anthropologically expressed in folk discourses. Folk discourses are cultural expressions as the collective memory of the local community such as cultural metaphors, proverbs, parables, traditional verses, traditional puzzles, fairy tales,

legends, myths, and other verbally cultural expressions. As the part of oral traditions, folk discourses are transferred orally from one generation to another (Sibarani & Robert et al., 2018b:3)

Folk discourses are verbal expressions such as cultural metaphors, proverbs, parables, traditional verses, and tales as the collective memory of local community. All folk discourses contain cultural resources related to the local community and understanding the folk discourses needs understanding the human beings and their culture. A folk discourse maybe language keeping cultural resources or speaking performing cultural practices. When folk discourses are being spoken, they are performances.

Metaphor

Let us now turn to some examples that are illustrative of contemporary metaphor research. They will mostly come from the domain of everyday conventional metaphor, since that has been the main focus of the research. I will turn to the discussion of poetic metaphor only after I have discussed the conventional system, since knowledge of the conventional system is needed to make sense of most of the poetic cases. The evidence for the existence of a system of conventional conceptual metaphors is of five types:

- Generalizations governing polysemy, that is, the use of words with a number of related meanings.
- Generalizations governing inference patterns, that is, cases where a pattern of inferences from one conceptual domain is used in another domain.
- Generalizations governing novel metaphorical language (see, Lakoff & Turner, 1989).
- Generalizations governing patterns of semantic change (see, Sweetser, 1990).
- Psycholinguistic experiments (see, Gibbs, 1990, this volume).

We will primarily be discussing the first three of these sources of evidence, since they are the most robust.

George Lakoff and Mark Johnson suggested that (i) our everyday language is much richer in metaphors than we might expect, (ii) metaphors are means of viewing one kind of experience in terms of another, and (iii) metaphors imply certain theories (or “folk theories”) about the world or our experience in it.

The generalized metaphorical concepts allow us to make connections across experiential domains to find coherence between unrelated and not necessarily similar events. What Lakoff and Johnson call “structural metaphors”, for example, can “include similarities”. For example, the idea that food metaphor establishes similarities across domains (thinking and eating) which are not otherwise necessarily linked in a person’s experience and is, in turn, based on some more basic metaphors, including the mind is a container metaphor, which represents a strong theory of the nature of the human mind. According to Lakoff and Johnson, a metaphor is acceptable as a characterization of our experience partly because it fits with other, more general metaphor concepts and forms with them a coherent whole. This paradigm is particularly appealing to cultural anthropologists who see culture as a system of knowledge (Duranti, 1997:65).

The considerable body of literature can also be considered as another case in which culture is seen as transmitted through linguistic forms and hence as communication, although the study of metaphors has been particularly attractive to anthropologists who subscribe to the cognitive view of cultures (Keesing, 1974). From the functional view of metaphors as ways of controlling our social and natural environment to the more recent cognitive theories that see metaphors as processes “by which we understand and structure one domain of experience in terms of another domain of different kind (Johnson, 1987:17), figurative language has always attracted anthropologists, linguists, and philosophers interested in how the specific form and content of our speech can be seen as a guide to our experience of the world (Duranti, 1997:38)

Local Wisdom

Local wisdom is the main value of local cultures used to overcome the socio-cultural problems to regulate the local community's life wisely. The local community practices local wisdoms as the implementation of cultural values to regulate the social life of the community in order to increase the local community's welfare and peace. The local community possesses indigenous knowledge as local wisdom deriving from the noble value of cultural traditions to overcome their socio-cultural problems (Sibarani & Robert, 2020:2).

As the local cultural values such as traditions and rituals, local wisdoms can be applied to manage wisely the local community's social order or social life. The local wisdom is indigenous knowledge including all the people's native scholarship that the local community applies to overcome their socio-cultural problems. The goals of local wisdom are directed for the people's welfare and peace. Local wisdoms play important roles in guiding local community to conduct wise relationship within the local people's social interaction, with their natural environment, and with their creator.

The agricultural lands were divided based on the local wisdoms available at research location. The land divisions were named in metaphors in accordance with the community's local wisdoms. The land division metaphors become the collective memory for the owner's land being responsible for irrigation management.

Language, Speaking, and Culture

The relationship between language and culture is expressed in some perspectives. The prominent relationship is anthropologically stated that language is a cultural resource and speaking is a cultural practice. He said that linguistic anthropology as the study of language as a cultural resource and speaking as a cultural practice (Duranti, 1997:2).

Language is a mirror of our culture and speaking is the mirror of our cultural behaviour. Language is the "robe" of our mental culture and speaking is the practical performance of our culture. It is studied by anthropolinguistics, the alternative terminology instead of linguistic anthropology or anthropological linguistics.

Anthropolinguistics is the study of language within the anthropological framework, the study of culture within the linguistic framework, and the study of other human life aspects within a shared framework of anthropology and linguistics (Sibarani, 2018a:5). Anthropological linguistics is that sub-field of linguistics which is concerned with the place of language in its wider social and cultural context, its role in forging and sustaining cultural practices and social structures. Anthropological linguistics views language through the prism of the core anthropological concept, culture, and, as such, seeks to uncover the meaning behind the use, misuse or non-use of language, its different forms, registers and styles. It is an interpretive discipline peeling away at language to find cultural understandings (Foley, 1997:3).

Traditional Irrigations

Irrigation is the supply of water to land or rice field farming either by means of channels or rivers. The channels or rivers supply water to agricultural crops. The source of traditional irrigation usually flows from upstream around mountain area to downstream draining land or rice field farming (Izwar et al., 2020:828).

Farmers aim to satisfy the objectives they selected for their household (to ensure a minimum revenue), their enterprise (to maximize profits, to minimize risks and to improve the quality of the products) and their land (to be sustainable). Each one freely choose the crops to grow on the basis of advice from his profession with due consideration given to the market. He consequently optimizes the management of the production factors, including the on-farm irrigation system (Sri Asi Haholongan Marbun et al., 2020:273-275).

The value of water in irrigated agriculture varies, largely due to the heterogeneity of the production systems. The cost of irrigation water is generally relatively high in the Mediterranean regions, implying high performances with high value-added crops.

The constraints of agricultural competitiveness make the irrigator very sensitive to the reliability of water supply and, of course, to its cost. For each crop in a given cropping pattern, water value per unit volume. Such a graph suggests how an irrigator reacts as the water price varies. (Tardieu in Svendsen (ed.), 2005:94).

There are types of traditional and modern irrigations. Traditional irrigation is always managed by cultural management with the local wisdoms, while modern irrigation is usually managed by technological management with logical systems.

RESEARCH METHODS

Design/Methodology/Approach

Qualitative approach with ethnographic model was applied in this research design. This research qualitatively employed the developmental research sequence consisting twelve steps proposed by ethnographic model. The twelve steps applied for collecting data, analyzing data, and writing the report are (1) locating informant and social situation, (2) interviewing informant and doing participant observation, (3) making an ethnographic record, (4) asking descriptive questions and making descriptive observation, (5) analyzing ethnographic interviews, (6) making a domain analysis, (7) asking structural questions and making focused observation, (8) making a taxonomic analysis, (9) asking contrast questions and making selected observations, (10) making a componential analysis, (11) discovering cultural themes and taking cultural themes, and (12) writing an ethnography.

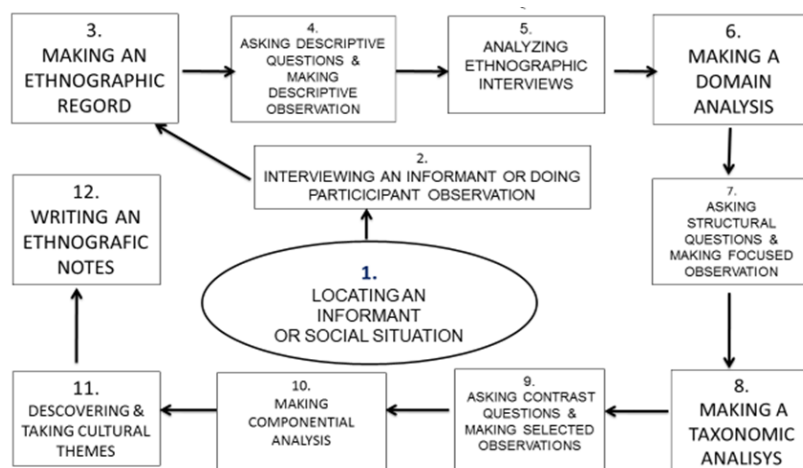


FIGURE 1
QUALITATIVE RESEARCH: ETHNOGRAPHIC MODEL DEVELOPMENTAL RESEARCH SEQUENCE

This research was conducted by employing anthropolinguistic approach with the analytic parameters of interconnection, valuability, and sustainability. The focus of analysis is on the performance, indexicality, and participation.

RESEARCH RESULT AND DISCUSSION

Compound Metaphors for the Irrigation Management

The earlier native inhabitants of Tipang have created folk discourses related to irrigation management. The home land of Tipang was distributed to the elders of the seven native surnames. The folk discourses are grouped in the domain of the *upa* in Batak Toba or *upah* in Indonesian meaning “pay”. The pay in the form of land is each given to the elders of the native surnames and the land pay is passed down from generation to generation. The land pay is distributed based on the roles played when opening, keeping, and repairing the irrigations. All the folk discourses are described as follows:

Upa Golat

Upa golat is a given rice field land distributed sequentially to the native seven surnames with the same measurement which is passed down form generation to generation. In the compound upa golat, the head is upa “pay” as noun and the attribute is golat “common sahare” as noun. It is so called because the people’s roles receiving the land pay divided the lands to the native inhabitants of Tivang village.

Upa Gogo

Upa gogo is a given rice field land distributed in zigzag to 60 irrigation workers or irrigators as their responsibilities for the water flow of the irrigations (panaharanI) from upstream (bongkahan) upto downstream (punsu ni aek). The compound upa gogo derives from noun upa “pay” as head and noun gogo “strength” as attribute. The land upa gogo is each distributed to the 60 irrigators in zigzag starting from the eldest to the youngest from the seven surnames of the native inhabitants of the Tipang Village.

Upa Parhara

Upa parhara is a given rice field land distributed to two classifications of eldest surnames, namely Purba from Simamora and Silaban from Sihombing. They are parhara “inviters” supervising the irrigations and inviting the 60 irrigators to conduct ritual of mangallang indahan siporhis “eating the very best rice” and repairing irrigation every year. The compound upa parhara derives from noun upa “pay” as head and noun parhara “inviters” as attribute. Parhara “inviters” daily check the irrigations and annually invite the 60 irrigators per each irrigation to conduct the ritual before doing the tradition of repairing the irrigations. Because there are two parhara, there are two parts of the land distributed as upa parhara.

Upa Jolo

Upa Jolo is a given rice field land distributed to the leaders of each group of the seven surnames at Tipang Village. Because there are seven leaders, there are seven parts of the rice field land distributed. The compound upa jolo derives from noun upa “pay” as head and adjective jolo “in front” as attribute. Because there seven leaders of each seven native inhabitants, there are seven parts of the land distributed as upa jolo.

Upa Lehu

Upa lehu is a given rice field land distributed to an individual as a local wisdom rights holder of curving irrigation flow in order raising and adding water upto downstream of irrigation. The compound upa lehu derives from noun upa “pay” as head and verb lehu “to curve” as attribute. Because the holder of the local wisdom rights of lehu is from Hutasoit, the land was distributed to Hutasoit.

Upa Rongit

Upa rongit is a given rice field land distributed to an individual being capable to do the land at area with many mosquitos. The component rongit “mosquito” is used to modify upa “pay” in the compound upa rongit.

Upa Bodil

Upa bodil is a given rice field land distributed to the people being brave at the steep, easily landsliding, and rocky land. The compound upa bodil derives from upa “pay” as head and bodil “gun” as attribute, methaphorically indexicalizing the very hard work.

Upa Datu

Upa datu is a given rice field land distributed to a shaman possessing supernatural power in order to give guidance when building irrigations. The compound upa datu derives from upa “pay” as head and datu “shaman” as attribute.

Upa Mate

Upa mate is a given rice field land distributed to a person who died or seriously got injured when opening the irrigations. The compound upa mate derives from upa “pay” as head and mate “die” as attribute.

Upa Tundal

Upa tundal is a given rice field land distributed to a person who met and asked his surname mates to participate in opening and building the irrigations. He met the people as far as he can see them by bowing and seeing the backward between his legs. The compound upa tundal derives from upa “pay” as head and tundal “see backward” as attribute.

Upa Baringin

Upa baringin is a given rice field land distributed to traditional village leaders. The compound upa baringin derives from upa “pay” as head and baringin “leading” as attribute. Baringin is the cutting form of parbaringin “leader”.

Based on the data, there are 11 compound metaphors created as the folk collective memory for the irrigation management at Tipang Village. All the inventarized words are compound metaphors formed from domain *upa* “pay” as head and various components as the attributes. They are compund metaphors as their meaning do not indexicalize the combined meanings of head and attribute. As metaphor, in compound *upa baringin*, fore example, literally meaning “pay for leader”, does not indexicalize “pay”, but anthropolinguistically indexicalizes “land”. These metaphors are the processes “by which we understand and structure one domain of experience relating to “pay” in terms of another domain *of different kind* relating to land. The components for head function to differentiate the compounds and to give contrast between the compounds. The metaphoric process can be seen as follows.

Table 1 METAPHOR		
UPA “PAY”	Process ➔	Hauma “Rice Land”
One Domain	In Terms of	Another Domain

The rule of creating the compound metaphors is establishing heads based on the domain as *upa* “pay” and then attributes based on the components for different features such as *golat* “dividing”. But the meaning of the compound metaphors is not the combination of the meaning of head and attribute. The structure is noun compound of which the head is noun and attributes are maybe adjective, noun or verb. The formula maybe framed as follows:

Compound (C)=Head (H)+Attribute (A)
or
Compound (C)=Domain (D)+Component (Co)

Compound Methapors as the Cultural Resources for the Irrigation Management

All the inventarized compound methapors are taxonomically classified based on the positions indexicalized by the symbolic category. The following compound metaphors *upa baringin* “pay for village leader”, *upa parhara* “pay for inviters”, *upa jolo* “pay for group leaders”, *upa gogo* “pay for the strength” hierarchily indexicalize positions of the people differentiated by the attributive components of the compound metaphors. The single *upa golat* “pay for common sahare” indexicalizes the common position of the people. The compound metaphors *upa lehu* “pay for curving”, *upa datu* “pay for supernatural power”, *upa rongit* “pay for working a mosquito area”, *upa bodil* “pay for the braveness”, *upa tundal* “pay for asking surname mates”, dan *upa mate* “pay for the death on repairing irrigation” are classified in one taxonomy because they are related to individual roles. The compound metaphors based on the domain *upa* can be classified as follows.

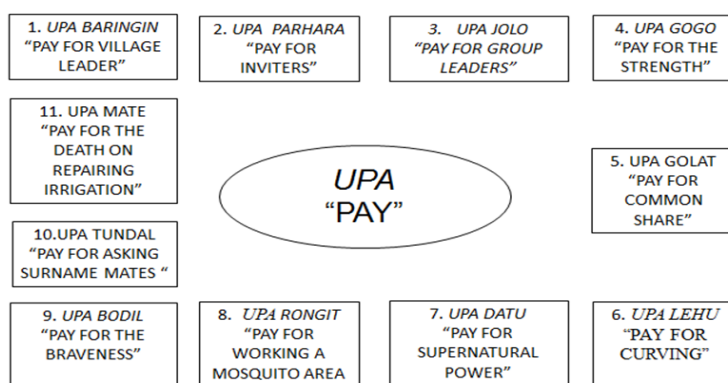


FIGURE 2
DOMAIN OF UPA “PAY” FOR IRIGATION MANAGEMENT AT TIPAING VILLAGE

All compound metaphors indexicalize the distributed land as the cultural inheritance. This anthropolinguistic study discovered cultural inheritances out of the compound metaphors as folk discourses. These compound metaphors exist in the collective memory of the local people to keep irrigations well because the rice field lands are passed down through the generations.

Metaphors for Inheriting both Rice-Field Land Divisions and Irrigation Tradition

The compound metaphors derived from the head *upa* “pay” contain historical land divisions at Tipang Village related to the forming them as the rice-field land after having opened irrigations. Since their basic livelihood is closed to rice-field farming, the metaphors become the daily collective memory for land divisions and irrigation management.

All the local inhabitants of Tipang Village know land divisions because of the metaphors as their collective memory. The metaphors and the cultural concepts indexicalized are passed down from one generation to another. The tasks of keeping irrigations well are also indexicalized by the metaphors. *Upa gogo* “Pay for Strength”, *Upa Parhara* “pay for Inviters”, and *Upa Jolo* “Pay for Group Leaders” are metaphors for the irrigators or irrigation workers being in charge of the irrigation maintenance.

The compounds under the domain UPA “pay” are in the form of cultural metaphors. Surprisingly, each metaphor has folk tales which become interesting for inheriting both irrigation tradition and rice-field land divisions. The metaphors have lasted for hundreds of years and the rice-field farming and irrigation traditions remain being kept well guarded.

CONCLUSION

As a qualitative study by applying linguistic anthropology approach, it tries to discover the “meaning” and the “pattern” of metaphors. The meanings are related to the cultural concept indexicalized by the metaphors, while the patterns are related to the linguistic structure of the metaphor derived from the head *upa* “pay”.

As the part of folk discourses, the metaphors were created as the collective memory of the local community in order to understand the background of the rice-field land divisions and irrigation maintenance based on the local wisdom. All metaphors constitute cultural resources related to the local community and understanding the metaphors needs understanding the human beings and their culture.

ACKNOWLEDGMENT

I would like to acknowledge the assistance of my staff, informants, and colleagues who help me finish this paper.

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