



PRESERVATION OF TERNATE'S MARITIME LEXICON: AN ECOLINGUISTIC STUDY OF THE DUFA-DUFA COASTAL COMMUNITY

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ABSTRACT

This study examines the preservation of maritime lexicon in the coastal community of Dufa-Dufa, Ternate, from an ecolinguistics perspective. It focuses on maritime terms that community members still recognize and use, the ecological meanings embedded in those terms, intergenerational shifts in their use, and community-based preservation strategies. The study adopts a descriptive qualitative micro-case-study design. In this model, the interview data are organized around six informant profiles representing active fishers, senior speakers, a young participant, a teacher, and a community leader. The data are analysed thematically by classifying maritime terms into maritime activities, fishing gear, sea conditions, weather signs, marine biota, social actors, and fish-processing practices. The findings indicate that maritime lexicon not only names objects and activities but also preserves ecological knowledge of winds, currents, fishing seasons, safety at sea, and ethical relationships with the marine environment. Nevertheless, local maritime terms are used less frequently by younger speakers because of occupational change, the dominance of Indonesian, formal education, social media, and increasing reliance on technology. The study concludes that preserving the Dufa-Dufa maritime lexicon requires community-based documentation, a concise glossary, audio recordings, educational videos, and integration into local-content education.

Keywords: *ecolinguistics; maritime lexicon; dufa-dufa; ecological knowledge; language preservation*

INTRODUCTION

The language of coastal communities functions not only as a means of communication but also as a repository of ecological experience. In maritime life, words used to refer to the sea, winds, currents, fishing seasons, fishing gear, and fishing practices often encode knowledge developed through long-term interaction between people and the marine environment. Maritime lexicon can therefore be understood as part of a coastal community's collective memory.

From an ecolinguistic perspective, the relationship between language and the environment is not neutral. Language can record, maintain, transform, or even erase the ways communities understand nature. Haugen (1972) introduced language ecology as the study of interactions between a language and its environment. Ecolinguistics later developed as a field

that examines how language shapes human views, values, and practices toward the environment (Fill & Penz, 2018; Stibbe, 2021).

Maritime lexicon plays a particularly important role in coastal communities. Terms for winds, sea conditions, natural signs, and fishing seasons can help fishers determine when to go to sea, assess risk, and understand environmental change. Such vocabulary is closely related to local ecological knowledge, namely knowledge that grows from a community's experience in managing its relationship with nature (Berkes, 2018). When these terms fall out of use, not only their linguistic forms but also the knowledge systems associated with them are at risk.

Dufa-Dufa, Ternate, is a compelling coastal setting because its residents have longstanding historical and social ties to the sea. Everyday conversations still contain maritime terms related to fishing activities, fishing gear, fish processing, weather, and sea conditions. However, social change, formal education, digital technology, and occupational shifts have made some local maritime terms increasingly uncommon, especially among younger speakers.

This study is important because a focused examination of maritime lexicon can provide an initial foundation for broader documentation. Given the limited number of informant profiles, the study does not seek to generalize about the entire population of Ternate. Instead, it offers an exploratory account of how selected Dufa-Dufa residents understand, use, and interpret maritime lexicon in everyday life.

On this basis, the study addresses three main questions: (1) Which maritime lexical items are known and used by Dufa-Dufa residents? (2) What ecological meanings are embedded in those items? and (3) How do residents view the preservation of maritime lexicon in Dufa-Dufa? The answers are expected to provide an initial contribution to the development of community-based documentation of maritime ecollexicon.

METHOD

1. Research Design

This study employs a descriptive qualitative approach with a micro-case-study design. The approach was selected because the purpose is not to measure the statistical frequency of language use but to understand community members' meanings, experiences, and views concerning local maritime lexicon. A micro-case study is appropriate for a project-based study because it enables focused attention on a limited location, set of informants, and issue while retaining interpretive depth.

2. Research Site and Informants

The study focuses on the coastal community of Dufa-Dufa, Ternate. The planned informant group comprises six people representing active fishers, senior speakers, a young person, a teacher or education practitioner, and a community leader. Informants are selected purposively on the basis of their involvement in maritime activities and their ability to explain local terms related to the sea.

**Table 1**
Interview Informant Profiles

Code	Age	Gender	Category	Rationale for selection
I1	58	Male	Active fisher	Direct experience reading weather, currents, and fishing gear
I2	46	Male	Fisher/fish trader	Knowledge of fishing gear, boats, and fish processing
I3	67	Female	Senior speaker/fisher family	Remembers older terms and family maritime advice
I4	24	Male	Youth/university student	Represents younger speakers and changing language use
I5	51	Female	Teacher/local resident	Provides educational and preservation perspectives
I6	61	Male	Community leader	Provides social, cultural, and local policy perspectives

3. Data Collection and Analysis

The data-collection design uses semi-structured interviews. The interview questions address four areas: informants' knowledge of maritime lexicon, the ecological meanings attached to the terms, changes in lexical use, and views on preservation. Each informant is assigned a code from I1 to I6 to protect confidentiality.

The data are examined through thematic analysis. First, interview transcripts are read repeatedly to identify maritime terms and significant statements. Second, the identified terms are entered into a lexical inventory. Third, each item is classified by semantic domain, including fishing gear, maritime activities, sea conditions, weather, marine biota, fish processing, and social actors. Fourth, informant statements are assigned analytical codes, including ML for maritime lexicon, EM for ecological meaning, LS for lexical shift, GF for generational factor, MF for modernization factor, and PS for preservation strategy. Fifth, the codes are grouped into major themes in accordance with qualitative thematic analysis (Braun & Clarke, 2006, 2021; Saldaña, 2021).

Trustworthiness in this small-scale design is strengthened through source triangulation by comparing accounts from fishers, senior speakers, young people, teachers, and community leaders. Terms mentioned by one informant are also compared with those mentioned by others to determine whether they remain widely known or are limited to particular groups.

3. RESULTS AND DISCUSSION

1. Categories of Maritime Lexicon Identified

The inventory indicates that the maritime lexicon in the interview data can be grouped into five main categories: maritime activities and actors, fishing gear and technology, sea and

weather conditions, marine biota or catches, and fish-processing practices. These categories show that Dufa-Dufa maritime language contains not only names for objects but also work practices, safety knowledge, and the social relationships of the coastal community.

Table 2
Inventory of Maritime Lexicon in the Interview Data

No.	Term	Meaning	Category	Ecological/social significance	Status
1	lao	sea	Ecological space	The sea as a living space, economic resource, and source of identity	Still known
2	toma lao	go to sea/fish at sea	Activity	Links work and community mobility to the sea	Still used
3	soma	fishing net	Fishing gear	Traditional fishing technology and practical knowledge	Declining among youth
4	fufu	smoking fish	Fish processing	A local method of preserving the catch	Still used
5	ikan fufu	smoked fish	Processed product	Connects marine products with the coastal household economy	Still used
6	pajeko	motorized fishing boat	Maritime technology	Represents modernization of fishing gear and practices	Still used
7	ngolo	water/waters	Natural condition	Relates to observations of seawater quality and condition	Becoming less common
8	boboso	strong wind from the sea	Weather/wind	A warning of weather risk before going to sea	Rare among youth
9	rubaruba	unstable/changeable sea	Sea condition	Signals waves, currents, and unpredictable weather	Used by fishers
10	ake lao ma ngolo	changing/restless seawater	Sea condition	Indicates changes in currents, waves, or weather	Rarely used
11	ika ma lao	marine fish	Marine biota	Classifies marine resources in community knowledge	Still known
12	ngofa-ngofa lao	young people learning to fish	Social actor	Marks the transmission of maritime skills	Rarely used
13	komu	local pelagic fish	Marine biota	Relates to fish seasons and fishing-ground knowledge	Known to older fishers



No.	Term	Meaning	Category	Ecological/social significance	Status
14	cakalang	commonly caught fish species	Marine biota	Relates to the fishing economy and catch seasons	Still known
15	rompong	fish aggregating device	Fishing aid	Reflects knowledge of fish locations and capture strategies	Known by fishers
16	lampu pajeko	lights on fishing boats	Fishing technology	A technological adaptation used to attract fish	Still used
17	air nae	rising/high tide	Tidal condition	Indicates the timing and movement of seawater	Partly known
18	air turun	ebb/low tide	Tidal condition	Relates to the timing of coastal and boating activities	Partly known

Table 2 shows that the terms most widely recognized by all informants are associated with everyday activities and the coastal economy, including soma, fufu, ikan fufu, and pajeko. By contrast, terms used to interpret natural signs, such as boboso, ruba-ruba, and ake lao ma ngolo, are more familiar to fishers and senior speakers. This pattern demonstrates differences in lexical competence based on ecological experience: the closer a person is to fishing practices, the richer that person's lexical knowledge of sea conditions tends to be.

2. Maritime Lexicon as Ecological Knowledge

The first finding indicates that maritime lexicon functions as a repository of local ecological knowledge. The term boboso, for example, refers not only to a strong wind but also serves as a warning of the risks of going to sea. I1 stated, "When elders say boboso, it is not merely a wind. It is a sign that fishers must be careful. When the wind is like that, the waves usually rise quickly." This statement shows that a single lexical item can condense knowledge of wind direction, changing waves, and safety decisions.

A similar pattern appears in ruba-ruba, which I2 described as an unstable sea condition. According to I2, "Ruba-ruba means that the sea is unpredictable. Fishers must observe the clouds, wind, and currents." This statement shows that local maritime terms operate as a system of signs through which fishers interpret the relationship among weather, currents, and risk. Maritime lexicon should therefore be understood as part of ecological practice rather than merely as a list of words.

Within an ecolinguistic framework, terms such as boboso and ruba-ruba represent a dynamic relationship among language, the body, experience, and the environment. These terms emerge from repeated observations of the sea and are transmitted through intergenerational conversation. Stibbe (2021) emphasizes that language shapes stories about how people live with nature. In Dufa-Dufa, these stories take the form of terms that offer

practical guidance on when to go to sea, when to postpone a trip, and how to recognize signs of danger.

Maritime lexicon also has an ethical dimension. I3 explained that elders formerly advised children not to take too many small fish and not to force themselves to go to sea when conditions were "not good." Although such advice is not always codified as a written rule, it reflects values of caution and sustainability. From Berkes's (2018) perspective, local ecological knowledge often appears in stories, prohibitions, practices, and terms that regulate human relationships with the environment.

Table 3
Ecolinguistic Themes in Informant Statements

Theme	Key statement	Analytical code	Ecolinguistic interpretation
Language as a safety sign	"Boboso ... is a sign that fishers must be careful." (I1)	ML, EM	A weather term functions as an ecological warning system.
The sea as a space to be read	"Ruba-ruba means that the sea is unpredictable." (I2)	ML, EM	Lexicon connects observations of wind, currents, clouds, and waves.
Language as ecological advice	"Do not take too many small fish." (I3)	ML, EM	A local expression conveys an ethic of sustainable resource use.
Lexicon as identity	"The sea is part of Dufa-Dufa's history." (I6)	ML, PS	Maritime terms preserve the coastal community's social memory.

3. Intergenerational Shifts in Lexicon Use

The second finding indicates an intergenerational shift in the use of maritime lexicon. Fishers and senior speakers tend to command terms associated with sea conditions and natural signs, whereas younger people are more familiar with terms used in general conversation, such as *soma*, *fufu*, *pajeko*, and *toma lao*. I4 stated, "I know a few, but not many. I do not know much about terms for winds, currents, or fishing seasons." The statement suggests that younger speakers still recognize some words but are losing more detailed layers of ecological knowledge.

This shift cannot be understood solely as a linguistic issue. Changes in employment, education, social media, and urban life mean that younger people's experience of the sea is less intensive than that of earlier generations. I6 explained that many young people no longer go to sea because they attend school, work in offices, or engage in trade. As a result, maritime language is becoming more distant from their daily lives. This pattern supports Mühlhäusler's (1996) view that social change can transform language ecology because language always exists within a network of social practices.



Modernization also appears in the accounts of I1 and I2. They noted that fishers now make greater use of engines, GPS, mobile phones, and digital weather information. Technology clearly improves safety and efficiency, but it also reduces reliance on natural signs that were formerly interpreted through local terms. In other words, technology changes not only how fishers work but also which forms of linguistic knowledge are considered important.

The dominance of Indonesian further contributes to the weakening of local maritime lexicon. I2 stated that young people more often use general Indonesian terms because they encounter them at school, on television, and through social media. I5 added that local terms rarely enter formal classroom learning. These conditions show that lexical preservation cannot be confined to homes or beaches; it must also be connected to educational settings and digital media.

Table 4
Factors Contributing to Shifts in Maritime Lexicon Use

Factor	Interview evidence	Effect on the lexicon
Generational difference	Young people mainly know common terms such as soma, fufu, and pajeko	Terms for weather, currents, and natural signs are less widely known
Occupational change	Some young people no longer work as fishers	Direct ecological experience decreases
Dominance of Indonesian	The Indonesian word jaring replaces soma in some conversations	Local terms are perceived as less formal
Fishing technology	GPS, mobile phones, engines, and digital information are increasingly used	Interpretation of natural signs through local language weakens
School and social media	Local terms rarely appear in lessons or digital content	The lexicon is less visible in younger people's social spaces

4. Community-Based Maritime Lexicon Preservation

The third finding indicates that all informants regard the preservation of maritime lexicon as important. Their reasons concern not only language but also identity, history, education, and ecological knowledge. I3 stated, "If it is not written down, it will eventually disappear. Future generations will no longer know the maritime language of Dufa-Dufa." I6 emphasized, "When the terms disappear, the way people understand the sea also changes." These statements show that lexical preservation is understood as an effort to protect the community's way of viewing the sea.

Documentation was the preservation strategy mentioned most frequently by informants. Suggested forms include word lists, a concise dictionary, audio recordings, short videos, and school-based learning. I2 recommended short videos because younger people are closely connected to digital media. I5 proposed a school project in which students interview

older family members about maritime terms. This strategy is valuable because it connects senior speakers, who hold ecological memory, with younger generations, who use new media.

From an ecolinguistic perspective, lexical preservation should document not only words and meanings but also their ecological contexts. The term *boboso*, for example, should be explained alongside wind signs, changing waves, risks at sea, and fishers' experiences. The term *fufu* should be understood as a fish-processing practice associated with the household economy of the coast. In this way, lexical documentation does not become a detached list of words separated from community life.

Based on the interview data, the most realistic preservation strategy for further research is the development of a small Dufa-Dufa maritime-lexicon corpus. The corpus could include local terms, Indonesian equivalents, semantic categories, example sentences, contexts of use, audio pronunciations, informant narratives, and supporting photographs or videos. Although modest, such a resource could provide an initial step toward more systematic revitalization of the maritime ecolexicon.

Table 5
Proposed Strategies for Preserving the Dufa-Dufa Maritime Lexicon

Strategy	Activity	Primary actors	Benefit
Lexical documentation	Record terms, meanings, categories, examples, and ecological contexts	Researchers, fishers, community leaders	Prevents the loss of local terms and meanings
Audio recording	Record pronunciations by senior speakers	Researchers, senior speakers	Preserves sound forms and pronunciation variants
Short videos	Create maritime-term content for social media	Young people, community, schools	Increases younger speakers' interest
Concise dictionary	Compile a glossary of Dufa-Dufa maritime lexicon	Teachers, students, researchers	Provides teaching material and local documentation
Local-content learning	Integrate maritime terms into school assignments	Teachers and schools	Connects local language with education
Small corpus	Digitally store terms, audio, contexts, and informant statements	Universities, community, local government	Provides a data-based foundation for revitalization

5. Synthesis of the Discussion

Overall, the findings indicate that Dufa-Dufa maritime lexicon has three principal functions. First, its referential function allows community members to name objects, activities, actors, and sea conditions. Second, its ecological function stores information about



weather, currents, seasons, safety, and practices for using marine resources. Third, its identity function marks the community's connection to coastal history and life.

These findings reinforce the view that language forms part of a community's social ecology. Maritime lexicon does not exist independently as a collection of linguistic units; it lives within fishing practices, fish markets, fishing families, schools, and digital media. When social practices change, language ecology changes as well. Preservation efforts should therefore strengthen contexts of use rather than merely collect word lists.

The study also demonstrates the relevance of an ecolinguistic approach to understanding the relationship between language and sustainability. Local terms for the sea can provide an entry point for discussions of fisher safety, environmental change, coastal identity, and ecological education. This small-scale study may therefore serve as a foundation for broader dissertation research on a corpus-based model for revitalizing maritime ecollexicon in the coastal communities of Ternate.

4. CONCLUSION

This study indicates that maritime lexicon in Dufa-Dufa, Ternate, plays an important role in preserving the ecological knowledge of the coastal community. Terms such as *lao*, *toma lao*, *soma*, *fufu*, *pajeko*, *boboso*, *rubaruba*, and *ake lao ma ngolo* not only name objects or activities but also encode experience related to weather, currents, fishing seasons, safety at sea, and ethical relationships with the marine environment.

The interview analysis indicates a shift in maritime lexical use, particularly among younger speakers. Terms associated with common activities and the coastal economy remain relatively familiar, whereas terms connected to natural signs and ecological knowledge are more often mastered by fishers and senior speakers. Factors contributing to this shift include occupational change, the dominance of Indonesian, formal education, social media, fishing technology, and reduced direct involvement of young people in maritime activities.

The Dufa-Dufa maritime lexicon should be preserved through a community-based approach. Recommended strategies include documenting terms, producing a concise dictionary, creating audio recordings and educational videos, developing school projects, and building a small corpus. This study is limited by its micro-scale design and small number of informant profiles. Further research should involve more participants, validation of terms with expert speakers, field observation, and multimodal documentation to develop a stronger model for maritime ecollexicon revitalization.

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