

## An Ethnosemantic Study of Palu Toponym and Its Association with Natural Hazards

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APA Citation:

Syamsuddin, S., Putra, R. A., Wulansari, A. (2023). An Ethnosemantic Study of Palu Toponym and Its Association with Natural Hazards. *Journal of English Language Teaching and Linguistics*, 8(1), 2023, 57-68.  
doi: <http://dx.doi.org/10.21462/jeltl.v8i1.1010>

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### Abstract

*This research investigates how the naming of locations in Palu, Central Sulawesi, Indonesia describes the geographical and social conditions in the local area. After the earthquake and tsunami on September 28, 2018, in Palu, considerable geographical studies have desired to discover the causality of this catastrophic natural phenomenon. Nevertheless, behind it all, the Kaili tribe, an indigenous tribe on the mainland of Central Sulawesi, believes that several areas in Palu are unfit for habitation because of the history of natural events that have occurred. They sketch this information using toponymy that modern society has often ignored. Moreover, acculturation and globalization have made people overlook local culture and history. The present study operated a different perspective to reveal that the toponymic naming in the Palu area. Those toponyms are derived from the Kaili language reflecting geographical conditions, history, and vegetation. The researcher discovered that based on ethnolinguistic fact, several zones were the hotspots of the worst earthquakes and liquefactions and reflected in several toponyms that today's society has forgotten. Using ethnosemantics tracing, historical, and geographical observation and involving cultural and indigenous figures, the researcher answered this phenomenon based on evidence. The implications and results of the findings of this study will be discussed further in the discussion section.*

**Keywords:** *ethnosemantics, natural disaster, semantic, toponym*

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### 1. Introduction

The semantic element of a place or area is intriguing to scrutinize because they carry certain contextual and historical information. Humans give a name to a place not without reason but as an attribute so that people can recall it as a differentiator between one area and another. The differences can be marked based on the characteristics of society, culture, natural wealth, and geography. A name of a place, or in linguistics called toponymy, is essential as a rudimentary knowledge of the community

communed to the area. Toponym certainly has traces of historical, geographical, and socio-cultural significant events, and it is interesting to examine their historical value and recognize their origins.

Moreover, our ancestors utilized linguistics features to anoint a particular territory in the pre-cartography era. According to Kridalaksana (2011), toponymy has two meanings, namely the onomastic branch that investigates place names and the context of place names. Apart from being comprised in naming theory, toponymy also examines the naming of geographical and other elements, such as socio-cultural and historical. A name is a medium of an idea and ideas generated from people's minds. Thus, the relationship between language and culture is significant in naming theory. Toponymy also describes records of environmental conditions, local understanding systems, and history (Su Mintarsih, 2007; Hartman, 2007; Ratnasari & Susilo, 2017).

In conducting a study of toponymy, it is required to make careful observations through academic procedures. The purpose of conducting toponymy research is more than just wanting to know the place or region's meaning (Nishonova, 2022). The name of a particular place is generally derived from an experience in the past. Utilizing a toponym name may be an effort to extend remembrance and as a record of natural events that can expand awareness of disasters or tragedies. In addition, several studies carried out ethnolinguistic and semantic approaches in toponymic observations. For example, Muhidin (2017) discovered several toponym patterns for natural disasters, which are determined using specific anointing patterns to increase the awareness of speech groups in certain areas. Toponymy is also demonstrated to provide an overview and predictions related to geographic information. With toponymy, the community indirectly provides information to other residents about the social, cultural, and geographical conditions of an area so that it becomes a guide for action and decision-making (Tao et al., 2022)

In addition, the toponym of Palu, Central Sulawesi, Indonesia, and its areas are important and exciting to be explored and comprehend. Moreover, there has been a transformation in the toponym of several locations in Palu that initially used local names. Those names must be preserved because they have a strategic role based on local wisdom (Apriadsa et al., 2019). In addition, toponymy is beneficial as a spatial marker and a region's identity and cultural heritage.

Several researchers in Indonesia have carried out research related to toponymy. Such as the Toponym of Cirebon Regency and City by Anshari et al. (2017) and the Toponym of Lamongan Regency by Camalia (2015) using an analysis of ethnosemantic studies and linguistic anthropology. In Indonesia, an area's naming can be based on culture, nobility, history, folklore, building construction, and natural phenomena. It is intended so that people can acquire necessary information regarding the areas they visit so that immigrant communities can know an area's history, traditions, customs, rules, and geography. (Sari, 2022; Triana et al, 2022; Kumala et al, 2022; Halfian et al, 2022, & Nugraha, 2023) Using a different approach, Mandillah (2022) accepts that the name of an area is affiliated with the morphosyntactic structure of a language, so Mandillah researched named areas in the West Kenya region, Bungoma County. It was revealed that their toponyms were assembled based on history, topographical features, and climatic conditions. In addition, Kyzy Gojayeva (2022) observed toponyms in fiction using the Azerbaijani language, which differs from previous research. Sociopolitical relations and religious affiliation are believed to be the determining factors in forming a toponym. However, this has a different approach and reality because the toponym names are exemplified in works of fiction. In addition, Steenwijk (2022) also mentions toponyms in the Val Resia area. However, this observation introduces how toponyms and demonyms alter based on socio-cultural developments.

However, the previous studies have yet to thoroughly clarify how toponyms and local culture are associated with natural phenomena, especially potential natural disasters. Moreover, Palu, that is famous for its tectonic plates and is also an area prone to earthquakes, so there are toponyms related to this natural phenomenon.

In contrast to previous studies, this research examines the names of urban villages in Palu, including the name Palu, the capital of the province of Central Sulawesi. Previous research has yet to take an approach that merges how toponyms in an area can be a trait of potential disasters. The toponyms, of course, have a historical, socio-cultural, and geographical background that has gone through a long process and has yet to be fully revealed.

The naming of Palu, for example, also contains diverse meanings. The city of Palu is the word Topalu'e which means uplifted land, because this area was originally part of the sea; due to an earthquake and shifting of the tectonic plates, the area that was previously the ocean was lifted and formed a valley that is now become a city, Palu. Another term also states that the name Palu comes from the Kaili language, namely volo, which means bamboo that grows from the Tawaeli area to Sigi Regency (Karsana, 2019). Local humanists, cultural observers, and historians confirmed this in the city of Palu, that previously parts of Palu were covered with bamboo.

Not only related to the ins and outs of the naming of Palu, the toponymy of urban villages in Palu, which generally employs the local language, also possesses various meanings. Almost all of the 46 urban villages in Palu use the Kaili language. The naming of the area is based on the background of geographical phenomena that exist or have occurred in physical, biological, geological, socio-cultural, and historical aspects. Based on the problems and discussion above, the researcher wants to uncover the semantic meaning of the toponyms in the urban village of Palu, Central Sulawesi. These names will be scrutinized with an ethnosemantic approach to reveal where these regional names' origins and authentic meanings are taken from the Kaili language.

## **2. Literature Review**

Toponym is a study that observes the form and pattern of names for a place or geographical name. The name of a place is closely associated with the social community and culture. Toponyms are unique and different from other words in arbitrary language systems because toponyms recollect an event or experience of someone who utilizes them (Radding & Western, 2010). Toponym studies are often mistaken for cross-disciplinary studies, even though linguistic studies consider toponyms as linguistic mapping, a valuable indicator in regional mapping and historical and cultural reconstruction (Giraut, 2020). In addition, toponyms are a sub-study of semantics in linguistics because they concentrate on the meaning of a place or area. This study is also often associated with geographic linguistics, namely the study of the distribution of territorial areas characterized by the naming of an area (Khomutnikova et al., 2020). This is compelling because the name of an area will partake in a transformation for centuries based on social events and natural events that occur in that area. It means that the name of an area can change based on these factors, and by tracing the name of the area, research can uncover the history and culture of the past. Toponym develops with science, geography, history, culture, and language. So, an area or culture can disappear, but ethnolinguistic evidence can provide a semantic conception and the remaining evidence of that culture. Toponym is also related to literature, where a region gives names to specific sites accompanied by oral-literary traditions to provide a vivid and stimulating description of events (Leo Agung & Akhyar, 2019). Of course, history filled with traditional art is more attractive for mundane people to follow and digest than detailed descriptions. So that the process of transmitting information using literature as a medium is more efficiently disseminated in society as an educative and exciting learning device. In this study, the researcher notices that the toponyms in Palu are rich in history. Moreover, every small area in this city has a solid oral literary saga. By studying toponyms using an ethnosemantic approach, the researcher expects to provide explanations and a complete picture of the toponym phenomenon in Palu.

## **3. Research Methods**

The present study is descriptive qualitative research designed to contribute to theory, practice, policy, social issues, and action (Flick, 2022). This study attempted to describe toponyms with an ethnolinguistic approach to urban villages in Palu through data, both written and oral. The researcher

desired to find out the meaning and background of the village's naming, which has not been clearly revealed so far (Rasyid et al., 2016). Sources of research data come from informants or locals who are considered to understand the history and background of the naming of urban villages in Palu, such as historians and cultural figures, as well as community leaders. In addition to exploring for data through information from informants, the researcher also aimed and collected data that already exists in written form or through local folklore. The data that were collected were analyzed by compiling, classifying, and describing them.

The researcher purposely and deliberately determined informant criteria in this study: 1) Informants are seen as members of the public who are professionals in the fields of culture, language, and regional history, 2) Informants are also actively involved as academics in educational institutions, and 3) Informants were community leaders or traditional leaders. The researcher selected four individuals to be an informant to cooperate. The first informant is SL, a humanist and educational figure who is a Kailinese art and history expert. The second informant is RM, a local artist who comprehends local culture and history well. The third informant is DD, a traditional Kailinese figure with deep experience and knowledge about toponyms. Furthermore, the last one is TS, an educational figure, lecturer, humanist, and historical figure most respected in the city of Palu and who masters 21 dialects of the Kaili language and several dialects of languages in Sulawesi. From them, the researcher piloted information exploration and verification related to the relationship between toponyms and cultural, historical, and literary contexts.

In this study, the researcher conducted interviews with tribal leaders, cultural figures, and local historical figures to verify the data obtained to provide an accurate illustration of the phenomenon. These figures were interviewed using open-ended interviews, so they were comfortable and could provide a more extensive explanation of related phenomena. The interview was attended to by the researcher and converted into a transcription so that it could be interpreted and grouped later. This research employs a qualitative approach because researchers believe a qualitative research model can provide an accurate picture of the essence of meaning and reality. Concerning toponyms, the researcher noticed that descriptive research could provide descriptions and explanations of how the names of areas in the urban village of Palu originate and their relation to ethnosemantic elements. The collected toponym data was compartmentalized based on aspects and themes. Then the researcher specified the meaning and semantic relationship of the area's name. Furthermore, the researcher corroborated with traditional leaders, languages, humanists, and historians. The confirmed information was then interpreted to produce conclusions based on scientific evidence.

#### **4. Results**

The naming (toponym) of areas, especially urban villages in Palu, is interesting and ought to be taught to the public. Moreover, the people of Palu are heterogeneous where; they are inhabited by various tribes and languages community; of course, not all of them know the toponym or meaning of these names. The names of these urban villages are not just markers or characteristics of an area but, in fact, have implications that are adapted to their historical, socio-cultural background and geomorphological conditions.

To highlight local identity and part of local wisdom, the local government is also trying to maintain the names of these villages, which still use the *Kaili* language. Moreover, most of the speakers actually live in the Palu Valley area (Palu, Donggala Regency, and Sigi Regency). Like the current usage of street names in Palu, which also utilizes the *Kaili* language a lot.

Based on data from the Government Section of the Regional Secretariat of Palu, almost all of the 46 urban villages in eight sub-districts in Palu use the *Kaili* language. This data does not include the naming of a number of places that used to be settlements in Palu. Such as *Tamalanja* (*Ipil-ipil* tree),

*Tatari* (a type of knee-high weed), *Uvetumbu* (water spring), *Tatanga* (central village), *Tanah Runtuh*, and *Karanpe* (stopover center & harbor).

Based on the mapping, urban villages toponyms in Palu turn out to contain quite a variety of meanings but broadly speaking, they can be grouped into four parts, namely: biological toponym (flora and fauna), historical (historical) toponym, geomorphological toponymy, and socio-cultural toponym.

**Table 1.** The toponyms of Palu urban villages

No	Urban Village	Meaning	Aspects
1	<i>Layana</i>	Field	Geomorphology
2	<i>Baiya</i>	Dry	Geomorphology
3	<i>Tatura</i>	Collapsing Ground	Geomorphology
4	<i>Duyu</i>	Landslide	Geomorphology
5	<i>Tondo</i>	Above/near the landslide	Geomorphology
6	<i>Ujuna</i>	Cape	Geomorphology
7	<i>Buluri</i>	On the mountain	Geomorphology
8	<i>Kawatuna</i>	Rocks	Geomorphology
9	<i>Watusampu</i>	Whetstone	Geomorphology
10	<i>Kabonena</i>	Sands	Geomorphology
11	<i>Siranindi</i>	Cathedral bells plant	Biology (flora)
12	<i>Nunu</i>	Ficus tree	Biology (flora)
13	<i>Kamonji</i>	Bread Fruit tree	Biology (flora)
14	<i>Kayumalue Ngapa</i>	Kayumalue tree	Biology (flora)
15	<i>Kayumalue Pajeko</i>	Wood for plowing the fields	Biology (flora)
16	<i>Talise</i>	Catappa Tree	Biology (flora)
17	<i>Talise Valangguni</i>	Catappa Tree (Yellow leaf)	Biology (flora)
18	<i>Taipa</i>	Mango tree	Biology (flora)
19	<i>Birobuli</i>	Sugarcane	Biology (flora)
20	<i>Lolu</i>	Stopover	Socio-cultural
21	<i>Tavanjuka</i>	Melinjo Tree	Biology (flora)
22	<i>Silae</i>	Bamboo	Biology (flora)
23	<i>Lambara</i>	Wild animal habitat	Socio-cultural
24	<i>Lasoani</i>	Spiky plant	Biology (flora)
25	<i>Besusu</i>	Water Snail	Biology (fauna)
26	<i>Balaroa</i>	Katimaha tree	Biology (flora)
27	<i>Petobo</i>	Execution site	Socio-cultural
28	<i>Donggala Kodi</i>	Donggala Tree	Biology (flora)
29	<i>Mamboro</i>	Mamboro Tree	Biology (flora)
30	<i>Tipo</i>	Weaving mat	Socio-cultural & History
31	<i>Pengavu</i>	Medicine/ Kitchen Ashes	Socio-cultural & History
32	<i>Baru</i>	New settlements	History
33	<i>Lere</i>	Bayhops plant	Biology (flora)
34	<i>Pantoloan</i>	Redeemed	History
35	<i>Pantoloan Boya</i>	Redeemed with cloth	History
36	<i>Tanamodindi</i>	Echoing ground	Geomorphology
37	<i>Bayaoge</i>	Spacious village	Socio-cultural
38	<i>Palupi</i>	Making a fence (using wood)	Socio-cultural
39	<i>Poboya</i>	Sheep farm	Socio-cultural
40	<i>Mpanau</i>	Lowland	Geomorphology

### 1.1 Biological Toponym (Flora and Fauna)

This toponymy is the naming of a place established on the portrayal of the animals and plants that are around that area. So, in biological toponyms, the naming of a place is based on the names of animals and plants that grow or live around that place.

Based on the results of the research, the names of the urban village in Palu actually possess a lot of biological implications (flora and fauna). The proof is, of the 46 existing urban village, 17 of them are taken from the names of plants and animals. This means that the naming of urban village in Palu is dominated by plants and animals. This is due to the practice of the Kaili people, who used to name a place according to the plants that were there. Before becoming a developing area and becoming the provincial capital of Central Sulawesi, the City of Palu used to grow a lot of miscellaneous plants. For example, the naming of the *Talise* urban villages, because previously, there were many *Catappa* trees growing in that area. Even though later these trees are now rarely found anymore because they have diverted into residential and office areas.

Likewise, the naming of the *Nunu* urban village is located in the Tatanga District. In this area, it was once known that there were many *Ficus* trees. However, over time, only a few trees remained. The naming of the *Balaroa* urban village was also due to the fact that there used to be many *Balaroa* trees (similar to hibiscus trees). The area was one of the points of the liquefaction disaster on September 28, 2018, which killed thousands of residents; almost no trees are found anymore because they have turned into densely populated residential areas. However, after liquefaction occurred, most of the area was prohibited from being used as a settlement and entered the red (dangerous) zone.

Other villages whose names were formerly named because they were overgrown with plants include *Silae* (bamboo), *Birobuli* (Birobuli trees), *Siranindi* (Cathedral Bells plant), *Kamonji* (Breadfruit), *Kayumalue Ngapa* (Tree), *Taipa* (Mango), *Lasoani* (Thorn trees), *Tavanjuka* (Melinjo), *Mamboro* (Mamboro tree) and *Donggala Kodi* (Donggala tree). The characteristics of this urban village, according to its name, are now almost invisible. The Kaili people who live in the Palu Valley give the name of a village or urban village based on plants that are constantly found in that place.

Apart from being based on plants, there is also the naming of sub-districts in Palu because there are many animals found in that location, such as the water snail, *Besusu*. Although these animals are almost no longer encountered today because the area has now become a densely populated settlement, especially in the urban center area. The *Besusu* is divided into three, namely West, East, and Central Besusu, which is divided by a small river that is part of the East Palu District.

**Table 2.** Toponymy of urban village in Palu based on biological aspects

NO	Urban Village (in Kailinese)	Meaning	Aspect
1	<i>Siranindi</i>	Cathedral Bells Plant ( <i>Kalanchoe pinnata</i> )	Flora
2	<i>Nunu</i>	Ficus Tree ( <i>Ficus benjamina</i> )	Flora
3	<i>Kamonji</i>	Bread Fruit Tree ( <i>Artocarpus altilis</i> )	Flora
4	<i>Kayumalue Ngapa</i>	Wood / Kayumalue tree	Flora
5	<i>Kayumalue Pajeko</i>	Wood for plowing the fields	Flora
6	<i>Talise</i>	Catappa Tree ( <i>Terminalia catappa</i> )	Flora
7	<i>Talise Valanguni</i>	Catappa Tree ( <i>Terminalia catappa</i> )	Flora
8	<i>Taipa</i>	Mango Tree ( <i>Mangifera indica</i> )	Flora
9	<i>Birobuli</i>	Sugarcane ( <i>Saccharum officinarum</i> Linn)	Flora
10	<i>Mamboro</i>	Mamboro Tree	Flora
11	<i>Balaroa</i>	Katimaha Tree ( <i>Kleinhovia hospita</i> )	Flora
12	<i>Tavanjuka</i>	Melinjo Leaf ( <i>Gnetum gnemon</i> Linn.)	Flora
13	<i>Silae</i>	Bamboo ( <i>Bambusoideae</i> )	Flora

14	<i>Lasoani</i>	Thorny Tree and Cactus ( <i>Cactaceae</i> )	Flora
15	<i>Lere</i>	Bayhops Plant ( <i>Ipomoea pes-caprae</i> )	Flora
16	<i>Donggala Kodi</i>	Donggala Tree	Flora
17	<i>Besusu</i>	Water Snail ( <i>Limnaea sp.</i> )	Fauna

## 1.2 Historical Toponymy

The researcher uncovered that several urban villages contain ethnolinguistic information based on the toponym. Those historical events or incidents are closely affiliated with the formation of that zone. These historical events can be general (national) or specific (according to the local community).

According to Liliweri (2014), "Cultural is socially innate, or tradition passed from past generations to future generations," and culturally symbolically is "the basis of meaning shared by society." The toponymy of a place is a collective arrangement and is passed down between generations. So, to find out the meaning of a place name, historical and symbolic cultural studies are required.

Likewise, the naming of urban villages in Palu is also influenced by many aspects, and one of them is the historical aspect. The names of some urban villages by their ancestors are based on the history of the place's formation. History is not only related to natural events and disasters but also customs. The name *Kampung Baru*, which has now changed its name to *Kelurahan Baru*, for example, according to historians, means a place that was previously empty and then made into a new settlement. Likewise, the naming *Pantoloan Boya* means redemption with a cloth. Based on local folklore and community leaders, the area was once part of a small kingdom in the Palu Valley. If there are people who violate the tribal law, then the penalty is to make up for it with a cloth. However, the naming of the region based on history also raises multiple interpretations. Such is the case with the name *Petobo*. This urban village which became a silent witness to the enormity of the liquefaction and claimed thousands of lives, in Kailinese, means a place for a massacre. That said, this place which borders Sigi Regency, used to be a slaughterhouse for people who opposed the king or committed transgressions. Those who commit violations will receive severe punishment from the king or regional leader at that time. In this place, a historical event also occurred when a woman named *Taboge Bulava* was about to be married to a man from the Kaili Tara tribe. However, they made an agreement that the dowry that would be handed over to the bride was the construction of an irrigation canal from the *Kawatuna* river to *Petobo*. Watkinson & Hall (2019) argued that this improper irrigation pattern and structure caused liquefaction when the 2018 earthquake occurred. Earthquakes only triggered land shifts which result in landslides due to the reduction of soil density structure and also the geographical conditions of Central Sulawesi, which are prone to tectonic earthquakes. In addition, The *Kaili* people in Palu believe that the *Petobo* area is uninhabitable because it can cause devastation, so the area only becomes a location for tribal war. However, along with the development of population mobilization, *Petobo* began to be inhabited by multicultural people so that people from new settlements did not know that this location was uninhabitable based on local customs. In addition, most of the area in *Petobo* is paddy fields, plantations, and agricultural irrigation (Bradley et al., 2019), causing the potential for landslides and liquefaction to occur at any time when a tectonic earthquake occurs.

**Table 3.** Toponymy of urban village in Palu based on historical aspects

NO	Urban Village (in Kailinese)	Meaning	Aspect
1	<i>Baru</i>	New settlements	History
2	<i>Pantoloan</i>	Redeemed (Trade center)	History
3	<i>Pantoloan Boya</i>	Redeemed with cloth	History
4	<i>Petobo</i>	Execution site	History

### 1.3 Socio-Cultural Toponymy

Socio-cultural toponym means naming a place based on a grant from someone who has authority over that place. So, toponymy established on socio-culture is based on a contribution by an individual who has an essential role in that place. There is also because the zone is the center of community activity.

The naming of places in Palu undoubtedly goes through a protracted process, not only based on biological (flora and fauna) and historical aspects, but other phenomena such as social culture also affect the naming of a place. Rais (2008) expresses that multiple names of geographical elements were given by humans when they first populated an area based on parables or mythology and also bonded to the history of human settlements. Thus, the toponym of a place cannot be isolated from human activity, and the naming of the place becomes an identity distinguishable from other places.

Likewise, naming villages and sub-districts in Palu cannot be disconnected from socio-cultural aspects. The naming communed to social activities at that time, such as gardening, animal husbandry, medicine, and craftsmanship, like *Poboya*, which means sheep farm. From the past until now, the area has been a place for sheep and goat husbandry. However, these sheep farms are no longer naturally found because the land where livestock spread has been transformed into residential areas—likewise *Tipo*, which means a place to weave mats. The village was formerly known as a place for producing woven mats. Many people work as mat weavers, a source of livelihood besides gardening and fishing. They use the local language as the area's name and a marker of where they accomplish their activities.

The name *Pengawu*, which means a place of medication, is also closely related to the people's social background at that time. The location was formerly known to the public as a place to take ingredients for medicines. Nevertheless, the area, which is part of the *Tatanga* District, has turned into residential areas, offices, and businesses.

**Table 4.** Toponymy of urban village in Palu based on socio-cultural aspect

NO	Urban Village (in Kailinese)	Meaning	Aspect
1	<i>Lolu</i>	Stopover	Socio-cultural
2	<i>Lambara</i>	A place for animals to roam	Socio-cultural
3	<i>Tipo</i>	Weaving mats	Socio-cultural
4	<i>Pengavu</i>	Medicine/ Kitchen Ash	Socio-cultural
5	<i>Poboya</i>	Sheep farm	Socio-cultural
6	<i>Palupi</i>	Fencing (using wood products)	Socio-cultural
7	<i>Bayaoge</i>	Spacious village	Socio-cultural

### 1.4 Geomorphological toponymy

Naming places in Central Sulawesi, including Palu, relatively has a long process. Not only witnessed from socio-cultural phenomena but geographical phenomena also seriously impact the naming of a place. Bintarto and Hadisumarno (1979) separate geographical and environmental phenomena into physical and non-physical ones. The physical environment phenomenon consists of topological, non-biotic, and biotic aspects. The topological aspect is the physical environment related to an area's location, shape, shape, and boundaries. In contrast, non-biotic aspects are aspects of the physical environment consisting of soil, water, and climate. The biotic aspect is an aspect of the physical environment consisting of humans, animals, and plants. The non-physical environmental phenomena consist of social, economic, cultural, and political aspects.

The toponym of the area based on geomorphology means the naming of a place based on the shape of the land of an area (city, district, sub-district, village, urban village, hamlet, and others)

associated with the existence of that place. So, the toponym of sub-districts and urban villages is based on the shape of the land in the area.

The toponym of a place or village in Palu is also based on the shape of the land or geomorphology. Currently, some of the names of urban villages in Palu are determined based on the land's condition and the place's geography. Such as *Buluri* (hill/mountain), *Watusampu* (sharpening stone/whetstone), *Kabonena* (lots of sand), *Baiya* (dry area), *Kawatuna* (rocks), *Tatura* (collapsed ground), *Tondo* (edge area) and *Duyu* (landslide).

The name *Kabonena*, for example, means much sand because, in that area, the contours of the land are mixed with sand. Understandably, formerly the area that is now part of the *Ulujadi* District was part of the sea before it finally experienced natural processes and the effects of earthquakes and plate shifts.

Moreover, the naming of *Tatura* and *Duyu* became part of the disaster mitigation efforts by the ancestors of the *Kaili* tribe. The two areas had previously experienced disasters that claimed many lives. In *Duyu*, floods have been recorded several times apart from landslides. For this reason, those previous two areas were not recommended as residential locations. However, in reality, the two locations are currently residential areas. After the earthquake, tsunami, and liquefaction on September 28, 2018, the regional government designated *Duyu* as a permanent shelter for thousands of disaster survivors. They are generally victims of the earthquake and liquefaction in *Balaroa* Village and its surroundings. However, it is risky because, based on the toponym, the place is prone to landslides. For this reason, the government should select a safer location for shelter.

Likewise, with *Tondo*, which means the edge or outskirts, the area is located on the edge of the *Talise* beach and is also on the outskirts of a location prone to landslides, so it is known as a landslide. When the earthquake occurred on September 28, 2018, some areas, especially along the coast, experienced cracks and collapsed into the sea. Not only landslides and landslides but parts of the *Tondo*, which are now permanent housing locations for thousands of disaster survivors, are also prone to and are frequently hit by floods.

Based on the results of this research, naming the urban village area also supports the community in recognizing the geographical conditions of the urban area. Communities can know the potential for disasters in their area, so they are always vigilant and make early anticipation exertions. Moreover, many locations that are currently residential areas in Palu are vulnerable and prone to disasters. Therefore, research with linguistic, cultural, and historical approaches can outline why the indigenous people manipulated toponyms to inform the populace and avoid losses.

**Table 5.** Toponymy of urban village in Palu based on geomorphological aspect

NO	Urban Village (in Kailinese)	Meaning	Aspect
1	<i>Layana</i>	Field	Geomorphology
2	<i>Baiya</i>	Dry land	Geomorphology
3	<i>Tatura</i>	Collapsing ground	Geomorphology
4	<i>Duyu</i>	Landslide	Geomorphology
5	<i>Tondo</i>	At the edge of the cliff	Geomorphology
6	<i>Ujuna</i>	Cape	Geomorphology
7	<i>Buluri</i>	On a mountain	Geomorphology
8	<i>Kawatuna</i>	Rocks	Geomorphology
9	<i>Watusampu</i>	Whetstone	Geomorphology
10	<i>Kabonena</i>	A lot of sand	Geomorphology

## 2. Discussion

### 2.1 Toponyms, Linguistics, and Beliefs of Indigenous Tribe

In the Kaili tribe culture, no evidence of penmanship has been found. In the pre-cartographic era, it would not be easy to map an area without using the local language to determine the toponym.

Toponym is designed according to the local language and provides a topographical portrayal of an area (Akbarova, 2022). Its relation to linguistics is that the sense contained in toponyms is associated with specific contexts such as social, cultural, historical, flora and fauna, geography, and even potential disasters (Moyo & Nombembe, 2022). In the past, the indigenous Kaili tribe did not yet have clear reasons to describe why a natural phenomenon occurred, so they composed a fictional story as a prohibition and warning so that it was straightforward to understand and became a social fact in their culture (Babamuradova, 2022).

In line with the current research, Halfian (2022) illustrates that area name is determined based on societal conventions, sociocultural figures, and geographical conditions. Even the land surface's or the earth's appearance also determines toponymy. In contrast to Halfian, Setyo et al. (2022) consider that social aspects and historical geography can provide a general description of the origin of an area's name. The name of an area is also closely connected to saga and folklore, the truth of which needs to be scientifically investigated. Apart from that, the uniqueness of the naming of an area is also determined by the language background. For example, in the Philippines, local names and terms are closely associated with Spanish language discourse, which was introduced by Portuguese sailors (Rodrigues, 2022). In addition, several cities were planned to be named after British colonial officials in Malaysia. These names give an overview of the history of an area. For example, George Town in Pulau Pinang, Malaysia, has so much history that it became a marker of friction between the British Empire, colonies, and multi-ethnicities. The place's name has been maintained until now and has become a historical heritage (Rungkhapan, 2022).

In addition, this toponym has a historical background, in this case, in the Palu, Balaroa area, which is the zone where liquefaction occurred. Since long ago, the indigenous people of Kaili believed this was an uninhabitable place, so the natives had a special lexeme for liquefaction disasters, namely "Nalodo" (Triyanti et al., 2022). Furthermore, Balaroa is a plant or tree of Katimabar (*Kleinhovia hospita*). These plants tend to grow in secondary forests or on the banks of rivers. The researcher considers that there has been a disaster similar to the evidence of this plant, which tends to appear in secondary forests after damage or changes in the geographical face.

The researcher strongly believes that folklore and art can adequately describe past experiences or events (Fujii et al., 2021; Indriana et al., 2021). The name of a region is a window of the history and differentiae of a nation, so toponyms must be considered because they contain essential information and reflect people's way of life in ancient times. These names also illustrate how and from where humans migrated. It gives an outlook on human life from the beginning until particular cultures liquefied away and disappeared, swallowed up by acculturation and modernization (Agmon, 2022). Thus, the naming of an area needs to be accompanied by an explanation that is efficiently unrestricted to the public, but this is sometimes noticed as an attempt to scare people. However, let us look at it from a disaster management perspective. This can speed up the evacuation process and increase public awareness of potential disasters in their area (Atanga & Tankpa, 2022; Li et al, 2022). The government should refrain from covering up important information like this because disaster mitigation knowledge is essential for people who live in disaster-prone areas. In the future, the researcher hopes there will be efforts from the government to provide disaster mitigation management education and be transparent on this issue.

## 6. Conclusion

Based on the research results above, the names (toponyms) of urban villages in Palu contain eclectic meanings. They are generally dominated by the names of plants (flora). These results accurately describe that in the past Kaili tribe anointed a place based on local vegetation. Nevertheless, apart from geographical conditions, the toponym is also based on people's habits and past events in the area. The toponym of the Palu urban village consists of four parts, namely: biological aspects, geomorphological

aspects, historical aspects, and sociocultural aspects. The results of this study still need to be improved, considering the limited data and the broad scope of the research. However, at least it can provide insight into the knowledge of the community about the meaning of the toponym of urban village areas in Palu. In the future, there will also be research that is reviewed from other sciences by exploring further the topography of the Palu area, especially from the historical aspect of the disaster. Thus, it is crucial, considering that Palu is a disaster-prone area often hit by disasters, especially earthquakes.

## References

- Agmon, N. (2022). Tatami: the enigmatic toponym of Western Judah, and use of suffixes in dating toponyms. *Palestine Exploration Quarterly*, 1-27.
- Atanga, R. A., & Tankpa, V. (2022). Geospatial analysis of flood emergency evacuation sites in Accra. *Jāmbā: Journal of Disaster Risk Studies*, 14(1), 9.
- Akbarova, D. (2022). The Main Features of Toponyms. *Science and innovation in the education system*, 1(3), 14-18.
- Anshari, B. I., Dede, M., Tirtayasa, R., T., & Musthafa, K. (2017). *Kajian Etnosemantik dalam Toponimi Wilayah Kabupaten dan Kota Cirebon*. <https://doi.org/10.31227/osf.io/5g6tw>
- Apriadsa, A., Anggoro, H. S., Cahyono, A., & Apriadna, R. (2019). Unveil the 'lost toponyms' in the northern part of the Menoreh Mountains, Java, Indonesia. *International Journal of Cartography*, 5(2-3), 242-254.
- Babamuradova L. X. (2022). *The Role of Folklore in The Moral and Aesthetic Upbringing of The Individual*. *World Bulletin of Management and Law*, 7, 101-103. Retrieved from <https://scholarexpress.net/index.php/wbml/article/view/573>
- Bintarto, R., dan Hadisumarno, S. (1979). *Metode Analisa Geografi*. LP3ES.
- Bradley, K., Mallick, R., Andikagumi, H., Hubbard, J., Meilianda, E., Switzer, A., ... & Hill, E. M. (2019). Earthquake-triggered 2018 Palu Valley landslides enabled by wet rice cultivation. *Nature Geoscience*, 12(11), 935-939.
- Camalia, M. (2015). Toponimi kabupaten lamongan (kajian antropologi linguistik). *PAROLE: Journal of Linguistics and Education*, 5(1), 74-83.
- Flick, U. (2022). *An Introduction to Qualitative Research*. Sage.
- Fujii, M., Tamano, E., & Hattori, K. (2021). Role of Oral Transmission in Disaster Prevention Education-Significance of Disaster Folklore in Modern Times. *Journal of Disaster Research*, 16(2), 241-243.
- Giraut, F. (2020). Plural Toponyms: When Place Names Coexist. Introduction. *EchoGéo*, (53).
- Halfian, W. O., Hariyati, H., & Masri, F. A. (2022). Toponimi Penamaan Jalan Di Kecamatan Lasalepa Kabupaten Muna. *Jurnal Pendidikan Bahasa dan Sastra Indonesia Metalingua*, 7(1), 35-50.
- Hartmann, J. F. (2007). The power to name places: Ban, Muang, Chiang, Viang, Nakon, Krung. *Studies in Tai and Southeast Asian linguistics*, 139-154.
- Indriana, F. N. L., Pangestu, Y. A., Amanda, B., Ranti, A. D., & Amaruli, R. J. (2021). A Preliminary Study on the Javanese Folklore as a Disaster Mitigation Strategy. In *E3S Web of Conferences* (Vol. 317, p. 01021). EDP Sciences.
- Karsana, D. (2019). Leksikon Arsitektur Hijau Dalam Bahasa Kaili. Pemanfaatan Kearifan Lokal. *Jurnal Multilingual*, Vol. 18, No. 1, Juni. Balai Bahasa Sulawesi Tengah
- Khomutnikova, E. A., Gumbina, E. V., Zhurkova, M. S., & Fetyukov, F. V. (2020). Semantics and etymology of English toponyms in the aspect of linguistic geography. In *European Proceedings of Social and Behavioural Sciences EpSBS* (pp. 505-513).
- KBBI, (2016). *Kamus Besar Bahasa Indonesia (KBBI)*. (Online). <https://kbbi.web.id/>.
- Kridalaksana, H. (2011). *Kamus Linguistik*. Gramedia Pustaka
- Kumala, S. A., Lauder, R. M., Datang, F. A., & Suratminto, L. (2022). Aspek Sejarah dan Budaya Cina Benteng pada Variasi Toponim Sewan: Sebuah Kajian Linguistik: Historical and Cultural Aspects on Sewan's Toponym Variation. *Jurnal Bastrindo*, 3(2), 97-108.

- Kyzy Gojayeveva, N. S. (2022). The Style of Toponyms and the Lexical and Semantic Features of Anar's Story "White Ram, Black Ram". *Path of Science*, 8(4), 3001-3008.
- Leo Agung, S., & Akhyar, M. (2019). Pengembangan bahan ajar digital sejarah lokal berbasis toponimi di Vorstelanden Surakarta. In *Seminar Nasional Sejarah* (Vol. 4).
- Li, H., Wang, Y., Jiang, J., & Zhou, R. (2022). Metro Station Evacuation Safety Assessment Considering The Emergency Response. *Simulation*, 98(10), 919-931.
- Liliweri, A. (2014). *Sosiologi Dan Komunikasi Organisasi*. Bumi Aksara.
- Mandillah, L. (2022). A morphosyntactic and semantic analysis of toponyms among the Luhya: A case of Bungoma County. *Journal of Languages, Linguistics and Literary Studies*, 2(1), 28-37.
- Moyo, M., & Nombembe, A. (2022). The History of Xhosa Toponyms in Mbembesi. *Marang: Journal of Language and Literature*, 35.
- Muhidin, R. (2019). Penamaan Badai Sebagai Pengingat Bencana Alam Dalam Persepsi Etnolinguistik. *Jurnal Lingko: Jurnal Kebahasaan dan Kesastraan*, 1(2).
- Nishonova, G. F. (2022). Linguistic prestige and anthroponym/toponym use at the crossroads of languages and cultures. *ACADEMICIA: An International Multidisciplinary Research Journal*, 12(4), 405-414.
- Nugraha, D. D. (2023). Village Names Meaning in Pesanggaran District, Banyuwangi Regency: An Antropolinguistic Study. *International Journal of High Education Scientists (IJHES)*, 3(1), 1-9.
- Radding, L., & Western, J. (2010). What's in a name? Linguistics, geography, and toponyms. *Geographical Review*, 100(3), 394-412.
- Rais, J., dkk. (2008). *Toponimi Indonesia*. Pradnya Rosdakarya.
- Ratnasari, N., & Susilo, B. (2017). Kajian Keterkaitan Toponim dengan Karakteristik Wilayah di Kecamatan Bayat, Kabupaten Klaten, Provinsi Jawa Tengah. *Jurnal Bumi Indonesia*, 6(3), 228718.
- Rasyid, S., Saman, S., & Syahrani, A. (2016). Klasifikasi kosakata permainan rakyat Melayu Sambas: pendekatan etnolinguistik. *Jurnal Bahastra*, 35(2).
- Rodrigues Lourenco, M. (2022). Before the Philippines: textual and cartographical representations of Mindanao in sixteenth-century Portuguese sources. *South East Asia Research*, 30(1), 9-22.
- Rugkhapan, N. T. (2022). Between Toponymy and Cartography: An Evolving Geography of Heritage in George Town, Malaysia. In *New Directions in Linguistic Geography: Exploring Articulations of Space* (pp. 327-354). Singapore: Springer Nature Singapore.
- Sari, N. A. (2022). Naming System on The Name of Banten Batik Motif: A Semantic Study. *Development in Language Studies*, 2(1), 8-18.
- Setyo, W. F. N., Muryani, C., & Nurhadi, N. (2022). Toponymic and Historiography Influences on Place Naming of Villages in Klego District, Indonesia. *KnE Social Sciences*, 89-100.
- Steenwijk, H. (2022). On the early history of Val Resia and some of its toponyms or: How the Resians lost their name. *Slovenski jezik/Slovene Linguistic Studies*, 14.
- Tao, L., Xie, Z., Xu, D., Ma, K., Qiu, Q., Pan, S., & Huang, B. (2022). Geographic Named Entity Recognition by Employing Natural Language Processing and an Improved BERT Model. *ISPRS International Journal of Geo-Information*, 11(12), 598.
- Triana, H. W., Kustati, M., Nelmawarni, N., & Reflinaldi, R. (2022). West Coastal Toponyms of Sumatra Island: A Corpus Linguistics Study. *OKARA: Jurnal Bahasa dan Sastra*, 16(1), 90-108.
- Triyanti, A., Surtiari, G. A. K., Lassa, J., Rafliana, I., Hanifa, N. R., Muhidin, M. I., & Djalante, R. (2022). Governing systemic and cascading disaster risk in Indonesia: where do we stand and future outlook. *Disaster Prevention and Management: An International Journal*, (ahead-of-print).
- Watkinson, I. M., & Hall, R. (2019). Impact of communal irrigation on the 2018 Palu earthquake-triggered landslides. *Nature Geoscience*, 12(11), 940-945.