Mapping Laz and Homshetsma in the Black Sea region: Kemalpaşa

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ABSTRACT: This study presents a detailed examination of the nouns used by the Laz and Homshetsma-speaking communities in the Kemalpaşa district of Artvin, Türkiye. It aims to document and analyze the lexical features of these two endangered minority languages, which belong to the South Caucasian and Indo-European language families, respectively. The Black Sea region's complex linguistic landscape results from historical migrations and interactions among various ethnic groups (Kırzıoğlu, 1976; Simonian, 2007). Using a lexical atlas approach, this research maps out the vocabulary differences and similarities between Laz and Homshetsma speakers in Kemalpaşa. Data collection involved extensive fieldwork, including interviews and data elicitation with Laz and Homshetsma native speakers. By highlighting the unique lexical traits of Laz and Homshetsma, the study also sheds light on the broader sociolinguistic dynamics of the region, offering insights into language contact, shift, and maintenance. The findings underscore the importance of cultural and linguistic diversity, advocating for policies that support the preservation of minority languages in Türkiye. This initial volume sets the stage for further comparative studies across different regions inhabited by Laz and Homshetsma speakers. This atlas serves as a crucial resource for linguists and anthropologists interested in the Caucasian linguistic area, contributing to the preservation and understanding of these endangered languages.

Keywords: Laz, Homshetsma, atlas, field work, endangered language(s)

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Lazca ve Hemşinçenin Karadeniz Bölgesinde Haritalanması: Kemalpaşa

ÖZ: Bu çalışma, Türkiye'nin Artvin ilinin Kemalpaşa ilçesinde yaşayan Lazca ve Hemşince konuşan dil topluluklarının kullandığı adları detaylı bir şekilde incelemektedir. Bu bölge, Güney Kafkas dil ailesine mensup olan Lazca ve Hint-Avrupa dil ailesine üye olan Hemşince ile zengin bir dil çeşitliliğine sahiptir. Karadeniz bölgesinin karmaşık dilsel manzarası, tarihsel göçler ve çeşitli etnik gruplar arasındaki etkileşimlerin bir sonucudur (Kırzıoğlu, 1976; Simonian, 2007). Bu araştırma, bir sözlük atlası yaklaşımı kullanarak Kemalpaşa'daki Laz ve Hemşin konuşucuları arasındaki kelime dağarcığı farklılıklarını ve benzerliklerini haritalandırmaktadır. Veri toplama süreci, Laz ve Hemşin anadil konuşucuları ile yapılan kapsamlı saha çalışmaları, röportajlar ve veri derleme çalışmalarıyla gerçekleştirilmiştir. Lazca ve Hemşincenin benzersiz sözlüksel özelliklerini vurgulayan bu çalışma, bölgedeki daha geniş sosyolinguistik dinamiklere de ışık tutarak dil teması, değişimi ve korunması hakkında önemli bilgiler sunmaktadır. Bulgular, kültürel ve dilsel çeşitliliğin önemini vurgulamakta ve Türkiye'deki azınlık dillerinin korunmasını destekleyen politikaların gerekliliğini ortaya koymaktadır. Bu ilk cilt, Laz ve Hemşin konuşucularının yaşadığı farklı bölgeler arasında yapılacak karşılaştırmalı çalışmalar için bir temel oluşturmaktadır. Sözlük atlası, Kafkas dil bölgesine ilgi duyan dilbilimciler ve antropologlar için önemli bir kaynak olup, bu tehlike altındaki dillerin korunması ve anlaşılmasına katkı sağlamaktadır.

Anahtar sözcükler: Lazca, Hemşince, atlas, alan araştırması, tehlike altındaki dil(ler)

1 Introduction

The Black Sea region of Türkiye harbors a number of endangered minority languages, Homshetsma (ISO-639-3: hyw), Laz (ISO-639-3: lzz), Romeyka (ISO-639-3: pnt), and Georgian (ISO-639-3: kat), within a compact linguistic area (coordinates: approximately between latitude 40.882155; longitude 39.295025 and latitude 41.377067; longitude 41.434354), as identified by the UNESCO Atlas of the World's Languages in Danger (Moseley, 2010). This region's linguistic diversity, characterized by the presence of these distinct language communities, underscores an urgent need for comprehensive documentation and preservation efforts. A linguistic atlas documenting the phonological and lexical features of these endangered languages is of great significance. Such a resource would not only serve as a vital tool for linguistic and cultural preservation but also facilitate comparative studies and support revitalization efforts. Given the endangered status of these languages, immediate

and systematic documentation is essential to safeguard their unique linguistic heritage for future generations.

The linguistic atlas would provide an in-depth analysis of the dialectal variations and unique linguistic structures of these languages, offering insights into their historical development and current usage.

Homshetsma, also known as Hamshen, is an Indo-European language primarily spoken by a small number of individuals in the Kemalpaşa, Hopa and Borçka districts of Artvin. Notably, Homshetsma remains largely undocumented. The language is classified as an Indo-European language and is referred to by various names including Hamshen and Hemşince (Eberhard, Simons & Fennig, 2025). According to The Endangered Languages Catalog, there is no available data on the number of Homshetsma speakers. No general census data from Türkiye between 1927 and 1965 records the number of speakers of different minority languages, including Homshetsma. This absence of data suggests that neither the language nor its speakers were officially recognized, despite the language being used by community members for a long time (Haykuni, 1895, as cited in Simonian, 2007). The origin of Homshetsma is debated, with some researchers proposing Hay roots (Simonian, 2007; Vaux, 2007), while others suggest Turkish origins (Kırzıoğlu, 1976; Gündüz, 2002). Despite these uncertainties, the Homshetsma language is known for its rich oral tradition, including songs, tales, jokes, riddles, and other elements of folklore, contributing to the cultural richness of the region. The existing literature scarcely addresses the history of the Hemshin region (Yılmaz, 2003) and the social structure, linguistic and cultural identity of the Hemshin people (Gündüz, 2002; Kaya, 2014; Akın, 2023, 2024).

The Laz language, spoken predominantly in the coastal regions of northeastern Türkiye and parts of Georgia, is a member of the South Caucasian language family (Ünlü and Hewitt, 2023). In this context, according to Salminen (2007), the number of Laz speakers is estimated at 20,000. Based on this data, Laz is classified as an endangered language with an unprotected status. As Kojima and Avcı Bucaklişi (2003) note, Laz not only remains insufficiently studied within the framework of dialectology but also, despite being classified as an endangered language, has not been sociolinguistically researched to a great extent. However, there are formal linguistic studies (Demirok & Öztürk, 2015; Öztürk, 2019; Taylan & Öztürk, 2014) on Laz in the relevant literature. These studies focus primarily on syntactic and morphosyntactic properties rather than comprehensive dialectological or sociolinguistic analyses. They provide valuable insights into the structural aspects of Laz, such as clause combining strategies, evidentiality, and argument structure, thereby filling a critical gap in formal linguistic inquiry. While these contributions mark significant progress, the need for extensive dialectological mapping and sociolinguistic documentation of Laz remains pressing.

2 Language Mapping: Maps and atlases

Technically, a map visually depicts spatially organized objects, according to Lameli, Kehrein and Rabanus (2010). These objects are arranged within a specific topology that reflects the spatial relationships among them. The depiction of these relationships on maps is often grounded in geographic realities, allowing users to interpret and estimate distances, orientations, and the relative positions of different locations. Key elements such as scale bars and legends are integral to maps, aiding in the accurate interpretation of their content. However, the design and presentation of these elements are influenced by the mapmaker's intentions and decisions, highlighting the subjective nature of cartographic representations. This subjectivity means that maps are not purely objective records of space but rather reflect the choices and priorities of those who create them. According to Lameli et al. (2010), if the definition of a map is somewhat unclear, the same uncertainty extends to the concept of an atlas. For practical purposes, Bollmann and Koch (2001) characterize an atlas as usually being a systematic collection of maps, presented either in book format or as individual sheets. What distinguishes an atlas is the aggregate nature of its content.

The comprehensive nature of an atlas allows it to serve as a multifaceted resource for various types of spatial and thematic information. Unlike individual maps, which may focus on a specific area or theme, atlases compile multiple maps into a cohesive collection, providing a broader and more detailed overview of different geographic aspects. This aggregation of maps is designed to offer users an extensive perspective, facilitating the exploration of diverse data sets, such as topography, demographics, or historical changes. Atlases are not merely collections of maps but are organized to present information systematically, often with accompanying text, charts, and indices that enhance their utility. The systematic arrangement of maps within an atlas reflects the intentional design choices of its creators, who curate and structure the content to meet specific objectives and to cater to the needs of users. This organization underscores the role of atlases in supporting detailed analysis and informed decision-making by providing a comprehensive and integrated view of spatial information. The earliest work focusing on languages that includes the term "atlas" in its title is Heinrich Julius Klaproth's *Asia polyglotta nebst Sprachatlas* (Klaproth, 1823). According to Lameli *et al.* (2010), the development of linguistic cartography is closely linked to the growing importance of European nation-states in the nineteenth century, particularly with the unification of countries like Germany and Italy in the latter half of the century. This historical context is one reason why major dialect atlases are often defined by national borders, covering linguistically diverse areas without fully representing the dialects of a single language. For example, the German *Sprachatlas des Deutschen Reichs* (Wenker, 1889-1923) includes western Polish dialects but excludes German dialects in Austria or Switzerland. This paradoxical situation—using political boundaries

for linguistic purposes— largely persists today, primarily for practical and financial reasons rather than ideological ones. Modern linguistic atlases are often regional, defined by administrative boundaries, such as the linguistic atlases of Brazilian federal states (cf. Lameli *et al.*, 2010 for more information).

The history of language atlases in linguistics and dialectology is a rich and evolving narrative, reflecting the development of these disciplines and their methodologies. Language atlases are collections of maps that depict the geographical distribution of linguistic features, such as dialects, phonological, syntactic, or lexical variations. These atlases serve as important tools for understanding the spatial dimensions of language use and change.

The roots of linguistic cartography can be traced back to the 19th century, coinciding with the rise of nationalism and the scientific study of languages. One of the earliest and most influential projects was the Sprachatlas des Deutschen Reichs (1881-1887) by Georg Wenker, a pioneering figure in the field. Wenker's work involved sending postal questionnaires containing sentences to be translated into local dialects, resulting in a vast collection of dialect data from across the German Empire. This data was used to create the first maps showing the geographic distribution of dialect features, marking a significant advancement in the field of dialect geography, as pointed out by Scheuringer (2010).

The Atlas Linguistique de la France (ALF), conducted by Jules Gilliéron and Edmond Edmont between 1897 and 1901, was another landmark in the history of linguistic atlases. The ALF provided a detailed mapping of linguistic features across France, reflecting the country's rich dialectal diversity. This work laid the foundation for modern dialectology, particularly the study of isoglosses—lines on a map that separate areas with different linguistic features. In the early 20th century, other nations embarked on their own linguistic atlas projects. For example, the Linguistic Atlas of the United States and Canada (LAMSAS) was the first major linguistic atlas in North America. It aimed to document regional language variations in English across the continent, providing valuable insights into American English dialects.

The post-World War II era saw a proliferation of linguistic atlases worldwide, aided by advances in technology and data collection methods. The use of audio recordings became more prevalent, allowing for more accurate documentation of pronunciation and other phonetic features. The Linguistic Atlas of Italy and Southern Switzerland (AIS), for instance, included phonetic transcriptions and recordings, providing a richer dataset for analysis.

In the latter half of the 20th century, computational methods began to play a more significant role in linguistic atlas projects. The digitization of data and the use of Geographic Information Systems (GIS) enabled more sophisticated analyses and visualizations of linguistic data. This technological evolution led to

the development of electronic linguistic atlases, which offer interactive maps and the ability to analyze linguistic phenomena dynamically.

There are no specific, widely recognized linguistic atlases exclusively dedicated to the Homshetsma and Laz languages. There are however scattered linguistic analyses (Simonian, 2007), some of which include a few representative linguistic maps. These resources aim to display the vast geographic distribution of these languages. Recent research has highlighted intra- community variation in Laz, with Eren (2023) providing a comprehensive analysis of morpho-syntactic variation among heritage speakers. This study thus stands out as the only one that specifically investigates the linguistic landscape of the Homshetsma and Laz languages in a compact geography in detail. By focusing on these underrepresented linguistic communities, this study aims to fill a significant gap in the documentation and understanding of the linguistic landscape in the Black Sea region. It provides a detailed mapping and analysis of the geographic distribution and dialectal variations of the Homshetsma and Laz languages.

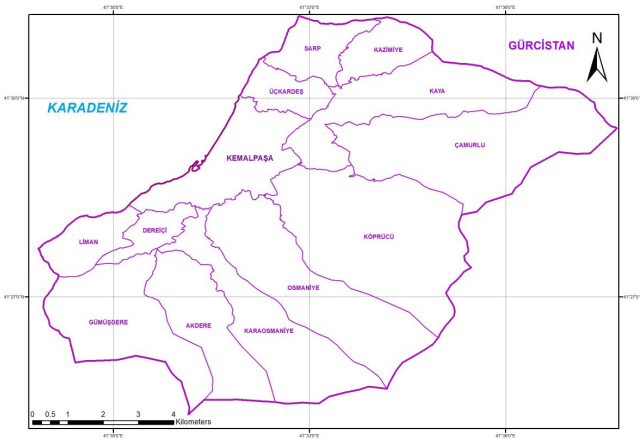
3 The Present Study

The present study outlines a comprehensive approach for documenting and analyzing the lexical features of the Laz and Homshetsma languages in the Kemalpaşa district of Artvin, Türkiye. Employing a lexical atlas methodology, the research integrates field work to capture the intricacies of these endangered minority languages. A key component of the data collection involved extensive fieldwork, including structured interviews and lexical elicitation sessions with native speakers of both Laz and Homshetsma.

3.1 Data Elicitation Process

All the data utilized in this study were gathered through fieldwork conducted between July 2022 and July 2024, in all the villages, situated in the district of Kemalpaşa in Artvin, Türkiye. The Kemalpaşa district was purposefully chosen as it holds significant linguistic importance due to its sui generis position as a region where both the Homshetsma and Laz languages are spoken. This district serves as a distinctive linguistic enclave, reflecting the diverse and complex heritage of the Black Sea region (see Map 1). The presence of these two endangered minority languages, belonging to different language families—Homshetsma from the Indo-European family and Laz from the South Caucasian family—within the same geographic area offers a rare opportunity for in-depth comparative linguistic analysis. The role of Kemalpaşa as a crossroads of these languages underscores its importance in studying linguistic landscape, language contact, and maintenance in a context of historical migrations and interactions

among various speech communities. Map 1 provides an overview of the Kemalpaşa district, highlighting its various villages and illustrating the district's geographical and administrative structure within Artvin Province, Türkiye.



Map 1. *Kemalpaşa district with villages*

Kemalpaşa (formerly: Noghedi) is a district situated on the Black Sea coast in Artvin Province, Türkiye. The district's population is 9,688 as of 2023. Kemalpaşa is located 15 kilometers (9.3 miles) east of Hopa and 5 kilometers (3.1 miles) west of the Sarp border checkpoint to Georgia. Historically, Kemalpaşa was part of the Principality of Guria within the Kingdom of Imereti until 1547 (Kırzıoğlu, 1976). The town was annexed by the Ottoman Empire in 1547. During World War I, it was occupied by the Russian Empire from 1915 to 1917. From 1918 to 1921, Kemalpaşa was part of the Democratic Republic of Georgia. After the Soviet Red Army occupied the Georgian Democratic Republic, the village was ceded to Türkiye in 1922. Kemalpaşa was declared a township in 1987 and became the seat of a district in 2017. The Kemalpaşa District comprises several villages, including Dereiçi, Köprücü, Liman, Sarp, Osmaniye, Karaosmaniye, Gümüşdere, Çamurlu, Üçkardeş, Akdere, Kayaköy, and Kazımiye.

As such, the district not only provides valuable insights into the preservation and evolution of endangered languages but also contributes to a broader understanding of the sociolinguistic dynamics shaping the region.

The Leipzig-Jakarta 100-word list is a significant tool in linguistic research, particularly for analyzing core vocabulary across languages. This list consists of 100 basic vocabulary items, primarily focusing on nouns, and provides a standardized framework for cross-linguistic comparison (Haspelmath & Tadmor, 2009). The Leipzig-Jakarta list is designed to capture fundamental concepts that

are universally present in languages, making it an effective instrument for examining lexical similarities and differences. The standardized nature of the list ensures consistency in data collection and analysis, which is crucial for producing reliable and comparable results across different linguistic contexts. The Leipzig-Jakarta 100-word list, which contains basic lexical items considered cross-linguistically stable and culturally universal (Haspelmath & Tadmor, 2009), was used as the reference framework for this study. These items typically include fundamental nouns such as "fire," "water," "child," "fish," "nose," and "house." For the present analysis of Laz and Homshetsma in the Kemalpaşa district, a subset of 25 representative nouns was selected. This selection was guided by both methodological and practical considerations. The limitations of word count and article scope necessitated a reduction in the number of items analyzed, as the inclusion of all 100 items would have precluded the provision of adequate depth in interpretation and discussion. Nouns were prioritized, as they are generally more prone to rapid borrowing than verbs or adjectives and are therefore regarded as more reliable indicators of language retention and attrition in contact settings (Matras, 2010). Furthermore, the chosen items were distributed across various semantic domains, including natural environment, body parts, kinship, and basic objects, to ensure representativeness. Consequently, while the full Leipzig-Jakarta list informed the study design, the reduced subset was employed to balance representativeness with analytical depth within the constraints of the publication. The elicitation sessions were conducted over a period of two years due to the number of villages that needed to be visited, which was too extensive to manage in just a few sessions. Before the data collection began, the lexical items were translated into Turkish. These translations were then reviewed by a Turkish linguist, and necessary revisions were made. To facilitate easy visualization for the speakers, the lexical items were compiled into a PowerPoint presentation, except for items that represented abstract concepts and notions.

An institutional ethics committee approval was received from the Human Subjects Ethics Committee (HSEC) at Artvin Çoruh University (AÇÜ) to carry out the study. The participants' consents were also obtained via consent forms prior to the data collection.

3.2 Informant Selection

This study investigates two specific groups of speakers of the endangered languages: Laz and Homshetsma. Due to the impossibility of random informant selection, purposeful sampling was utilized. Purposeful sampling is a qualitative research technique where participants are selected based on the researcher's judgment (Creswell & Poth, 2018). Researchers intentionally choose informants based on predefined criteria to gain a comprehensive understanding of the cases

under study, as "each research setting is unique in its own mix of people and contextual factors" (Bloomberg & Volpe, 2019, p. 309). Data were collected from 4 Laz and 9 Homshetsma speakers who volunteered for the study. The selection criteria included: (i) being native speakers of Laz or Homshetsma, (ii) living in a village situated in Kemalpaşa, Artvin, and (iii) using their heritage language regularly. Demographic information about the informants' linguistic backgrounds, ages, and education levels was gathered before fieldwork commenced. A limitation of the present study is that the data were obtained from a single speaker in each community. While this approach allowed for in-depth elicitation and detailed documentation within the available time and resources, it inevitably raises questions regarding the reliability and representativeness of the findings. Linguistic variation within a community—shaped by factors such as age, gender, education, and social networks—may not be fully captured through a single-speaker sample. Consequently, the results should be interpreted as indicative rather than exhaustive, and future research involving a broader pool of participants is necessary to corroborate and refine these observations. Due to the absence of a standard orthography for these languages, assessing the informants' language proficiency was not feasible.

Table 1 provides details about the informants and the contexts of data collection.

Table 1. Information about the informants and the contexts of data collection

Informant	Village	Heritage language	Age	Gender
Homshetsma(1)	Gümüşdere	Homshetsma	45	Male
Homshetsma(2)	Akdere	Homshetsma	44	Male
Homshetsma(3)	Osmaniye	Homshetsma	67	Male
Homshetsma(4)	Karaosmaniye	Homshetsma	63	Female
Homshetsma(5)	Çamurlu	Homshetsma	82	Male
Homshetsma(6)	Kaya	Homshetsma	83	Female
Homshetsma(7)	Kazımiye	Homshetsma	56	Male
Homshetsma(8)	Üçkardeş	Homshetsma	94	Male
Homshetsma(9)	Köprücü	Homshetsma	63	Male
Laz(1)	Köprücü	Laz	67	Male
Laz(2)	Sarp	Laz	69	Male
Laz(3)	Liman	Laz	52	Male
Laz(4)	Dereiçi	Laz	82	Male

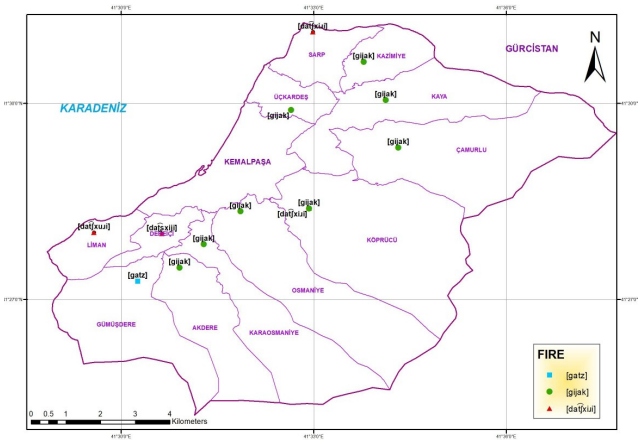
Table 1 offers a comprehensive overview of the informants involved in the study and the conditions under which data collection took place. The informants were drawn from various villages within the Kemalpaşa district, representing two distinct linguistic groups: Homshetsma and Laz. For the Homshetsma group, there were nine informants, aged between 44 and 94 years, with a balanced representation of both genders. These individuals come form from villages such as Gümüşdere, Akdere, Osmaniye, Karaosmaniye, Çamurlu, Kaya, Kazımiye, Üçkardeş, and Köprücü. The Laz group comprised four informants, all male, aged from 52 to 82 years, from villages including Köprücü, Sarp, Liman, and Dereiçi. This demographic breakdown highlights the linguistic diversity within the region and the varying ages of the speakers, which can influence language use and preservation.

4 Findings

4.1. Lexical Maps

This study features 25 maps showing 25 nouns selected from the Leipzig-Jakarta 100-word list, focusing on the dialects of the Laz and Homshetsma languages spoken in the villages of Kemalpaşa, Artvin. Each map includes a detailed explanation of the phonological peculiarities specific to each village, providing a comprehensive view of the linguistic diversity within these communities. In the corresponding maps, if an informant did not provide a specific lexical item, the respective slot has been intentionally left empty, maintaining the integrity of the data. Additionally, given that many informants are elderly, some pronunciations may need to be considered cum grano salis due to potential dental issues affecting speech clarity.

Although the Laz and Homshetsma data were collected from speakers in different locations, their presentation alongside one another is deliberate and methodologically motivated. The primary aim of the study is not to produce a direct, one-to-one geographic comparison, but rather to illustrate patterns of lexical retention and attrition in two closely related minority languages that share historical and sociolinguistic contexts in the Kemalpaşa district within the Black Sea region. Presenting the data for each lexical item side-by-side facilitates a clearer visualization of similarities and divergences in the basic vocabulary of the two languages, thereby allowing broader comparative insights into their respective language contact dynamics and susceptibility to lexical replacement. This approach enables the identification of parallel developments or divergences that may be attributable to typological similarity, shared substratal influences, or differing contact ecologies, even in the absence of identical sampling locations. Map 2 illustrates the lexical item "fire" in the Laz and Homshetsma languages across different villages in the Kemalpaşa district.



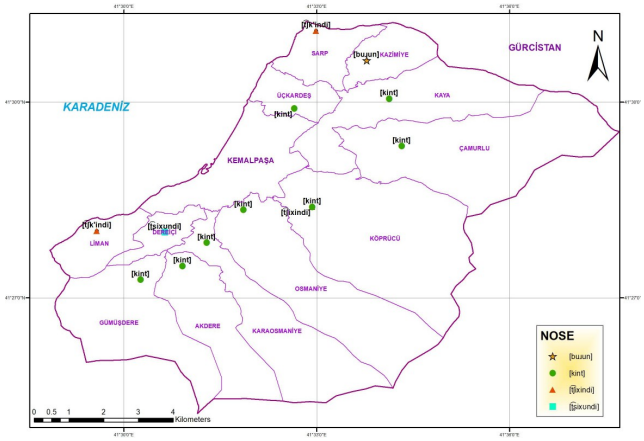
Map 2. *"fire" in the Laz and Homshetsma languages*

Kemalpaşa district, Artvin, focusing on the Laz and Homshetsma languages. The Laz dialect shows variation in the pronunciation of the word "fire" across different settlements; Dereiçi: /daʈʂxiji/, Köprücü: /datʃxiɹi/, Liman: /datʃxuɹi/, and Sarp /datʃxiɹi/. The primary differences appear in the fricative and affricate sounds. The use of /ʈʂ/ in Dereiçi compared to /tʃ/ in other areas, and the variation between /xiɹi/ and /xuɹi/ in coda position, highlight regional phonetic shifts. These patterns suggest localized phonological shifts that may reflect the influence of micro-dialectal boundaries and varying degrees of contact. The existence of multiple phonetic realizations for the same basic lexical item could also indicate early stages of lexical attrition, whereby reduced intergenerational transmission and increased contact-induced accommodation promote the erosion of less common variants.

In contrast, Homshetsma exhibits greater lexical stability for "fire," with /gijak/ recorded in Köprücü, Osmaniye, Karaosmaniye, Gümüşdere, Çamurlu, Üçkardeş, Akdere, Kaya, and Kazımiye. The sole exception is Gümüşdere, where /gatz/ is documented, potentially representing a localized borrowing or an archaism preserved in that settlement. The relative uniformity of /gijak/ across most Homshetsma-speaking locations may indicate stronger lexical retention for this core vocabulary item, though the emergence of /gatz/ suggests that language contact or internal lexical replacement processes are not entirely absent.

When considered together, these data point to different trajectories of lexical stability and change in Laz and Homshetsma. Laz shows greater phonological diversification, potentially tied to language contact and attrition pressures, while Homshetsma maintains higher stability with isolated localized variants. Such patterns underscore the importance of examining both phonetic variation and lexical replacement when assessing the vitality of endangered languages.

Map 3 depicts the different lexical forms for the word "nose" in the Laz and Homshetsma languages within the villages of the Kemalpaşa district.



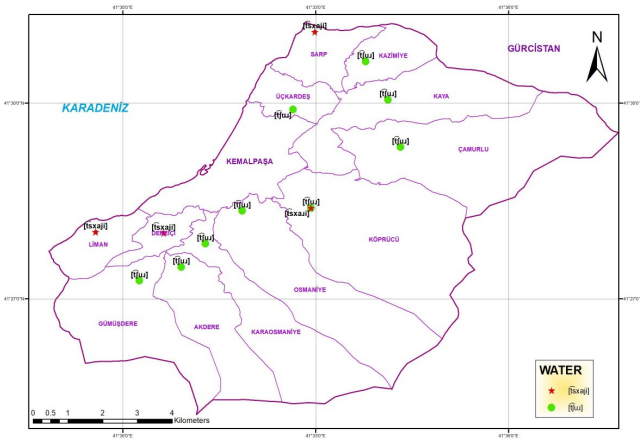
Map 3. *"nose" in the Laz and Homshetsma languages*

Map 3 presents phonetic data for the lexical item "nose" across various villages in the Kemalpaşa district, providing a linguistic snapshot of the Laz and Homshetsma languages. This data, integral to a lexical atlas, shows the phonological variation and consistency within these language communities. The Laz language exhibits a range of phonetic forms for the word "nose," with variations such as /t͡ʂixɔndi/, /t͡ʃixindi/, and /t͡ʃk'indi/. This diversity may reflect regional dialectal differences, historical phonological shifts, or varying levels of contact with other linguistic groups. The lexicon "nose" is articulated as /t͡ʂixɔndi/ in Dereiçi, indicating a unique phonetic characteristic with the affricate /t͡ʂ/. The pronunciation shifts to /t͡ʃixindi/, highlighting a change in the initial consonant cluster in Köprücü. As for Liman and Sarp, both villages share the variant /t͡ʃk'indi/, suggesting a regional phonological convergence or shared dialectal features within these localities. The convergence of /t͡ʃk'indi/ in Liman and Sarp may reflect either a shared dialectal heritage or recent leveling through inter-village interaction. Such phonetic diversification within a single lexical item could also be an early marker of lexical attrition, whereby less frequent variants risk being replaced or leveled under sustained language contact pressure.

In contrast, Homshetsma displays a high degree of lexical stability, with /kint/ documented consistently in Köprücü, Osmaniye, Karaosmaniye, Gümüşdere, Çamurlu, Üçkardeş, Akdere, and Kayaköy. This stability suggests conservative retention of the term and potentially stronger resilience against lexical replacement. The sole exception is Kazımiye, where the Turkish form /buɯn/ appears, representing a clear case of contact-induced borrowing. This

substitution may indicate localized attrition, as the original term is supplanted in favor of the dominant language's equivalent.

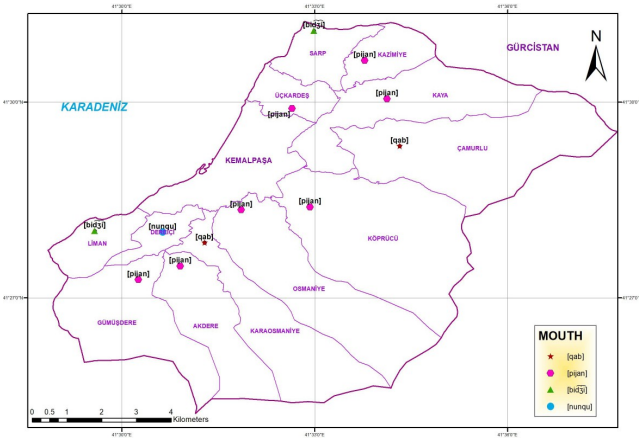
Map 4 illustrates the various lexical forms for the word "water" in the Laz and Homshetsma languages across the villages in the Kemalpaşa district.



Map 4. *"water" in the Laz and Homshetsma languages*

Map 4 presents the lexical variations for the word "water" in the Laz and Homshetsma languages across different villages in the Kemalpaşa district. The Laz dialects in the villages of Dereiçi, Köprücü, Liman, and Sarp exhibit a consistent phonological pattern with the root form /t͡sxaji/. A slight variation occurs in Köprücü, where the form shifts to /t͡sxaɪi/. The difference between /j/ and /ɪ/ in the final segment suggests a phonological variation. The Homshetsma dialects, spanning nine villages (Köprücü, Osmaniye, Karaosmaniye, Gümüşdere, Çamurlu, Üçkardeş, Akdere, Kayaköy, and Kazımiye), consistently use the form /t͡ʃuɪ/. The uniformity in the Homshetsma dialects suggests a stronger adherence to a standardized form or less dialectal diversity within the Homshetsma-speaking communities. In summary, the comparative analysis highlights a clear phonological and lexical distinction between Laz and Homshetsma languages in the Kemalpaşa district, with Laz showing slight intra-dialectal variation and Homshetsma maintaining consistency. The comparison between the two languages highlights a distinct pattern: Laz retains the original root form with minor phonological divergence across settlements, while Homshetsma demonstrates complete uniformity. These differences suggest that while both languages preserve the lexical item "water," Homshetsma's more homogeneous form may reflect a tighter linguistic network and reduced susceptibility to contact-induced variation, whereas the minor variation of Laz may point toward ongoing—but still limited—contact- related change.

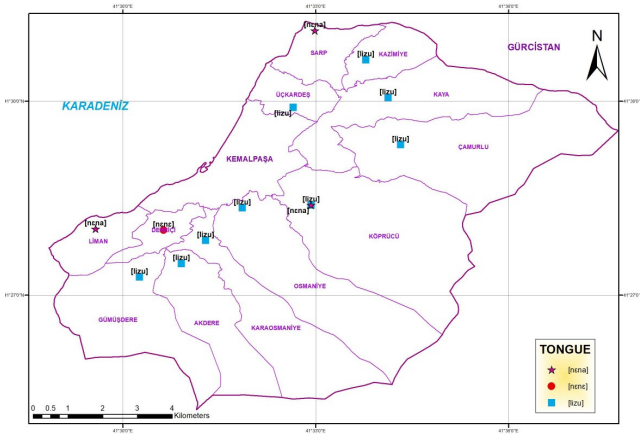
Map 5 shows the different lexical forms for the lexical item "mouth" in the Laz and Homshetsma languages within the villages of the Kemalpaşa district.



Map 5. *"mouth" in the Laz and Homshetsma languages*

This map shows a clear difference in phonetic representation for the lexical item "mouth". /bid͡ʒi/ is used in Liman and Sarp, indicating a common term in these areas, whereas /nunqu/ in Dereiçi shows a distinct regional variation. As for Homshetsma, /pijan/ is predominant across most locations, showing a higher degree of consistency. The variation is primarily between /pijan/ and /qab/, indicating specific regional deviations rather than widespread variability. /qab/ appears in Karaosmaniye and Çamurlu, showing regional variation.

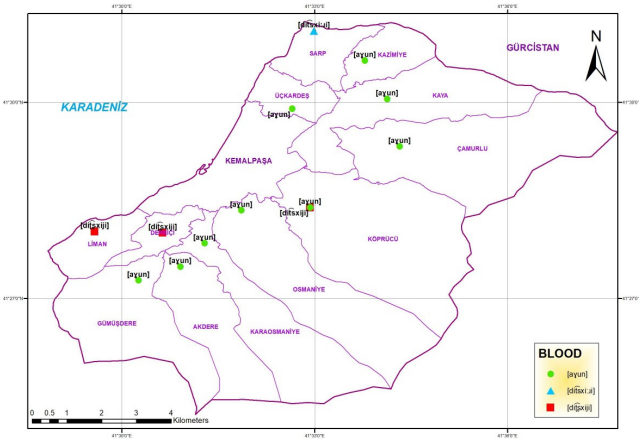
Map 6 illustrates the different lexical forms for the word "tongue" in the Laz and Homshetsma languages.



Map 6. *"tongue" in the Laz and Homshetsma languages*

Map 6 displays the lexical item "tongue" across different settlements in the Kemalpaşa district. The primary differences in the Laz dialect appear in the vowel sounds. Dereiçi uses /nɛnɛ/, which differs from the /nɛna/ used in Köprücü, Liman, and Sarp. This variation in the final vowel sound from /ɛ/ to /a/ in the endings highlights a regional phonetic shift within the Laz-speaking communities. Dereiçi stands out with its unique use of /nɛnɛ/, suggesting localized phonetic influence or a dialectal variant. In the Homshetsma-speaking areas, the word "tongue" is uniformly pronounced as /lizu/ across all the settlements listed.

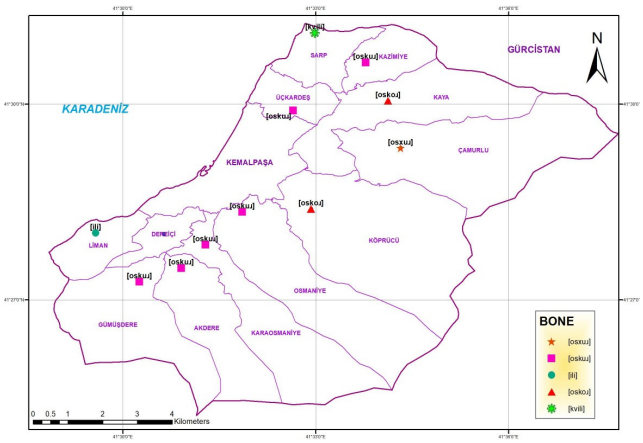
Map 7 shows the different lexical forms for the lexical item "blood" in the villages of the Kemalpaşa district.



Map 7. *"blood" in the Laz and Homshetsma languages*

On the map, the primary differences in the Laz dialect appear in the affricate and fricative sounds: Dereiçi and Liman use /dit̪ʂxiji/, incorporating the retroflex affricate /t̪ʂ/. Köprücü uses /ditsxiji/, which differs in using the dental affricate /ts/. Sarp's pronunciation is /ditsxi:ɹi/, which not only uses the dental affricate /ts/ but also extends the vowel sound in the ending. These variations highlight regional phonetic shifts within the Laz-speaking communities. The use of retroflex versus dental affricates and the lengthening of vowel sounds in Sarp point to localized phonetic influences. In the Homshetsma-speaking areas, the word "blood" is uniformly pronounced as /aɣun/ across all the settlements listed.

Map 8 illustrates the various lexical items for "bone" in the Laz and Homshetsma languages across the villages in the Kemalpaşa district.



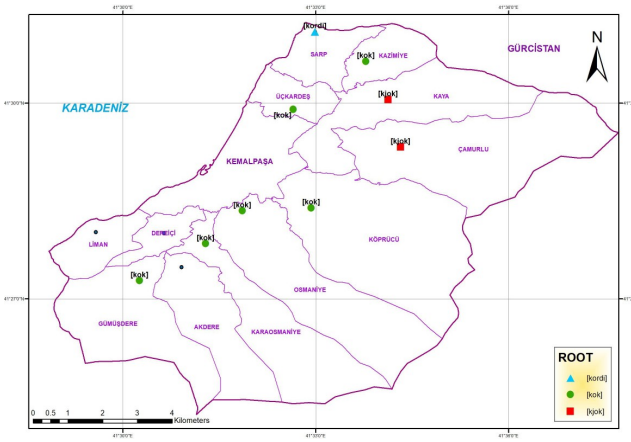
Map 8. *"bone" in the Laz and Homshetsma languages*

The Laz language demonstrates noticeable variability in the lexical item "bone" across different settlements: Liman: /ili/ and Sarp: /kvili/. In the Laz-speaking areas, the word for "bone" exhibits distinct regional differences: Liman uses /ili/, a simpler phonetic form. Sarp uses /kvili/, which includes the consonant cluster /kv/, adding complexity compared to the form in Liman. This variability within the Laz dialect highlights regional phonetic shifts, particularly in the use of consonant clusters. The absence of data for Dereiçi and Köprücü suggests that further research could reveal additional patterns. The Homshetsma language, in contrast, shows consistency with minor regional variations:

- Osmaniye, Karaosmaniye, Gümüşdere, Üçkardeş, Akdere, Kazımiye: /oskuı/
- Çamurlu: /osxuı/
- Kayaköy, Köprücü: /oskoı/.

In Homshetsma-speaking areas, the noun "bone" is predominantly pronounced as /oskuı/ with the following variations: Çamurlu: /osxuı/, where the /k/ sound is replaced by /x/, indicating a local phonetic shift. Kayaköy and Köprücü: /oskoı/, where the vowel /u/ is replaced by /o/ before the final /ı/. These variations point to subtle regional phonetic influences while maintaining overall consistency in the Homshetsma dialect.

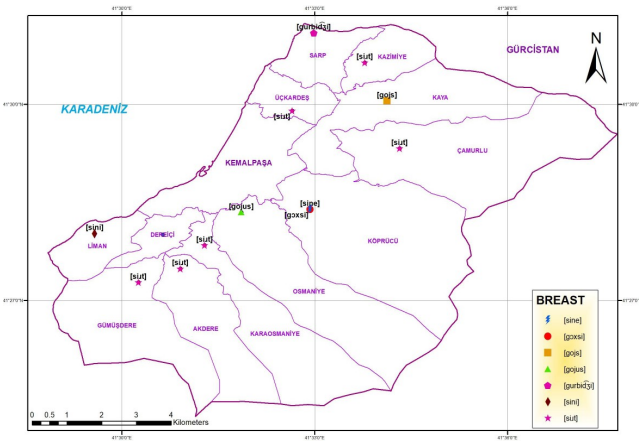
Map 9 illustrates the various lexical forms for the word "root" in the Laz and Homshetsma languages across the villages in the Kemalpaşa district.



Map 9. *"root" in the Laz and Homshetsma languages*

Map 9 delineates the diverse lexical forms for the term "root" in the Laz and Homshetsma languages across the villages within the Kemalpaşa district. The Laz language presents a solitary instance from Sarp, denoted as /kordi/. Conversely, the Homshetsma language employs a Turkish loanword /kœk/ to signify "root," with the form /kok/ being widely used. This reflects a high degree of lexical uniformity, potentially indicating strong linguistic cohesion among the villages near the coastal areas. However, in the villages of Kaya and Çamurlu, a diphthongization occurs, resulting in the variant /kjok/. The form [kok], represented by green circles, is the most widely attested, occurring in central and western villages, and is likely the conservative variant shared across both Laz and Hamshen dialects. In contrast, the form [kjok], restricted to the eastern inland villages of Kaya and Çamurlu, exhibits palatalization, suggesting a localized phonological development or possible influence from neighboring languages. The most distinct form, [kordi], documented exclusively in Sarp—a border settlement adjacent to Georgia—may represent an archaism, a retention of a South Caucasian-influenced term, or a more recent lexical borrowing. The coexistence of widespread conservative forms with geographically isolated variants underscores the interplay between language contact, localized innovation, and community-specific retention patterns.

Map 10 illustrates the various forms of the lexical item "breast" in the Laz and Homshetsma languages across the villages in the Kemalpaşa district.



Map 10. *"breast" in the Laz and Homshetsma languages*

Map 10 presents an analysis of the lexical variations for the term "breast" within the Laz and Homshetsma languages. The data reveals distinct patterns in the lexical choices between the two languages. In the Laz language, there is significant lexical diversity for the term "breast," as evidenced by the following variations:

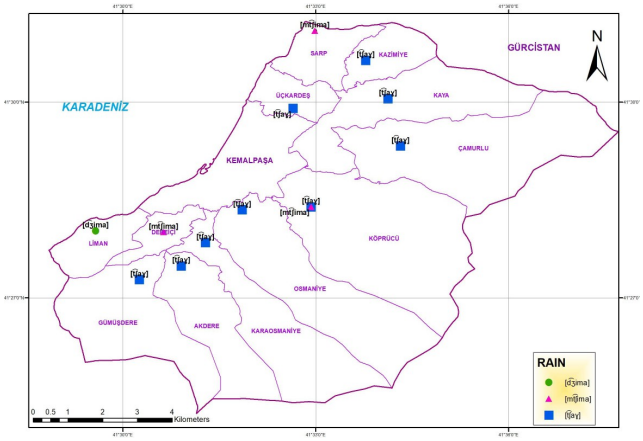
- Köprücü: /gɔxsi/, Liman: /sini/, and Sarp: /gurbid͡ʒi/.

This variation suggests a high degree of phonetic and lexical divergence among the Laz-speaking villages, possibly reflecting regional dialectal differences and varying influence from socially-dominant Turkish language. In contrast, the Homshetsma language exhibits a notable degree of lexical uniformity, with the term /sɯt/ being the most prevalent across multiple villages:

- Köprücü: /sine/, Osmaniye: /gojus/, Karaosmaniye, Gümüşdere, Çamurlu, Üçkardeş, Akdere, Kazımiye: /sɯt/, and Kayaköy: /gojs/.

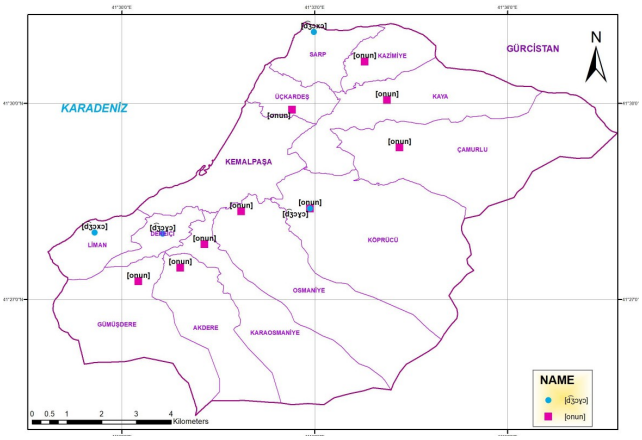
The predominant use of /sɯt/ across a majority of the Homshetsma-speaking villages indicates a strong lexical cohesion and potentially a more standardized linguistic practice within these communities. The presence of alternate forms such as /gojus/ in Osmaniye and /gojs/ in Kayaköy, however, suggests contact-induced lexical change with Turkish.

Map 11 illustrates the various lexical forms for the word "water" in the Laz and Homshetsma languages across the villages in the Kemalpaşa district.



Map 11. *"rain" in the Laz and Homshetsma languages*

As displayed on Map 11, The Laz settlements exhibit two distinct phonetic forms for "rain." In Dereiçi, Köprücü, and Sarp, the form /mt͡ʃima/ is consistently used. However, in Liman, the form /dʒ͡ima/ is recorded. This variation suggests a possible dialectal difference within the Laz-speaking communities. The majority form, /mt͡ʃima/, is characterized by a complex initial consonant cluster /mt͡ʃ/, which is notably different from the simpler /dʒ͡/ in Liman. In contrast, the Homshetsma settlements show remarkable phonetic uniformity. Across all listed villages, the word for "rain" is transcribed as /t͡ʃaɣ/. This consistency indicates a strong phonetic standardization within the Homshetsma-speaking community in Kemalpaşa.

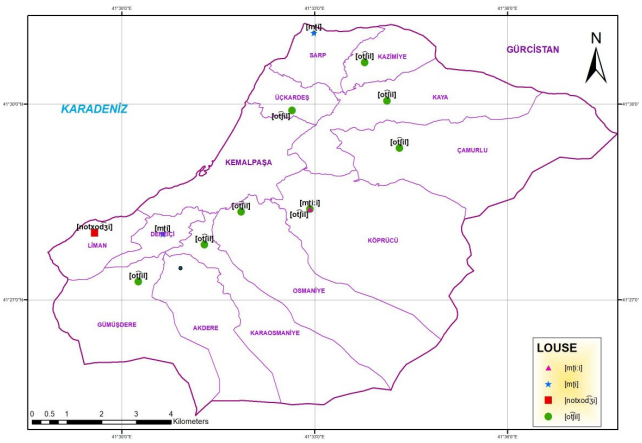


Map 12. *"name" in the Laz and Homshetsma languages*

On Map 12, the Laz settlements display two phonetic forms for "name." In Dereiçi and Köprücü, the form /dʒ͡ɔɣɔ/ is used, whereas in Liman and Sarp, the form /dʒ͡ɔxɔ/ is recorded. Dereiçi and Köprücü: The use of /dʒ͡ɔɣɔ/ in these settlements may suggest a shared dialectal influence or a historical phonetic trait that has been preserved within these communities. Liman and Sarp: The presence of /dʒ͡ɔxɔ/ in these villages indicates a different phonetic development or external influence, leading to the substitution of /ɣ/ with /x/. This variation may reflect localized speech patterns or a separate linguistic evolution within these areas.

The difference lies in the final consonant, with /ɣ/ in the former and /x/ in the latter. The Homshetsma settlements however demonstrate a uniformity, consistently using /onun/. The form /onun/ consists of a simple vowel- consonant structure that is easily reproducible and stable across different settlements.

Map 13 illustrates the various lexical forms for the noun "louse."



Map 13. *"louse" in the Laz and Homshetsma languages*

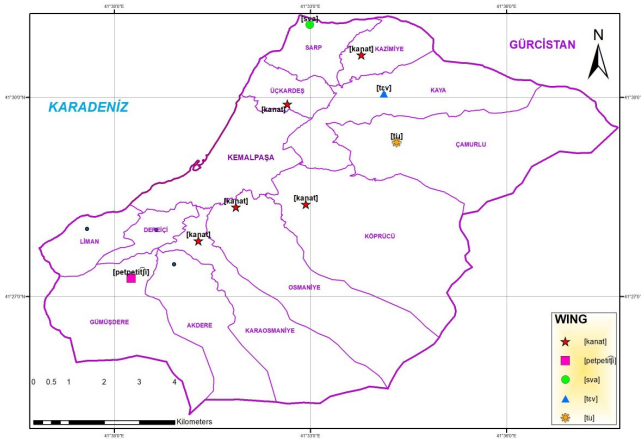
As indicated on Map 13, the Laz settlements exhibit three distinct phonetic forms for "louse." The most common form is /mɫi/, found in Dereiçi and Sarp. Köprücü shows a variation with /mɫi:i/, featuring a lengthened vowel. Liman, however, presents a completely different form, /notxodʒ͡i/, which stands out from the other settlements.

The Homshetsma settlements, in contrast, demonstrate remarkable uniformity, consistently using /otʃ͡il/ across almost all villages. The absence of data for Akdere is noted.

The linguistic representation of "louse" in Kemalpaşa settlement areas highlights both diversity and uniformity within the Laz and Homshetsma languages. Laz shows phonetic variation, reflecting dialectal differences and

external influences, while Homshetsma exhibits phonetic uniformity, indicating strong standardization.

Map 14 illustrates the various lexical forms for the word "wing" in the Laz and Homshetsma languages.

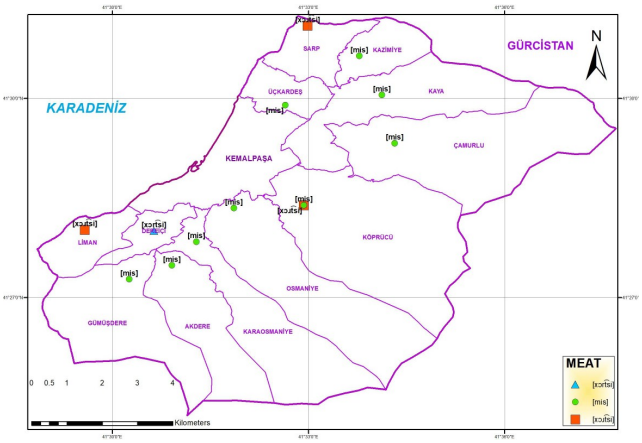


Map 14. *"wing" in the Laz and Homshetsma languages*

Map 14 indicates that the data for the Laz settlements is incomplete, with only Sarp providing a phonetic transcription for "wing" as /sva/. This limited data restricts us to make broad generalizations about phonetic patterns within the Laz-speaking community in Kemalpaşa for this particular lexical item. However, the presence of /sva/ in Sarp is noteworthy and suggests a distinct phonetic form in this settlement. However, the Homshetsma settlements show a variety of phonetic forms for "wing," indicating a higher degree of lexical diversity compared to Laz. In this regard, /kanat/ was found in Köprücü, Osmaniye, Karaosmaniye, Üçkardeş, and Kazımiye. This is a Turkish borrowing, suggesting a standard or commonly accepted term within these communities. /petpetit͡ʃi/ was recorded in Gümüşdere. This form is unique and significantly different from the other forms, indicating local linguistic variation or possibly influence from another language or dialect. /tiɩ/ was found in Çamurlu. Lastly, /tɛv/ was recorded in Kayaköy. This item is another unique representation, adding to the phonetic diversity within the Homshetsma- speaking community. The predominant form, [kanat]—identical to standard Turkish—is shown with red stars and occurs widely across central and northern villages. Its broad distribution points to extensive lexical borrowing and even replacement, likely fueled by Turkish dominance in schooling, media, and daily interaction. This pattern illustrates ongoing lexical attrition in both Laz and Hamshen. By contrast, non-Turkish forms appear mainly in peripheral or more isolated areas, indicating pockets of linguistic resilience or innovation. For instance, [petpetiʃ], marked with a pink

square in the southwest, originates from Hamshen Armenian and reflects a clear departure from Turkish, preserving an ethnic lexical marker. Similarly, [sva], most likely a Laz form, is found solely in Sarp (green circle), a border village whose closeness to Georgia may foster contact with other South Caucasian languages. The forms [tev] (blue triangle) and [tʃu] (orange sunburst) occur in the eastern and southeastern zones; both are distinct in phonology and lexicon, potentially representing archaic Laz roots, dialectal variants, or locally maintained innovations in less-assimilated communities.

Map 15 illustrates the various forms of the lexical item "meat" in the Laz and Homshetsma languages across the villages in the Kemalpaşa district.

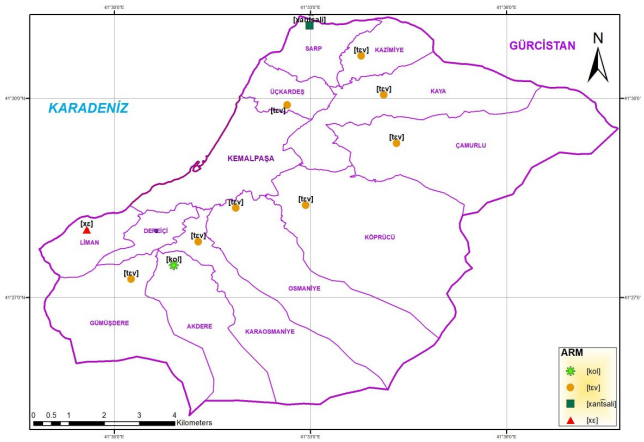


Map 15. *"meat" in the Laz and Homshetsma languages*

As depicted on the map, the Laz settlements show two phonetic forms for "meat," with a slight variation in the consonant: (i) /xɔrt͡si/ was recorded in Dereiçi and this form features the voiceless alveolar tap /r/ and (ii) /xɔɹt͡si/ was found in Köprücü, Liman, and Sarp and this variant features the voiced alveolar approximant /ɹ/. However, Homshetsma exhibits a high degree of uniformity, consistently using /mis/ across all settlements.

The linguistic representation of "meat" in Kemalpaşa settlement areas highlights both phonetic variation in Laz and uniformity in Homshetsma. Laz exhibits two forms, reflecting minor dialectal differences, while Homshetsma maintains a single form, indicating strong linguistic standardization. These findings provide valuable insights into the phonetic dynamics of Kemalpaşa and emphasize the importance of phonetic analysis in understanding regional language varieties.

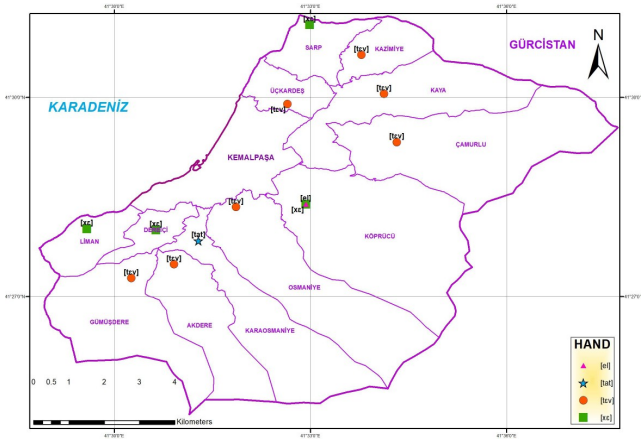
Map 16 shows the different lexical forms for the lexical item “arm”.



Map 16. *“arm” in the Laz and Homshetsma languages*

Map 16 illustrates two distinct Laz realizations of the lexical item “arm.” In Liman, the form /xɛ/ was attested, characterized by its brevity and absence of consonant clusters, which indicates a simplified phonotactic structure. By contrast, the form /xant͡sali/, documented in Sarp, is phonologically more complex, incorporating both a consonant cluster and an additional syllable. The lack of data from Dereiçi and Köprücü constrains a fuller assessment of the distributional and structural variation of this lexical item within Laz. In Homshetsma, the data reveal a high degree of uniformity, with /tɛv/ functioning as the predominant form across a wide range of localities, including Köprücü, Osmaniye, Karaosmaniye, Gümüşdere, Çamurlu, Üçkardeş, Kayaköy, and Kazımiye. This widespread distribution suggests that /tɛv/ constitutes the unmarked or conventional lexical choice for “arm” within the speech community. The only documented divergence occurs in Akdere, where the form /kol/—a clear lexical borrowing from Turkish—was recorded, highlighting the impact of language contact on the lexicon.

Aligned with the lexical item "arm", Map 17 illustrates the various lexical forms for the noun "hand."



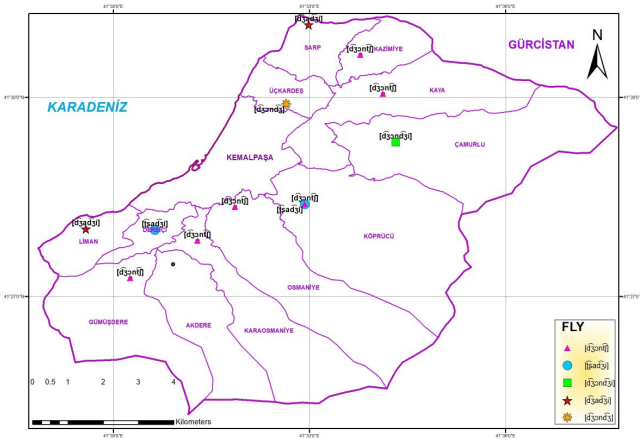
Map 17. *"hand" in the Laz and Homshetsma languages*

As Map 17 shows, the uniform use of /xε/ in Laz suggests minimal phonetic variation for this term. In Homshetsma, the variation between /tεv/, /el/, and /tat/ indicates regional dialectal differences and Turkish influence. The predominant use of /tεv/ suggests a common form, while the presence of /tat/ and Turkish-induced /el/ in specific settlements points to localized phonetic preferences and historical linguistic influences.

The Laz settlements display a uniform phonetic form for "hand": /xε/ is consistently used across all four settlements—Dereiçi, Köprücü, Liman, and Sarp. On the other hand, the Homshetsma settlements exhibit more phonetic variation:

- /tεv/ was used in Osmaniye, Gümüşdere, Çamurlu, Üçkardeş, Akdere, Kayaköy, and Kazımiye and this form is the most common, indicating a prevalent standard form within the community.
- /el/ was recorded in Köprücü and it is a Turkish lexical copy.
- /tat/ was found in Karaosmaniye. This variant indicates another local variation, suggesting phonetic diversity within the speech community.

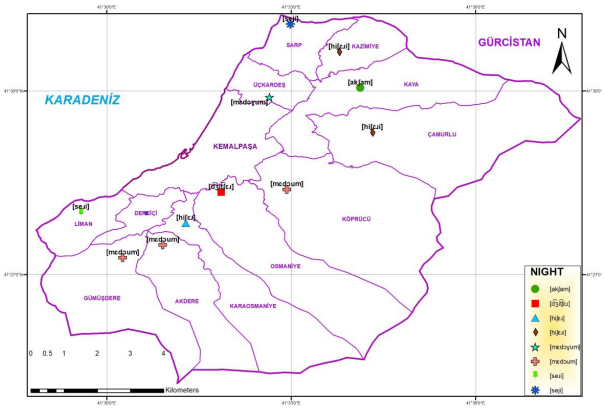
The following map shows the various lexical forms for the lexical item "fly."



Map 18. *"fly" in the Laz and Homshetsma languages*

Map 18 demonstrates two phonetic realizations of the verb "fly" in Laz-speaking settlements. In Dereiçi and Köprücü, the form /t͡ʂad͡ʒi/ was recorded, characterized by an initial retroflex consonant cluster that reflects a marked articulatory feature distinctive to these localities. By contrast, in Liman and Sarp the variant /d͡ʒad͡ʒi/ occurs, in which the retroflex is replaced by a simpler alveolar cluster. This distribution suggests intra-dialectal phonetic variation, potentially arising from historical sound change or contact with neighboring linguistic systems. The coexistence of retroflex and alveolar forms thus points to divergent phonological trajectories within the Laz-speaking area. In Homshetsma-speaking communities, the form /d͡ʒɔnt͡ʃ/ predominates across most settlements, indicating a relatively high degree of phonological uniformity. Such consistency may be linked to strong social cohesion and dense local networks that stabilize linguistic norms. The localized variant /d͡ʒɔnd͡ʒi/, documented in Çamurlu, constitutes the sole deviation from this pattern and may plausibly reflect contact-induced influence or micro-level phonetic innovation.

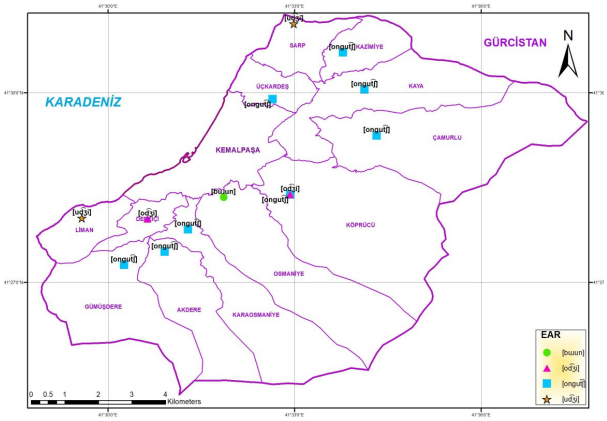
Map 19 illustrates the different lexical forms for the word "night" in the Laz and Homshetsma languages.



Map 19. *"night" in the Laz and Homshetsma languages*

As displayed in the map, the phonetic forms /seɹi/ and /seji/ suggest regional dialectal differences within the Laz community, with variations primarily in the final consonant. As for Homshetsma, the consistent use of /mɛdɔum/ and /mɛdɔɣum/ in Köprücü, Gümüşdere, Akdere, and Üçkardeş (with a minor variation in Üçkardeş) indicates a common phonetic structure across these settlements. The unique form /dʒ͡itʃ͡ɛɹ/ found in Osmaniye suggests a distinct phonetic evolution or influence. The presence of /hiʃɛɹ/ and /hiʃɛɹi/ in Karaosmaniye, Çamurlu, and Kazımiye shows a related phonetic pattern with slight variations. The distinct form /akʃam/ in Kayaköy points to an external linguistic influence, likely from Turkish.

Map 20 illustrates the various lexical items for "ear" in the Laz and Homshetsma languages across the villages in the Kemalpaşa district.



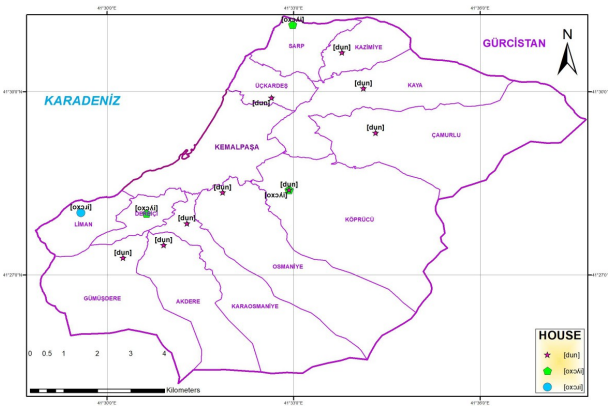
Map 20. *"ear" in the Laz and Homshetsma languages*

This map presents the phonetic realizations of the lexical item "ear" in Laz (lzz) and Homshetsma (hyw) as spoken in the Kemalpaşa region.

In Laz-speaking settlements, two variants are attested: /odʒi/, recorded in Dereiçi and Köprücü, and /udʒi/, documented in Liman and Sarp. The distinction lies in the quality of the initial vowel—/o/ versus /u/—which reflects a minor but systematic regional phonetic variation within Laz.

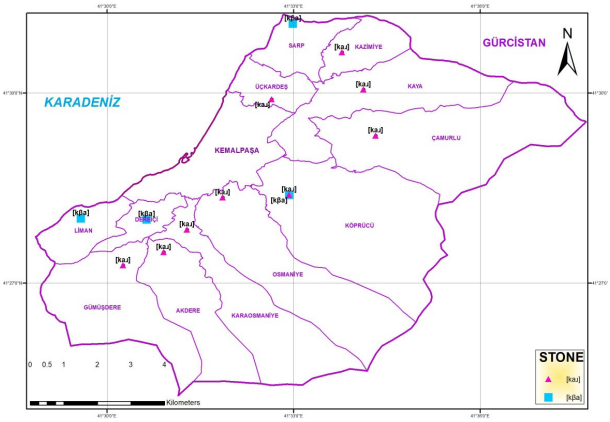
In Homshetsma-speaking areas, the predominant form is /ongutʃ/, observed in Köprücü, Karaosmaniye, Gümüşdere, Çamurlu, Üçkardeş, Akdere, Kayaköy, and Kazımiye. This widespread distribution suggests a high degree of phonological stability across settlements. The sole exception is Osmaniye, where the Turkish lexical borrowing /buɯn/ replaces the inherited form, constituting a notable case of contact-induced substitution.

Map 21 illustrates the various lexical forms for the noun "house."



Map 21. *"house" in the Laz and Homshetsma languages*

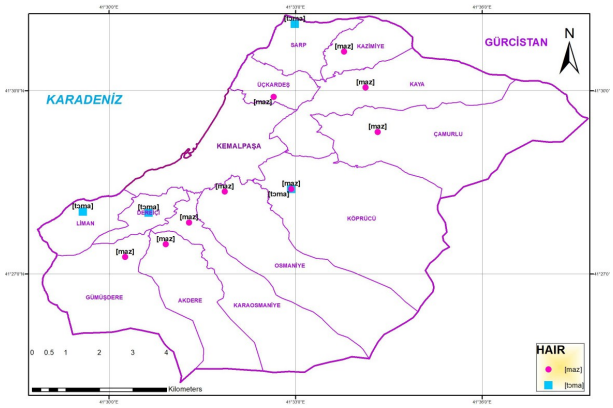
As illustrated on the map, Laz settlements display two phonetic variants for the word "house." The form /oxɔʎi/ was recorded in Dereiçi, Köprücü, and Sarp, while /oxɔɹi/ was documented in Liman. The contrast lies in the final consonant—/ʎ/ versus /ɹ/—indicating a localized phonetic divergence within Laz. By contrast, Homshetsma-speaking settlements exhibit a uniform realization: /dun/, consistently attested across all surveyed locations. This stability suggests a high degree of phonological cohesion within the Homshetsma variety.



Map 22. *"stone" in the Laz and Homshetsma languages*

Map 22 shows that the uniform phonetic representation of /kβa/ indicates phonetic stability within the Laz community. Similarly, the consistent use of /kaɹ/ across all surveyed Homshetsma settlements suggests a stable phonetic tradition.

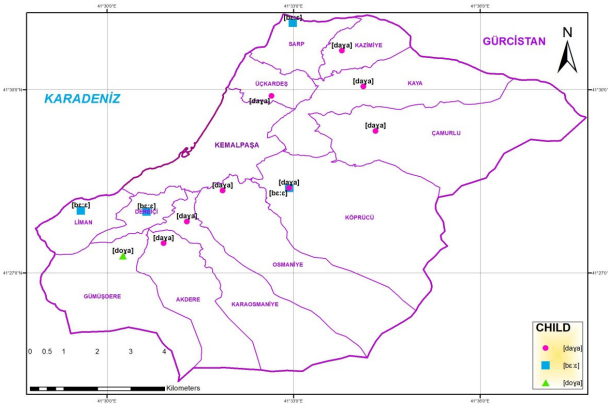
Map 23 illustrates the dialectal distribution of the lexical item "hair" in the Laz and Homshetsma languages.



Map 23. *"hair" in the Laz and Homshetsma languages*

As indicated on the map, the phonetic distribution of the noun "hair" in the Kemalpaşa region reveals significant consistency within both the Laz /tɔma/ and Homshetsma /maz/, highlighting robust phonetic traditions.

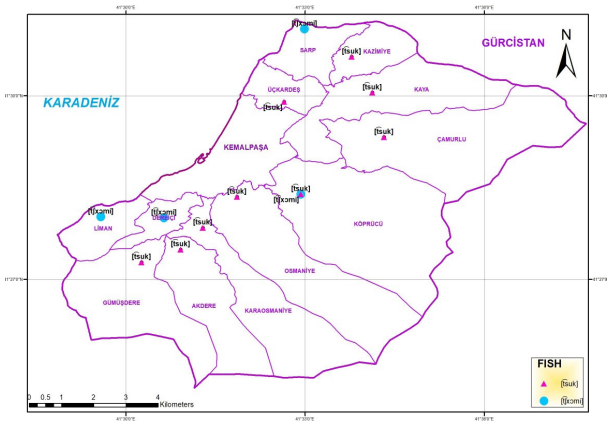
Map 24 illustrates the dialectal distribution of the lexical item "child" in the Laz and Homshetsma languages.



Map 24. *"child" in the Laz and Homshetsma languages*

The map reveals that the form /daɣa/ is consistent across most Homshetsma settlements, with the exception of Gümüşdere, where /doɣa/ is used. /bɛ:ɛ/ is documented across all surveyed Laz settlements.

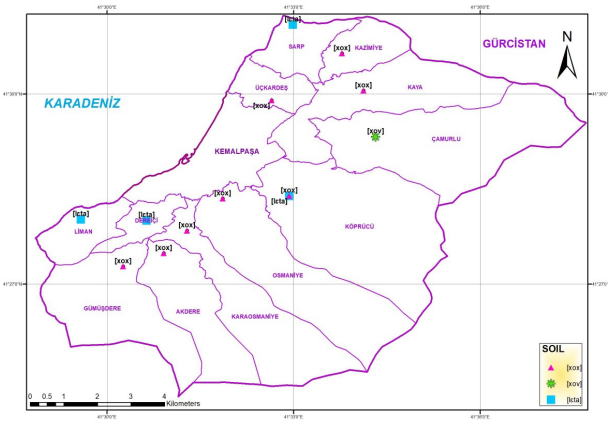
The following map illustrates the various lexical forms for the noun "fish."



Map 25. *"fish" in the Laz and Homshetsma languages*

A s shown on the map, the phonetic distribution of the noun "fish" in the Kemalpaşa region demonstrates significant consistency within both the Laz /t͡ʃxɔmi/ and Homshetsma /t͡suk/.

Map 26 illustrates the various forms of the lexical item "soil" in the Laz and Homshetsma languages across the villages in the Kemalpaşa district.



Map 26. *"soil" in the Laz and Homshetsma languages*

As shown on the map, the distribution of the noun "soil" across various settlements in the Kemalpaşa region indicates distinct phonetic consistencies within both the Laz and Homshetsma communities. In all the Laz-speaking settlements surveyed (Dereiçi, Köprücü, Liman, and Sarp), the word for "soil" is uniformly transcribed as /lɛta/. Similarly, the Homshetsma-speaking settlements exhibit a notable consistency with the form /xox/ documented across most locations (Köprücü, Osmaniye, Karaosmaniye, Gümüşdere, Üçkardeş, Akdere, Kayaköy, and Kazımiye). An exception to this pattern is found in Çamurlu, where the variant /xov/ is recorded. This slight variation in Çamurlu may suggest either a localized phonetic shift or a minor dialectal difference.

5 Discussion and Conclusion

This study has reached several conclusions about the relationship between dialectal differences and spatial relationships, focusing on the Laz and Homshetsma languages spoken in the villages of the Kemalpaşa district in Artvin, Türkiye. By analyzing 25 detailed maps, each representing a noun selected from the Leipzig-Jakarta 100-word list, this lexical atlas offers a comprehensive view of the phonological and lexical diversity within these communities.

The lexical atlas revealed significant lexical and phonological variation and consistency within the Laz and Homshetsma dialects. For instance, the Laz dialect exhibits considerable variation in the pronunciation of certain lexical items, such as "fire" and "nose." Variations like /ʈʂ͡ixʊndi/, /tʃ͡ixindi/, and /tʃ͡k'indi/ for "nose" reflect regional dialectal differences in the Laz language. Unique phonetic characteristics, such as the affricate /ʈʂ͡/ in Dereiçi, contrast with shifts to /tʃ͡/ in other areas, illustrating the dynamic nature of Laz phonology. In contrast, the Homshetsma language demonstrates remarkable uniformity in its lexical items. The word "nose" is predominantly articulated as /kint/ across most villages, with the exception of Kazımiye, where /buɹun/ is used. This high degree of lexical consistency suggests strong linguistic cohesion and a conservative retention of terms within the Homshetsma- speaking community. The divergence in Kazımiye, with the adoption of the Turkish borrowing /buɹun/, indicates a contact-induced change, highlighting the impact of linguistic interaction.

Other lexical items, such as "water," also show minor intra-dialectal variation within the Laz dialect, with forms like /tsx͡aji/ and /tsx͡aɹi/. In contrast, the Homshetsma dialects consistently use the form /tʃ͡uɹ/, indicating less dialectal diversity within these communities. Similarly, for the lexical item "mouth," the Laz dialect shows variation between /bidʒ͡i/ and /nunqu/, while the Homshetsma dialect predominantly uses /pijan/, with regional deviations to /qab/ in Karaosmaniye and Çamurlu.

The comparative analysis of the lexical items "tongue," "blood," "bone," "breast," and "rain" reveals a clear distinction between the Laz and Homshetsma languages. The Laz language is characterized by notable intra- dialectal variation and regional phonetic shifts, reflecting localized influences and potential historical changes. In contrast, the Homshetsma language demonstrates remarkable lexical and phonetic uniformity, suggesting strong linguistic cohesion and standardized linguistic practices within the Homshetsma-speaking communities.

This study underscores the importance of detailed phonetic and lexical mapping in understanding the complexities of regional dialects and linguistic diversity. The observed variations and consistencies provide valuable insights into the historical, social, and contact-induced factors shaping the phonological landscape of the Laz and Homshetsma languages.

The examination of phonetic forms across the Laz and Homshetsma settlements in the Kemalpaşa district provides compelling insight into the linguistic diversity and uniformity within these communities. The Laz settlements reveal phonetic variations for several lexical items, indicating dialectal differences and external influences. For instance, the use of /dʒ͡ɔɣɔ/ and /dʒ͡ɔxɔ/ for "name" and the different forms for "louse," "meat," and "arm" reflect a rich tapestry of local speech patterns. Conversely, the Homshetsma settlements exhibit a high degree

of phonetic uniformity, particularly in lexical items like "name," "louse," "meat," and "arm." This consistency suggests strong linguistic standardization within the Homshetsma-speaking communities. However, there are instances of lexical diversity, as seen in the different forms for "wing" and "hand," highlighting regional variations and external influences, particularly from Turkish.

Overall, the phonetic analysis underscores the dynamic nature of language evolution in the Kemalpaşa district. The Laz language shows significant internal variation, possibly due to historical dialectal influences and external interactions. In contrast, the Homshetsma language maintains a more stable phonetic structure, albeit with pockets of variation reflecting localized speech patterns and linguistic borrowings. These findings emphasize the importance of detailed phonetic studies in understanding the complexities of regional languages and their development.

The phonetic analysis of various lexical items across the Laz and Homshetsma-speaking settlements in the Kemalpaşa district reveals both notable diversity and remarkable uniformity. For instance, the Laz settlements display variations in phonetic forms, as seen with the lexical item "fly," where Dereiçi and Köprücü use /t͡ʂad͡ʒi/ while Liman and Sarp use /d͡ʒad͡ʒi/. Such variations suggest historical phonetic shifts or external linguistic influences. Similarly, the different phonetic forms for "ear" and "house" among the Laz settlements further emphasize this phonetic diversity. Conversely, the Homshetsma-speaking areas exhibit a high degree of linguistic unity, consistently using specific phonetic forms for most lexical items. The widespread use of /d͡ʒɔnt͡ʃ/ for "fly" and /dun/ for "house" across various Homshetsma settlements indicates strong sociolinguistic cohesion and minimal phonetic variation. However, localized variations, such as /d͡ʒɔnd͡ʒi/ in Çamurlu for "fly" and /buɹun/ in Osmaniye for "ear," highlight the influence of contact- induced changes.

The consistent phonetic forms in both Laz and Homshetsma for items like "stone," "hair," "child," and "fish" indicate robust phonetic traditions within each linguistic community. The uniformity in these lexical items suggests a stable phonetic structure maintained over time, reflecting strong cultural and linguistic continuity.

Overall, this lexical atlas provides a detailed phonological and lexical analysis of the Laz and Homshetsma languages in the Kemalpaşa district. The findings underscore the richness and complexity of these linguistic traditions, highlighting both the dynamic nature of Laz dialectal variation and the strong cohesion within the Homshetsma-speaking communities. This work contributes to our understanding of regional linguistic diversity and offers valuable data for future research on the phonological and lexical characteristics of minority languages. The study emphasizes the need for continued research and documentation to preserve these unique linguistic heritages and to better understand the intricate dynamics of language variations in multilingual settings.

Additionally, this atlas would be instrumental in educational and revitalization initiatives, providing a foundation for teaching materials and language preservation programs. The documentation process would also involve engaging with native speakers and communities, ensuring that the project supports the needs and interests of those who speak and value these languages. The creation of such an atlas is not merely an academic exercise but a crucial step in preserving the rich cultural and linguistic diversity of the Black Sea region, which is at risk of disappearing.

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Submission statement and verification: This study has not been previously published elsewhere. It is not under review in another journal. Publication of the study has been approved, either implicitly or explicitly, by all authors and the responsible authorities at the university/research center where the study was conducted. If the study is accepted for publication, it will not be published in the same form in another printed or electronic medium in Turkish or any other language without the written permission of the Journal of Linguistic Research.
Conflict of Interest Statement: The authors declare no conflict of interest.
Data Use: The primary data used in this study consist of spoken language samples collected during fieldwork in Artvin, Kemalpaşa. All the data utilized in this study were gathered through fieldwork conducted between July 2022 and July 2024, in all the villages, situated in the district of Kemalpaşa in Artvin, Türkiye. These data were gathered directly from participants for this research. Access to and use of the data complied with institutional ethical guidelines and were carried out following the consent provided by participants.
Ethical Approval/Participant Consent: An institutional ethics committee approval was received from the Human Subjects Ethics Committee (HSEC) at Artvin Çoruh University (AÇÜ) to carry out the study. The participants' consents were also obtained via consent forms prior to the data collection.
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Abbreviations

ACU: Artvin Coruh University
AIS : Linguistic Atlas of Italy and Southern Switzerland
ALF : Atlas Linguistique de la France
GIS : Geographic Information Systems
HSEC : Human Subjects Ethics Committee
LAMSAS : Linguistic Atlas of the United States and Canada N : north

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