LITHUANIAN DIALECT CLASSIFICATIONS

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Abstract

The article provides an overview of Lithuanian dialects and their classification. Two of them were of particular significance: the system devised by Baranauskas in 1898 and the classification of Jaunius prepared in 1890-1911, whose principles were used by Salys to create the first scientific classification of Lithuanian dialects in 1933, when the methods of historic comparative linguistics were applied. The rise of structuralism gave the impetus for phonological classification in the second half of the 20th century. The system designed by Zinkevičius and Girdenis in 1966 is still considered to be the main dialect classification of Lithuanian dialects – it is based on certain phonetic (phonological) criteria, but no other criteria (lexical, morphological, or syntactical) have so far been used as the basis for dialect classifying.

The dialect variation of the Lithuanian language in the early 21st century is reflected in the new dialect derivations – regiolects and geolects (2014).

CLASSIFICACIONS DIALECTALS DEL LITUÀ

Resum

Aquest article ofereix una visió general dels dialectes lituans i la seva classificació. Dues van tenir una importància especial: el sistema ideat per Baranauskas el 1898 i la classificació de Jaunius feta el 1890-1911, els principis de la qual van ser utilitzats per Salys per crear la primera classificació científica dels dialectes lituans el 1933, quan els mètodes de comparació històrica s'aplicaven a la lingüística.

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L'auge de l'estructuralisme va donar impuls a la classificació fonològica durant la segona meitat del segle XX. El sistema dissenyat per Zinkevičius i Girdenis el 1966 encara es considera la principal classificació dialectal dels dialectes lituans: es basa en certs criteris fonètics (fonològics), i fins ara no s'ha utilitzat cap altre criteri (lèxic, morfològic o sintàctic) com a base per a una classificació dialectal.

La variació dialectal de la llengua lituana a principis del segle XXI es reflecteix en les noves derivacions dialectals: regiolectes i geolectes (2014).

Paraules clau: classificació dialectal, dialectologia isoglòtica, dialectologia perceptiva, dialectologia quantitativa, lituà

**LIETUVIŲ TARMIŲ KLASIFIKACIJOS**

Santrauka

Straipsnyje apžvelgiamos lietuvių kalbos tarmės ir jų klasifikacijos. Ypač svarbios dvi iš jų: 1898 m. Baranausko sukurta lietuvių tarmių sistema ir 1890–1911 m. parengta Jauniaus klasifikacija, kurios principais rėmėsi Salys, 1933 m. sudaręs pirmąją mokslinę lietuvių tarmių klasifikaciją ir jai pritaikęs istorinės lyginamosios kalbotyros metodus. XX a. antrojoje pusėje fonologinei klasifikacijai impulsą davė struktūralizmo įsigalėjimas. Pagrindine lietuvių tarmių klasifikacija iki šiol laikoma 1966 m. Zinkevičiaus ir Girdenio sukurta sistema – ji remiasi fonetiniais (fonologiniais) vokalizmo požymiais, tačiau jokie kiti kriterijai (leksiniai, morfologiniai ar sintaksiniai) iki šiol nenaudojami kaip tarmių klasifikavimo pagrindas.

XXI a. pradžios lietuvių kalbos ploto tarminis variantiškumas atsispindi naujuosiuose tarminiuose (tarmiškuosiuose) dariniuose – regiolektuose ir geolektuose (2014).

Reikšminiai žodžiai: tarmių klasifikacija, izoglosinė dialektologija, kiekybinė dialektologija, lietuvių kalba

1. Introduction

Lithuanian is spoken in the Republic of Lithuania, a small (65,300 sq. km) Eastern European country on the Baltic coast. It is bounded by Latvia to the north, Belarus to the east and south, Poland to the southwest and Russia to the west (via the oblast of Kaliningrad) (Map 1).
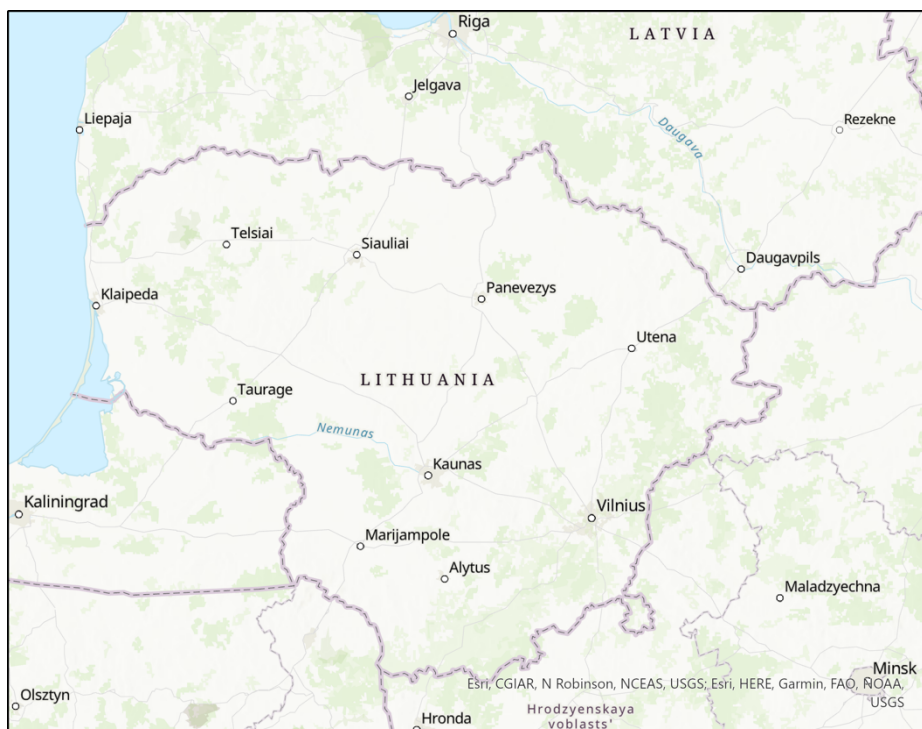
Map 1. Map of Lithuania (source: authors)

The 2021 statistics show that Lithuania is populated by 84.1% ethnic Lithuanians, 6.6% Poles, 5.8% Russians, 1.2% Belarussians and 1.1% other ethnic groups. 1.2% of respondents did not reveal their ethnicity during the survey (Lithuania. Online: https://www.cia.gov/the-world-factbook/countries/lithuania/).

Lithuanian, the official language of the Republic of Lithuania, is spoken by over 3.3 million people: 2.7 million residing in Lithuania, and around 640,000 living in other countries. The language is spoken by 82% of people in Lithuania, with further 8% using Russian, 5.6% Polish and 0.9% other tongues (Statistics Lithuania. Online: https://osp.stat.gov.lt/pradinis). 3.5% of respondents did not indicate their language during the survey (Lithuania. Online: https://www.cia.gov/the-world-factbook/countries/lithuania/).[1]

Lithuanian is part of the Baltic group of languages within the Indo-European linguistic family. Other Baltic languages include Latvian, Galindian, Curonian, Semigallian, Selonian, Yotvingian and Prussian (Mikulėnienė, Stafecka 2009:21-24).

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[1] Based on 2011 data.

However, Lithuanian and Latvian are the only two surviving languages still in use today. The rest of the eastern and western Baltic tribes and their tongues are now extinct, with the only surviving relics of written language coming from Prussian (Mikulėnienė & Stafecka 2009: 21-24).

When the academic community first started taking an interest in Lithuanian in the 19th century, the area of its use was split between two countries – Russia and East Prussia. According to linguist Friedrich Kurschat (1806-1884), 1.5 million speakers of Lithuanian lived in the indicated territory in the 19th century. However, due to the processes of Germanization and – post WWII – intense Russification, compact Lithuanian communities which had lived in the former territory of East Prussia (now the oblast of Kaliningrad) were pushed out (Kurschat 1876).

Lithuanian, as a language displaying many characteristics of its Indo-European parent, came into particular focus in the mid-19th century. *Litauische Grammatik*, published by linguist August Schleicher (1821-1868) in 1856, described for the first time the split of Lithuanian dialects into Aukštaitian and Žemaitian (Samogitian). The characteristics of each dialect were also provided: 1) Aukštaitian *ů* [ʊɔ], *ë* [ɪɛ], *o* [o], corresponding to *o* [o], *ėi* [ęɪ], *å* [ɒ] of Žemaitian; 2) archaic compounds **tj, *dj* changing to sibilant *cż* [ʧ], *dż* [ʤ] in Aukštaitian, while remaining unmodified in Žemaitian and, in Schleicher's opinion, reflecting the older state of the language; 3) stress retraction, typical of Žemaitian subdialects. However, apart from describing dialect differences and approximate areas where certain characteristics were particularly prominent, Schleicher did not provide a more detailed classification of either dialect or drawn a map (see Schleicher 1856).

This article will therefore focus on the five most detailed classifications of Lithuanian dialects: 1) the reconstruction of Antanas Baranauskas' dialect classification (1898; Geržotaitė 2016); 2) the dialect classification of Kazimieras Jaunius (Mikulėnienė & Trumpa 2008:128-146; Mikulėnienė 2018); 3) the dialect classification of Antanas Salys, based on Jaunius' classification (1933); 4) the dialect classification of Zigmas Zinkevičius and Aleksas Girdenis (1966); and 5) the classification of new dialect derivations (Mikulėnienė & Meiliūnaitė 2014).

It must be noted that the starting point for classifying the Lithuanian language into dialects remains the same since the 19th century and is based on further categorization of the two main dialects (Aukštaitian and Žemaitian) into subdialects.

2. Classifications

2.1 Antanas Baranauskas (Antoni Baranowski, 1898)

Antanas Baranauskas (1835-1902) is considered the author of the first systematic dialect classification in Lithuania. A Catholic priest, a bishop and a poet, Baranauskas did not see himself as a linguist, yet his activities undoubtedly included linguistic research. In 1865 Baranauskas met August Schleicher (1821-1868) in Jena (Germany), he also corresponded with many notable linguists from other countries. Among these were Franz Anton Schiefner (1817-1879), Jan Aleksandr Karłowicz (1836-1903), August Leskien (1840-1916), Jan Baudouin de Courenay (1845-1929), Leopold Geitler (1847-1885), Filipp Fortunatov (1848-1914), Karl Friedrich Christian Brugmann (1849-1919), Adalbert Bezzenberger (1851-1922), Franz Specht (1888-1949), Eduard Volter (1856-1941) (for more information, see Mikulėnienė 2018: 236-239).

During his time teaching homiletics at the Kaunas Priest Seminary, Baranauskas collected dialect texts with other clerics and devised the first classification of Lithuanian dialects (Барановский 1898). This work laid the foundations for Lithuanian dialectology.

2.1.1 Framework: Isoglottic dialectology

Baranauskas' linguistic views reflected the German tradition of dialectology, defined by the famous Neogrammarian school of linguists in Leipzig and their principles of historical linguistics, sound laws and analogy. Following these theories,

Baranauskas believed that a pure and vivid language can only be found in the speech of ordinary people, i.e., 'further away from towns, manors and roads'. His teachings, therefore, cemented the tradition of rural dialectology which continued in Lithuania for over a hundred years. This premise of linguistic purity is best illustrated by Baranauskas' belief that one's own word is better than someone else's and that an older word is better than a new one (Alminauskis 1930; 1932: 66-67; Mikulėnienė 2018: 225-226). Furthermore, Baranauskas was familiar with phonetics, as shown by his efforts to apply the ancient theory of moras to the Eastern Aukštaitian subdialect, with short vowels being equal to one mora, semi-long vowels corresponding to two moras and the long ones lasting three moras (Girdenis 1981: 196; 2003: 286-288).

Baranauskas' descriptions of Lithuanian dialects suggest which dialect features were used to base this classification on. Despite not identifying any exact characteristics, it is obvious from the examples below that Baranauskas mostly focused on phonetic differences (vowels and consonants), (Table 1).

Differences in the pronunciation of
-ie- [ɪɛ], *-uo-* [ʊɔ] > [¹ˈduɔnɑ], [¹ˈsʲʊʲiɛstɑs] / [¹ˈdo̝ːnǎ], [¹ˈsʲʊʲe̝ːstǎs] / [¹ˈdo̝ʊnǎ], [¹ˈsʲʊʲe̝ɪsts] / [¹ˈduːnɑ], [ˈsʲʊʲiːsts] ~ *duona*, *sviestas* ('bread', 'butter')
-an- [ɑn], *-am-* [ɑm] > [¹ˈlɔ·ŋgǎs] / [¹ˈlu·ŋgɑs] ~ *langas* ('window'), [²ˈrɔŋ·ko̝] / [²ˈrʊ̞ŋ·ko̝] ~ *ranką* (sg. acc. of 'hand'), [ˈdɔŋgʊs] / [ˈdʊ̞ŋgʊs] ~ *dangus* ('sky')
-ą- [ɑː], *-ę-* [ɛː] ~ [²ˈʒɔːsʲɪ̯] / [²ˈʒuːsʲɪ̯] ~ *žąsį*, (sg. acc. of 'goose') [²ˈtʲe̝ːsʲtʲ] / [²ˈtʲiːsʲtʲ] ~ *tęsti* ('to continue');
-lė- [lʲe] > [²ˈlʲeːkʲtʲ] / [²ˈlɵ̝ːkʲtʲ] ~ *lėkti* ('to go fast')
-ã- [ɑ] > [ˈlɑ·pʲɛ] / [ˈlɔ·pʲɛ] ~ *lapė* ('fox')
-ė- [e] > [¹ˈtʲeːʋɑs] / [¹ˈtɑːʋɑs] ~ *tévas* ('father'), etc

Table 1. Some of the phonological/phonetic characteristics used by Antanas Baranauskas for his classification of Lithuanian dialects

Baranauskas used several previously tested methods while collecting dialect materials. For example, he would often ask his clerics to retell the same text in their native dialects (Baranauskas 1909: 14). The same method – translating the text into the dialect of the subject – was used by Georg Wenker in 1876 to collect material for one of the first language atlases in Europe, *Deutscher Sprachatlas* (see The Digital Wenker Atlas. Online: http://www.3.diwa.info/).

2.1.2 Reconstruction of Baranauskas' classification (2016)

The dialect classification of Baranauskas has been reconstructed using his notes, which include approximate indication of subdialect borders (for more, see Geržotaitė 2016). As illustrated by Map 2, Baranauskas' classification did not include the entire territory of present-day Lithuania, only the Kaunas Governorate which at the time was part of the Russian empire.
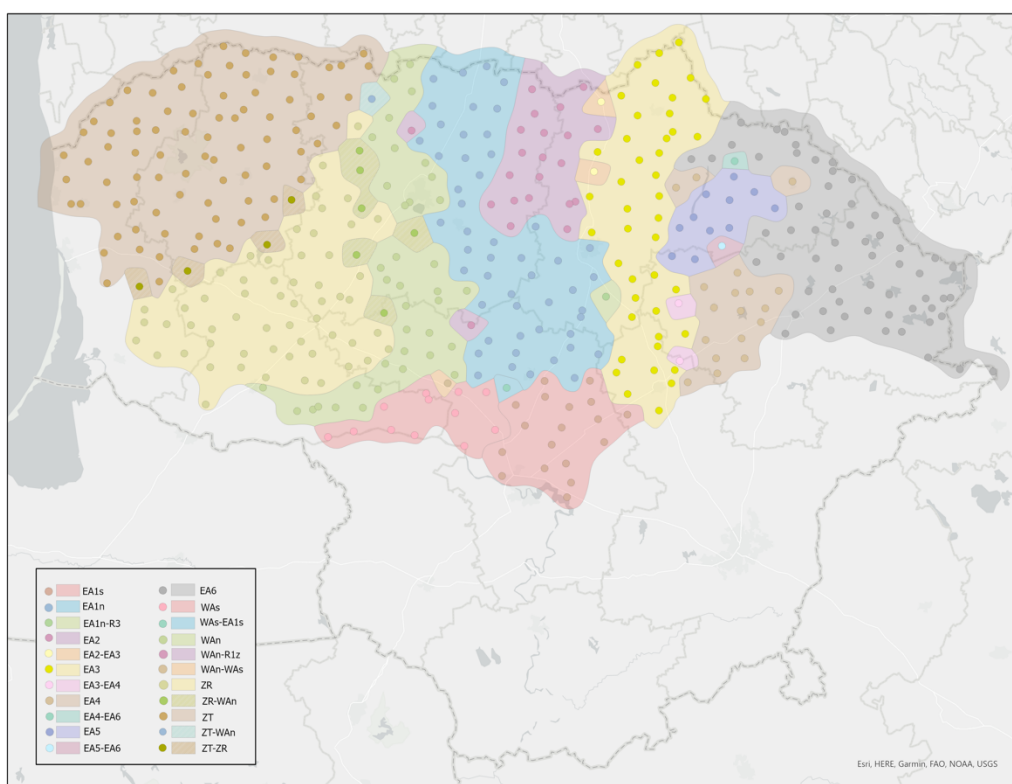
Map 2. Dialect classification of Antanas Baranauskas (cartographic reconstruction), (for explanations of abbreviations, see Table 2)

Baranauskas identified two distinct dialect varieties within the Žemaitian area as well as nine different Aukštaitian subdialects. He also believed the existence of several smaller transitional areas (see Table 2). In his nomination, Baranauskas used the cardinal directions, the names of the two major dialects (Aukštaitian and Žemaitian) as well as the order of geographical distribution of dialects within the territory of

Lithuania, hence the numbering of the Eastern Aukštaitian subdialects (Eastern Aukštaitians I – VI).

Dialect	Subdialect	Legend Abbreviation
Aukštaitians	Eastern Aukštaitians I (South)	**EA1s**
	Eastern Aukštaitians I (North)	**EA1n**
	Eastern Aukštaitians II	**EA2**
	Eastern Aukštaitians III	**EA3**
	Eastern Aukštaitians IV	**EA4**
	Eastern Aukštaitians V	**EA5**
	Eastern Aukštaitians VI	**EA6**
	Western Aukštaitians (South)	**WAs**
	Western Aukštaitians (North)	**WAn**
Žemaitians	Žemaitians of Raseiniai	**ZR**
	Žemaitians of Telšiai	**ZT**

Table 2. Classification of Lithuanian Dialects by Antanas Baranauskas (Reconstructed)

Baranauskas' classification served as the basis for *Litauische Dialektsudien* (Leipzig, 1930), the first systematic overview of Lithuanian dialects, published by Lithuanian-born German linguist Georg Gerullis (1888-*c.*1945), (Gerullis 1930). He identified the main dialect features by applying the Copenhagen transcription method to short dialect texts, comparing them to the examples of written Lithuanian used at the time.

2.2 Kazimieras Jaunius (Kazimir Javnis, 1890-1911)

The territorial aspect is also obvious in the dialect descriptions of districts left by Baranauskas' disciple Kazimieras Jaunius (1848-1908). Published between 1890 and 1898, the overviews of dialects spoken in Ukmergė, Kaunas, Raseiniai, Zarasai, Šiauliai and Panevėžys (Явнисъ 1890, etc.; 1911) exalted their author to one of the most prominent researchers of Lithuanian dialects.

2.2.1 Framework: Isoglottic dialectology

Jaunius followed the neo-grammatical approaches of his teacher Baranauskas (see section 2.1). There is only one difference – the classification given by Jaunius covered the whole territory of Lithuania.

2.2.2 Classification of dialects and subdialects

Just like Baranauskas, Jaunius did not leave any maps illustrating his classification. However, by comparing the two systems several differences can be identified (Table 3).

Dialect	Subdialect			Classification Author
Žemaitians	Žemaitians of Telšiai		Žemaitians of Raseiniai	Baranauskas (Барановскій 1898: 50)
	North-Western Žemaitians		South-Eastern Žemaitians	Jaunius (Явнис 1890)
	North-Western Žemaitians	South-Western Žemaitians	South-Eastern Žemaitians	Jaunius (Явнис 1911)
Aukštaitians	Western Aukštaitians (North, South)		Eastern Aukštaitians I (North, South), Eastern Aukštaitians II-VI	Baranauskas (Барановскій 1898: 50–51)
	Western Aukštaitians		Eastern Aukštaitians	Jaunius (Явнис 1890)
	Western Aukštaitians	Central Aukštaitians	Eastern Aukštaitians	Jaunius (Явнис 1911)

Table 3. Main differences between the dialect classifications of Antanas Baranauskas and Kazimieras Jaunius

As shown in Table 3, Jaunius provided at least two classifications of Lithuanian dialects. His first attempt was similar to Baranauskas' system: the two main dialects (Aukštaitian and Žemaitian) were further categorised into two subdialects each. However, Jaunius' subsequent classification included three subdialects within both the Žemaitian and the Aukštaitian areas. This is because Jaunius' 1911 system included not

only the area of the Kaunas Governorate but the entire territory of the Lithuanian language. For example, an additional subdialect – Central Aukštaitian – was included in this later classification to reflect its transitional position between Western and Eastern Aukštaitians (Table 4).

In summary, none of the main descriptions of Lithuanian dialects in the late 19th century – early 20th century included extensive analyses of their distinctive features and are therefore not covered in this article. However, it is clear from earlier examples that the same phonetic characteristics were dominant, with the only differences occurring in their priority order. For instance, Baranauskas differentiated the Žemaitian and the Aukštaitian dialects first by their dissimilar pronunciation of diphthongs *ie* [ɪɛ] and *uo* [ʊɔ], while Jaunius prioritised the different pronunciation of *ė* [e] and *o* [o].

Western Aukštaitians	Central Aukštaitians	Eastern Aukštaitians
-an- [ɑn] ~ [ɑn]	*-an-* [ɑn] ~ [ɑn]	*-an-* [ɑn] ~ [ɔn], *-am-* [ɑm] ~ [ʊ̯m]
-en [ɛn] ~ [ɛn]	*-en* [ɛn] ~ [ɛn]	*-en* [ɛn] ~ [ɪn]
-ą- [ɑ] ~ [ɑ], *-ę-* [ɛ] ~ [ɛ]	*-ą-* [ɑ] ~ [ɑ], *-ę-* [ɛ] ~ [ɛ]	*-ą-* [ɑ] ~ [u], *-ę-* [ɛ] ~ [i]
-lė- [lʲe] ~ [lʲe]	*-lė-* [lʲe] ~ [lʅ̩]	*-lė-* [lʲe] ~ [lʅ̩]

Table 4. Dialect features of Aukštaitians according to Kazimieras Jaunius

The present-day Southern Aukštaitian subdialect was not included in Jaunius' classification as its speakers 'retained the eastern pronunciation only in their prolonged vowels.'

It is therefore clear that the entire inventory of phonetic differences and typical dialect features were identified in the late 19th century and carried through, effectively unchanged, into the classifications of the 20th century. This confirms the saliency of the dialect variants used at the time.

2.3 Antanas Salys (1933)

The establishment of Vytautas Magnus University highlighted Lithuania's need for highly qualified professionals. The most talented students were sent abroad to continue their education. One of them was Antanas Salys (1902-1972), who studied in

Kaunas for several years before moving to Germany in 1925 to study Baltic, Slavic and Indo-European languages at Leipzig University under Reinhold Trautmann, Eduard Sievers and George Gerullis. During Salys' time at Hamburg University (1929) he was also introduced to experimental phonetics by his professor Giulio Panconcelli-Calzia. After producing his doctoral dissertation *Die Žemaitischen Mundarten* at Leipzig University (1929, published in 1930), Salys returned to Lithuania to contribute significantly to the field of dialectology (Salys 1992).

In addition to designing a system for classifying Lithuanian dialects, Salys compiled *Apklausas 1 (žodžių geografijai)* [Questionnaire 1 (for Word Geography)] for the word atlas (1942), established a lab of experimental phonetics and put plans in place to set up an audio repository to store dialect recordings (Salys 1942). However, the collection of dialect materials for word geography and other linguistic activities were discontinued at the start of WWII.

2.3.1 Framework: Isoglottic dialectology

Salys' classification is the first scientific classification of Lithuanian dialects (Salys 1933). It is based on phonetic features which, upon applying a historic comparative method, are still important not just in terms of Lithuanian dialects and the history of the Lithuanian language, but also to Baltic and Indo-European studies in general.

Salys chose the varying treatment of archaic clusters **tja*, **dja* as the main feature to illustrate the differences between the Aukštaitian and the Žemaitian dialects. Pronounced as *če* [ʧʲɛ], *dže* [ʤʲɛ] by Aukštaitians and *ce* [ʦʲɛ], *dze* [ʣʲɛ] by Dzūkians, these clusters turned into *te* [tʲɛ], *de* [dʲɛ] when used by the speakers of Žemaitian (Table 5).

Dialect	Subdialect and its differentiating features
Aukštaitians	**Eastern Aukštaitians *(pantininkai)***
	-añ- [²ˈɑn·] ~ [ɔn·] > [²ˈrɔŋ·kǫ] ~ *ranką* (sg. acc. of 'hand')
	-eñ- [²ˈɛn·] ~ [ęn·] > [²ˈtʲʊʲęŋ·kʲtʲ] ~ *tvenkti* ('to dam')
	-ą- [ɑː], *-ę-* [ɛː] ~ [ɔː], [ę̄ː] > [²ˈʒɔːsʲɪ̨] ~ *žąsį* (sg. acc. of 'goose'); [²ˈtʲę̄ːsʲtʲ] ~ *tęsti* ('to continue')

Eastern Aukštaitians (*pontininkai*)

-án- [¹ˈɑ·n], *-añ-* [²ˈɑn·], *-an-* [ɑn] ~ [ɔn] > [¹ˈlɔ·ŋgɑ̆s] ~ *langas* ('window'), [²ˈrɔŋ·kǫ] ~ *ranką* (sg. acc. of 'hand'), [ˈdɔŋgŏs] ~ *dangus* ('sky')

-ą- [ɑː], *-ę-* [ɛː] ~ [ɔː], [ę̄ː] > [²ˈʒɔːsʲɪ̡] ~ *žąsį* (sg. acc. of 'goose'), [²ˈtʲę̄ːsʲtʲ] ~ *tęsti* ('to continue')

Eastern (East) Aukštaitians (*puntininkai*)

-án- [¹ˈɑ·n], *-añ-* [²ˈɑn·], *-an-* [ɑn] ~ [u·n], [ʊ̜n] > [¹ˈlu·ŋgɑs] ~ *langas* ('window'), [²ˈrʊ̜ŋ·kǫ] ~ *ranką* (sg. acc. of 'hand'), [ˈdʊ̜ŋgʊs] ~ *dangus* ('sky')

-eñ- [²ˈɛn·] ~ [ɪn·] > [²ˈtʲʊ̜ʲɪŋ·kʲtʲ] ~ *tvenkti* ('to dam')

-ą- [ɑː], *-ę-* [ɛː] ~ [uː], [iː] > [²ˈʒuːsʲɪ̡] ~ *žąsį* (sg. acc. of 'goose'), [²ˈtʲiːsʲtʲ] ~ *tęsti* ('to continue')

-o- [o] ~ [ɑ] > [²ˈʒɑːdʲi·s] ~ *žodis* ('word'), [ɑ·bɑ·²ˈlʲi·s] ~ *obuolys* ('apple')

Eastern (West) Aukštaitians (*puntininkai*)

-án- [¹ˈɑ·n], *-añ-* [²ˈɑn·], *-an-* [ɑn] ~ [u·n], [ʊ̜n] > [¹ˈlu·ŋgɑs] ~ *langas* ('window'), [²ˈrʊ̜ŋ·kǫ] ~ *ranką* (sg. acc. of 'hand'), [ˈdʊ̜ŋgʊs] ~ *dangus* ('sky')

-eñ- [²ˈɛn·] ~ [ɪn·] > [²ˈtʲʊ̜ʲɪŋ·kʲtʲ] ~ *tvenkti* ('to dam')

-ą- [ɑː], *-ę-* [ɛː] ~ [uː], [iː] > [²ˈʒuːsʲɪ̡] ~ *žąsį* (sg. acc. of 'goose'), [²ˈtʲiːsʲtʲ] ~ *tęsti* ('to continue')

Eastern Aukštaitians (*puntininkai*) Central *rotininkai* of Anykščiai

-án- [¹ˈɑ·n], *-añ-* [²ˈɑn·], *-an-* [ɑn] ~ [u·n], [ʊ̜n] > [¹ˈlu·ŋgɑs] ~ *langas* ('window'), [²ˈrʊ̜ŋ·kǫ] ~ *ranką* (sg. acc. of 'hand'), [ˈdʊ̜ŋgʊs] ~ *dangus* ('sky')

-eñ- [²ˈɛn·] ~ [ɪn·] > [²ˈtʲʊ̜ʲɪŋ·kʲtʲ] ~ *tvenkti* ('to dam')

-ą- [ɑː], *-ę-* [ɛː] ~ [uː], [iː] > [²ˈʒuːsʲɪ̡] ~ *žąsį* (sg. acc. of 'goose'), [²ˈtʲiːsʲtʲ] ~ *tęsti* ('to continue')

-ã- [ˈɑː] ~ [ɔ·] > [ˈlɔ·pʲɛ] ~ *lapė* ('fox')

Eastern Aukštaitians (*puntininkai*) Central *rotininkai* (*dadininkai*)

-án- [¹ˈɑ·n], *-añ-* [²ˈɑn·], *-an-* [ɑn] ~ [u·n], [ʊ̜n] > [¹ˈlu·ŋgɑs] ~ *langas* ('window'), [²ˈrʊ̜ŋ·kǫ] ~ *ranką* (sg. acc. of 'hand'), [ˈdʊ̜ŋgʊs] ~ *dangus* ('sky')

-eñ- [²ˈɛn·] ~ [ɪn·] > [²ˈtʲʊ̜ʲɪŋ·kʲtʲ] ~ *tvenkti* ('to dam')

-ą- [ɑː], *-ę-* [ɛː] ~ [uː], [iː] > [²ˈʒuːsʲɪ̡] ~ *žąsį* (sg. acc. of 'goose'), [²ˈtʲiːsʲtʲ] ~ *tęsti* ('to continue')

-ã- [ˈɑː] ~ [ɔ·] > [ˈlɔ·pʲɛ] ~ *lapė* ('fox')

-ė- [e] ~ [ɑː] > [¹ˈtɑːʊɑs] ~ *tėvas* ('father')

Central Aukštaitians

-lė- [lʲe] ~ [lǫ̈] > [²ˈlǫ̈ːkʲtʲ] ~ *lėkti* ('to go fast')

South-Western Aukštaitians

-ė [e] ~ [e], *-ės* [es] ~ [es], *-o* [o] ~ [o], *-os* [os] ~ [os] > [ˈsɑ·kʲe] ~ *sakė* ('told'), [ˈlɑ·pʲes] ~ *lapės* ('foxes'), [ˈsɑ·ko] ~ *sako* ('says'), [ˈʃɑ·ko·s] ~ *šakos* ('branches')

Western Aukštaitians of Veliuona

-ė [e] ~ [ɪ̡], *-ės* [es] ~ [ɪ̡s], *-o* [o] ~ [ʊ̜], *-os* [os] ~ [ʊ̜s] > [ˈsɑ·kʲɪ̡] ~ *sake* ('told'), [ˈlɑ·pʲɪ̡s] ~ *lapės* ('foxes'), [ˈsɑ·kʊ̜] ~ *sako* ('says'), [ˈʃɑ·kʊ̜s] ~ *šakos* ('branches')

North-Western Aukštaitians

-ė [e] ~ [ɛ], *-ės* [es] ~ [ɛs], *-o* [o] ~ [ɑ], *-os* [os] ~ [ɑs] > [ˈsɑ·kʲɛ] ~ *sake* ('told'), [ˈlɑ·pʲɛs] ~ *lapės* ('foxes'), [ˈsɑ·kɑ] ~ *sako* ('says'), [ˈʃɑ·kɑs] ~ *šakos* ('branches')

Western Dzūkians

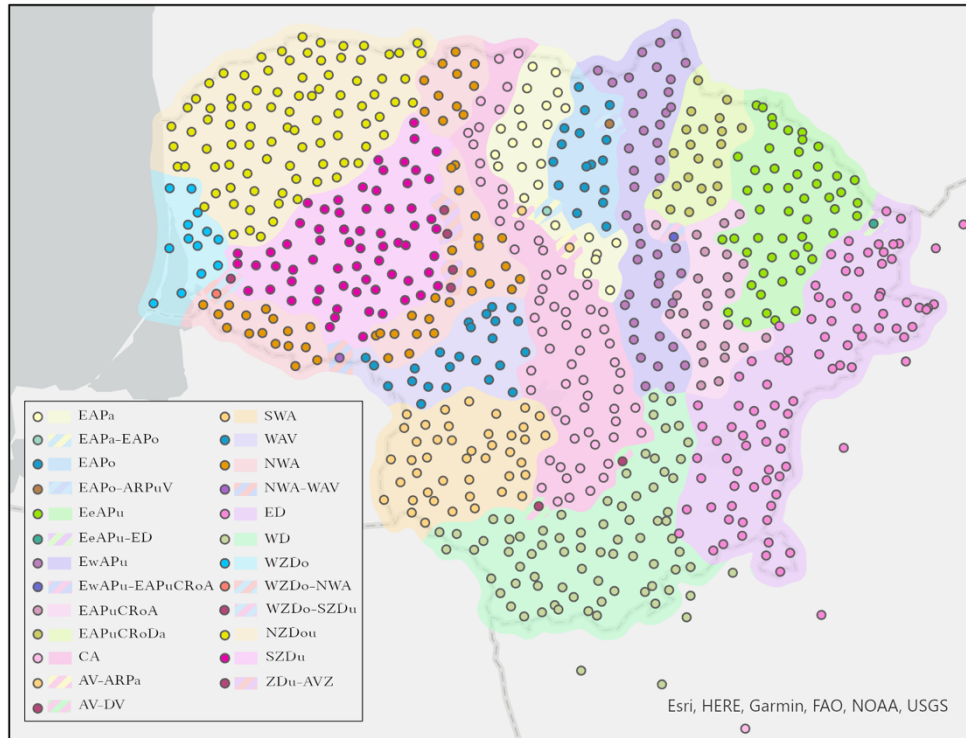*-t-, -d-, -tv-* [tʊ], *-dv-* [dʊ] ~ [ts], [dz] > [ˈnɑ·kʲtsʲi·] ~ *naktį* (sg. acc. of 'night'), [ˈmʲæ·dzʲɪs] ~ *medis* ('tree'), [ˈdzʲʊʲɪ] ~ *dvi* (fem. plur. of 'two')

	Eastern Dzūkians
	-t-, -d-, -tv- [tʊ], *-dv-* [dʊ] ~ [ʦ], [ʣ] > [ˈnɑ·kʲʦʲi·] ~ *naktį* (sg. acc. of 'night'), [ˈmʲæ·ʣʲɪs] ~ *medis*('tree'), [ˈʣʲʊʲɪ] ~ *dvi* (fem. plur. of 'two')
	án- [ˈˈɑ·n], *-añ-* [²ˈɑn·], *-an-* [ɑn] ~ [u·n], [o̜n] > [¹ˈlu·ŋgɑs] ~ *langas* ('window'), [²ˈro̜ŋ·ko̜] ~ *ranką* (sg. acc. of 'hand'), [ˈdo̜ŋgʊs] ~ *dangus* ('sky')
Žemaitians	**Western Žemaitians (*donininkai*)**
	-uo- [ʊɔ] ~ [o̜ː] > [¹ˈdo̜ːnǎ] ~ *duona* ('bread')
	-ie- [ɪɛ] ~ [e̜ː] > [¹ˈsʲʊʲe̜ːstǎs] ~ *sviestas* ('butter')
	Northern Žemaitians (*dounininkai*)
	-uo- [ʊɔ] ~ [o̜ʊ] > [¹ˈdo̜ʊnǎ] ~ *duona* ('bread')
	-ie- [ɪɛ] ~ [e̜ɪ] > [¹ˈsʲʊʲe̜ɪsʦ] ~ *sviestas* ('butter')
	Southern Žemaitians (*dūnininkai*)
	-uo- [ʊɔ] ~ [uː] > [¹ˈduːnɑ] ~ *duona* ('bread')
	-ie- [ɪɛ] ~ [iː] > [¹ˈsʲʊʲiːsʦ] ~ *sviestas* ('butter')

Table 5. Features chosen by Antanas Salys for classifying Lithuanian dialects

2.3.2 Classification of dialects and subdialects

Like Jaunius, Salys categorised the entire area of the Lithuanian language into dialects and subdialects, including the dialects spoken by the Lithuanians living in the territories of former East Prussia. Salys identified twelve subdialects of Aukštaitian and three variants of Žemaitian (Map 3).

○ EAPa	○ SWA
○ EAPa-EAPo	○ WAV
○ EAPo	○ NWA
○ EAPo-ARPuV	○ NWA-WAV
○ EeAPu	○ ED
○ EeAPu-ED	○ WD
○ EwAPu	○ WZDo
○ EwAPu-EAPuCRoA	○ WZDo-NWA
○ EAPuCRoA	○ WZDo-SZDu
○ EAPuCRoDa	○ NZDou
○ CA	○ SZDu
○ AV-ARPa	○ ZDu-AVZ
○ AV-DV	

Map 3. Dialects as classified by Antanas Salys (for explanations of abbreviations, see Table 2)

Salys created the name of each subdialect by adding a geographical reference (cardinal direction) to the name of the main dialect, e.g., Western Aukštaitians, Central Aukštaitians, Eastern Aukštaitians. These subdialects were further divided into smaller categories, labelled with a combination of two geographical names (or two geographical names combined with the name of the locality). An example is the Western Aukštaitian subdialect, split further into North-Western Aukštaitians, South-Western Aukštaitians and Western Aukštaitians of Veliuona.

Admittedly, Salys was not always consistent when naming the individual subdialects, using nickname-based labels on several occasions. For example, in his classification the South-Western Aukštaitian subdialect was called *kapsai* (based on the pronunciation of *kaip* ('how') as *kap*) or *zanavykai* (meaning 'the ones living on the other side of the river Nova').

The breakdown of Eastern Aukštaitians is even more complex and is based on the pronunciation of the word *pantis* ('clog'). The subdialect was divided into *pantininkai* (pronounced *pantis*), *pontininkai* (*pontis*) and *puntininkai* (*puntis*) (Salys

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1992: 116). Some speakers of the *puntininkai* variant pronounced the *a* in *ratai* ('wheels') with a hint of *o* and were therefore called *rotininkai*. Other variants were labelled according to their pronunciation of *dėdė* ('uncle'), e.g., *dadininkai*.

The Žemaitian dialect in Salys' classification was divided into smaller subdialects, according to their pronunciation of the word *duona* ('bread'): *dūnininkai* (pronounced *dūna*), *dounininkai* (*douna*) and *donininkai* (*dona*) (Table 6).

Dialect	Subdialect	Legend Abbreviation
Aukštaitians	Eastern Aukštaitians (*pantininkai*)	EAPa
	Eastern Aukštaitians (*pontininkai*)	EAPo
	Eastern (East) Aukštaitians (*puntininkai*)	EeAPu
	Eastern (West) Aukštaitians (*puntininkai*)	EwAPu
	Eastern Aukštaitians (*puntininkai*) Central *rotininkai* of Anykščiai	EAPuCRoA
	Eastern Aukštaitians (*puntininkai*) Central *rotininkai* (*dadininkai*)	EAPuCRoDa
	Central Aukštaitians	CA
	South-Western Aukštaitians	SWA
	Western Aukštaitians of Veliuona	WAV
	North-Western Aukštaitians	NWA
	Western Dzūkians	WD
	Eastern Dzūkians	ED
Žemaitians	Western Žemaitians (*donininkai*)	WZDo
	Northern Žemaitians (*dounininkai*)	NZDou
	Southern Žemaitians (*dūnininkai*)	SZDu

Table 6. Classification of Lithuanian Dialects by Antanas Salys

Salys' most significant contribution was designing a network of residential points for his *Word Geography* which was used to collect dialect materials for the *Atlas of the Lithuanian Language* after WWII (see Morkūnas 1977; 1982; 1991). Therefore, Salys' legacy continued, even after his dialect classification fell out of use due to certain political factors and the cumbersome names of subdialects.

2.4 Zigmas Zinkevičius and Aleksas Girdenis (1966)

Following the departure of Salys to the West (and later to the US) after the end of WWII, his name was gradually forgotten in Lithuania, which was by then part of the Soviet Union. A new dialect classification was required. It was developed by two prominent academics of Vilnius University: Zigmas Zinkevičius (1925-2018), a famous researcher of Lithuanian language history, and Aleksas Girdenis (1937-2011), the founder of the phonological school in Lithuania. Their classification system was based on phonetic (phonological) features of Lithuanian dialects (Girdenis, Zinkevičius 1966: 139-147).

Compared to Salys' classification, the system developed by Zinkevičius and Girdenis had certain (geographical) differences. It included only the territory of the Lithuanian SSR (there were no remaining compact Lithuanian-speaking communities left in the oblast of Kaliningrad after WWII). Furthermore, the new classification used a more scientific labelling of subdialects, based on the names of larger towns and cities in the areas researched.

The territorial aspect of dialect speech distribution was also highlighted in Zinkevičius' *Lithuanian Dialectology* (1966), a fundamental study in Lithuanian dialect research, reflecting the principles of historical dialectology (Zinkevičius 1966). In addition to discussing the spread of dialect phonetic and morphological features as well as illustrating it with 75 maps, Zinkevičius' work provides valuable material for analysing the historical development of these features. This study paved the way for further research into the history of the Lithuanian language.

Girdenis' phonological school of Lithuanian dialectology was based on the principles of structuralism: a new concept of language and speech (content and aspect of a sign), synchrony and diachrony, paradigmatics and syntagmatics, as well as the application of new research methods (distribution analysis, binary (dichotomous) division, functional sentence perspective, etc.) (Girdenis 2014). The school of Girdenis significantly expanded the boundaries of descriptivism, applying precise machine calculation methods (subsequently, computer) to experimental dialect phonetics. It must be noted that Girdenis and his followers were not averse to using some of the

traditional principles dating back to the Neogrammarian period. For example, informants were being selected based on the NORM (*non-mobile older rural male*) criteria, while dialects were mostly researched by native speakers.

The new dialect classification was adopted by the linguists behind the *Atlas of the Lithuanian Language*, three volumes of which were published during this period: *Lexis* (1977), *Phonetics* (1982) and *Morphology* (1991) (Morkūnas 1977; 1982; 1991).

2.4.1 Framework: Isoglottic dialectology

Zinkevičius and Girdenis based their classification on the principles of structural phonology, identifying relevant phonological (phonetic) features (see Table 7). All dialects and subdialects were classified according to the distribution and prosody of vocalisms' isophone lines, completely disregarding consonantism which had not been the case with previous research.

The Žemaitian dialect is categorised into five subdialects, while Aukštaitian is split into nine dialect variants. Only two subdialects – Western Aukštaitian and Southern Aukštaitian – were not subdivided further.

Aukštaitians	Žemaitians
-uo- [ʊɔ] ~ [ʊɔ] > [¹'duɔnɑ] ~ *duona* ('bread')	*-uo-* [ʊɔ] ~ [uː], [ǫʊ], [ǫ:] > [¹'duːnɑ], [¹'dǫʊnǎ], [¹'dǫːnǎ] ~ *duona* ('bread')
-ie- [ɪɛ] ~ [ɪɛ] > [¹'sʲʊʲiɛstɑs] ~ *sviestas* ('butter')	*-ie-* [ɪɛ] ~ [iː], [ęɪ], [ę:] > [¹'sʲʊʲiːsts], [¹'sʲʊʲęɪsts], [¹'sʲʊʲę:stǎs] ~ *sviestas* ('butter')
Southern Žemaitians of Varniai and Raseiniai	**Northern Žemaitians of Kretinga and Telšiai, Western Žemaitians**
-uo- [ʊɔ] ~ [uː] > [¹'duːnǎ] ~ *duona* ('bread');	*-uo-* [ʊɔ] ~ [ǫʊ], [ǫ:] > [¹dǫʊnǎ], [¹dǫːnǎ] ~ *duona* ('bread')
-ie- [ɪɛ] ~ [iː] > [¹'sʲʊʲiːsts] ~ *sviestas* ('butter')	*-ie-* [ɪɛ] ~ [ęɪ], [ę:] > [¹sʲʊʲęɪsts], [¹'sʲʊʲę:stǎs] ~ *sviestas* ('butter')
Northern Žemaitians of Kretinga and Telšiai	**Western Žemaitians**
-uo- [ʊɔ] ~ [ǫʊ] > [¹dǫʊnǎ] ~ *duona* ('bread')	*-uo-* [ʊɔ] ~ [ǫ:] > [¹'dǫːnǎ] ~ *duona* ('bread')
-ie- [ɪɛ] ~ [ęɪ] > [¹'sʲʊʲęɪsts] ~ *sviestas* ('butter')	*-ie-* [ɪɛ] ~ [ę:] > [¹'sʲʊʲę:stǎs] ~ *sviestas* ('butter')
Southern Žemaitians of Raseiniai, Western Aukštaitians of Kaunas and Šiauliai, Southern Aukštaitians	**Southern Žemaitians of Varniai, Eastern Aukštaitians of Kupiškis, Panevėžys, Utena, Anykščiai, Širvintos, and Vilnius**

-añ- [ɑn] ~ [ɑn] > [²ˈrɑŋ·kɑː] ~ *ranką* (sg. acc. of 'hand')	*-añ-* [ɑn] ~ [ʊn], [ǫn] > [²ˈrʊŋ·kɑ] / [²ˈrǫŋ·kǫ] ~ *ranką* (sg. acc. of 'hand')
Eastern Aukštaitians of Širvintos, Vilnius, Panevėžys, and Utena	**Eastern Aukštaitians of Kupiškis and Anykščiai**
-ã- [ɑ] ~ [ɑ] > [ˈlɑːpʲeː] ~ *lapė* ('fox')	*-ã-* [ɑ] ~ [ɔ·] > [ˈlɔːpʲĕː] ~ *lapė* ('fox')
Eastern Aukštaitians of Utena and Vilnius	**Eastern Aukštaitians of Širvintos and Panevėžys**
-ie- [ɪɛ] ~ [ɛ·] / [ɪɛ] > [βʲɛ·ˈnʲɛ·lʲi·s] / [βʲɪɛ·ˈnʲɛ·lʲi·s] ~ *šienelis* (dim. of 'hay')	*-ie-* [ɪɛ] ~ [ɛ] / [ę̇] / [ɪ̯] > [βʲɛ·ˈnʲɛ·lʲɪ̯s] / [βʲę̇·ˈnʲɛ·lʲi·s] / [βʲɪ̯ˈnʲɛ·lʲɪ̯sʲ]~ *šienelis* (dim. of 'hay')
Western Aukštaitians of Kaunas and Šiauliai	**Southern Aukštaitians**
-ą- [ɑː] ~ [ɑː] > [¹ˈkɑːsʲnʲɪs] ~ *kąsnis* ('bite')	*-ą-* [ɑː] ~ [uː] > [¹ˈkuːsʲnʲɪs] ~ *kąsnis* ('bite')
Western Aukštaitians of Kaunas	**Western Aukštaitians of Šiauliai**
no accent retraction: [gʲiˈʊɑ] ~ *gyva* (fem. sg. of 'alive')	accent retraction: [ˈgʲiːʊɑ] ~ *gyva* (fem. sing. of 'alive')
Northern Žemaitians of Telšiai	**Northern Žemaitians of Kretinga**
-u- [ʊ] ~ [ʊ] / [ǫ] > [ˈdʊˌrʲĭs] / [ˈdǫˌrʲĭs] ~ *duris* (pl. acc. of 'door')	*-u-* [ʊ] ~ [ǫ] > [ˈdǫˌrʲĭs] ~ *duris* (pl. acc. of 'door')
Eastern Aukštaitians of Anykščiai	**Eastern Aukštaitians of Kupiškis**
-ė- [e] ~ [ę̇ː] > [¹ˈtʲę̇ːʊɑs] ~ *tėvas* ('father')	*-ė-* [e] ~ [ę̇ː] / [ɑː] > [¹ˈtʲę̇ːʊɑs] / [¹ˈtɑːʊɑs] ~ *tėvas* ('father')
Eastern Aukštaitians of Širvintos	**Eastern Aukštaitians of Panevėžys**
-à [ɑ]: *-ù* [ʊ] ~ [ɑ]; [ʊ] (no accent retraction) > [ʃɑˈke] ~ *šaka* ('branch'); [mʲɪˈʃkʊ] ~ *mišku* (sg. abl. of 'forest')	*-à* [ɑ]: *-ù* [ʊ] ~ [ʊ̯] / [ă]; [ʊ̯] / [ʊ̯̆] with accent retraction > [ˈʃɑkʊ̯] / [ˈʃɑkă] ~ *šaka* ('branch'); [ˈmʲɪʃk ʊ̯] / [ˈmʲɪʃkʊ̯̆] ~ *mišku* (sg. abl. of 'forest')
Eastern Aukštaitians of Vilnius	**Eastern Aukštaitians of Utena**
-ie- [ɪɛ] ~ [ɪɛ] > [βʲɪɛ·ˈnʲɛ·lʲi·s] ~ *šienelis* (dim. of 'hay')	*-ie-* [ɪɛ] ~ [ɛ·] > [βʲ ɛ·ˈnʲɛ·lʲɪ̯s] ~ *šienelis* (dim. of 'hay')

Table 7. Features chosen by Zigmas Zinkevičius and Aleksas Girdenis for classifying Lithuanian dialects

2.4.2 Classification of traditional dialects and subdialects

Zinkevičius and Girdenis developed a consistent labelling system for subdialects by adding geographical names (cardinal directions) to the names of the two main dialects (Western/Northern/Southern Žemaitians and Western/Eastern/Southern Aukštaitians) (Map 4).
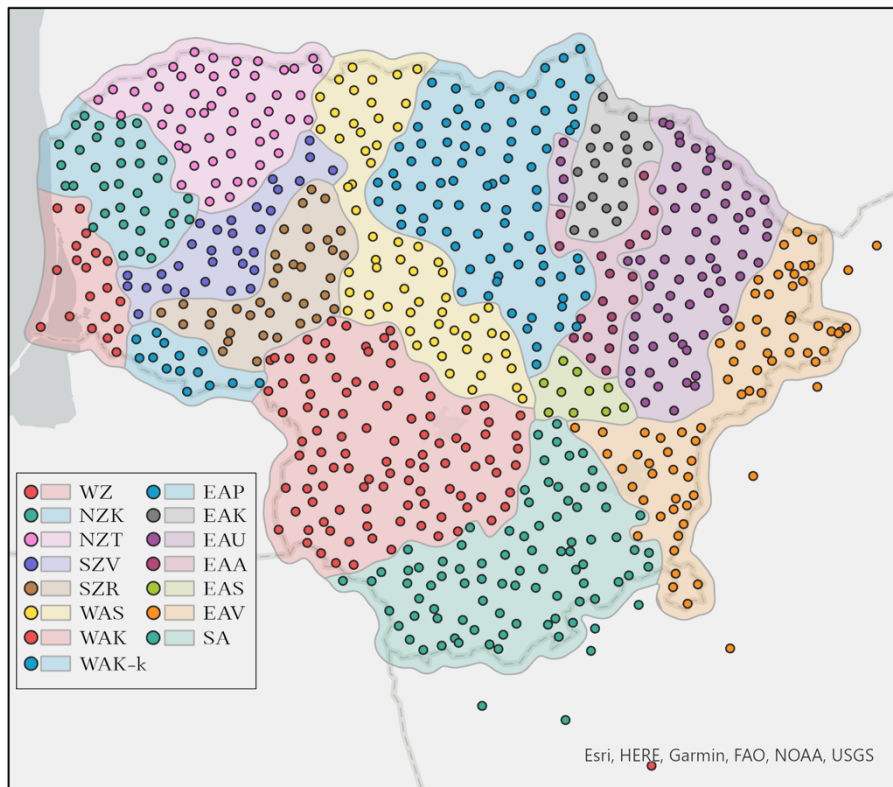
Map 4. Dialects as classified by Zigmas Zinkevičius and Aleksas Girdenis

The names of larger towns or district centres were used for labelling further subdivisions, e.g., Northern Žemaitians of Kretinga were distinguished from Northern Žemaitians of Telšiai, while Southern Žemaitians were labelled as Southern Žemaitians of Raseiniai and Southern Žemaitians of Varniai.

The highest number of subdialects were identified within the Eastern Aukštaitian area: Eastern Aukštaitians of Vilnius, Eastern Aukštaitians of Utena, Eastern Aukštaitians of Anykščiai, Eastern Aukštaitians of Kupiškis, Eastern Aukštaitians of Panevėžys and Eastern Aukštaitians of Širvintos (Table 8).

Dialect	Subdialect	Legend Abbreviation
Žemaitians	Western Žemaitians	WZ
	Northern Žemaitians of Kretinga	NZK
	Northern Žemaitians of Telšiai	NZT
	Southern Žemaitians of Varniai	SZV
	Southern Žemaitians of Raseiniai	SZR
Aukštaitians	Western Aukštaitians of Šiauliai	WAS
	Western Aukštaitians of Kaunas	WAK
	Western Aukštaitians of Klaipėda region	WAK-k
	Eastern Aukštaitians of Panevėžys	EAP
	Eastern Aukštaitians of Kupiškis	EAK
	Eastern Aukštaitians of Utena	EAU
	Eastern Aukštaitians of Anykščiai	EAA
	Eastern Aukštaitians of Širvintos	EAS
	Eastern Aukštaitians of Vilnius	EAV

Table 8. Lithuanian dialects and subdialects according to Zigmas Zinkevičius and Aleksas Girdenis

2.5 Mikulėnienė et al. (2014)

The monitoring of all 735 Lithuanian Atlas points, conducted during 2011-2014, revealed the existence of new dialect derivations – regiolects and geolects – across the entire territory of Lithuania. Several geolectal zones were identified (Mikulėnienė & Meiliūnaitė 2014).

2.5.1 Framework: Isoglottic, perceptual and quantitative dialectology

The multimodal method of researching local linguistic variants is based not only on specific local dialect characteristics but also on the analysis of the linguistic landscape and the sociocultural networks of residents, their views on their own local dialect and its usage (Mikulėnienė 2020: 11-33; 2020: 8-27). This research showed that the local variants which are vibrant from a territorial point of view continue to expand. Various processes of convergence with nearby dialects as well as with Standard Lithuanian are also having a modifying effect on the map of traditional dialects.

These new dialect derivations are currently being defined by Lithuanian linguists only in geographical terms since the users of these variants often no longer retain the defining dialect characteristics. This means that less-prominent characteristics become

the distinguishing features of that variety. Equally, it is no longer sufficient to use phonetic (phonological) features for identifying linguistic regiolects. Any territorial, phonetic (phonological) attributes (markers) must be supplemented with relevant morphological, lexical, or syntactic features and constructions. Therefore, the current research is focused on all dialect features (markers) as a whole.

2.5.2 Classification of new dialect derivations

Regional dialects (regiolects) are forming around the larger, more attractive centres based on traditional Lithuanian dialects and often include more than one subdialect area. The geolectal zones observed within these territories also exhibit some of the best-preserved features of traditional (sub)dialects (Mikulėnienė & Meiliūnaitė 2014). The new formations are characterised by varying degrees of sustainability, from strong to transitional (Map 5 and Table 9).
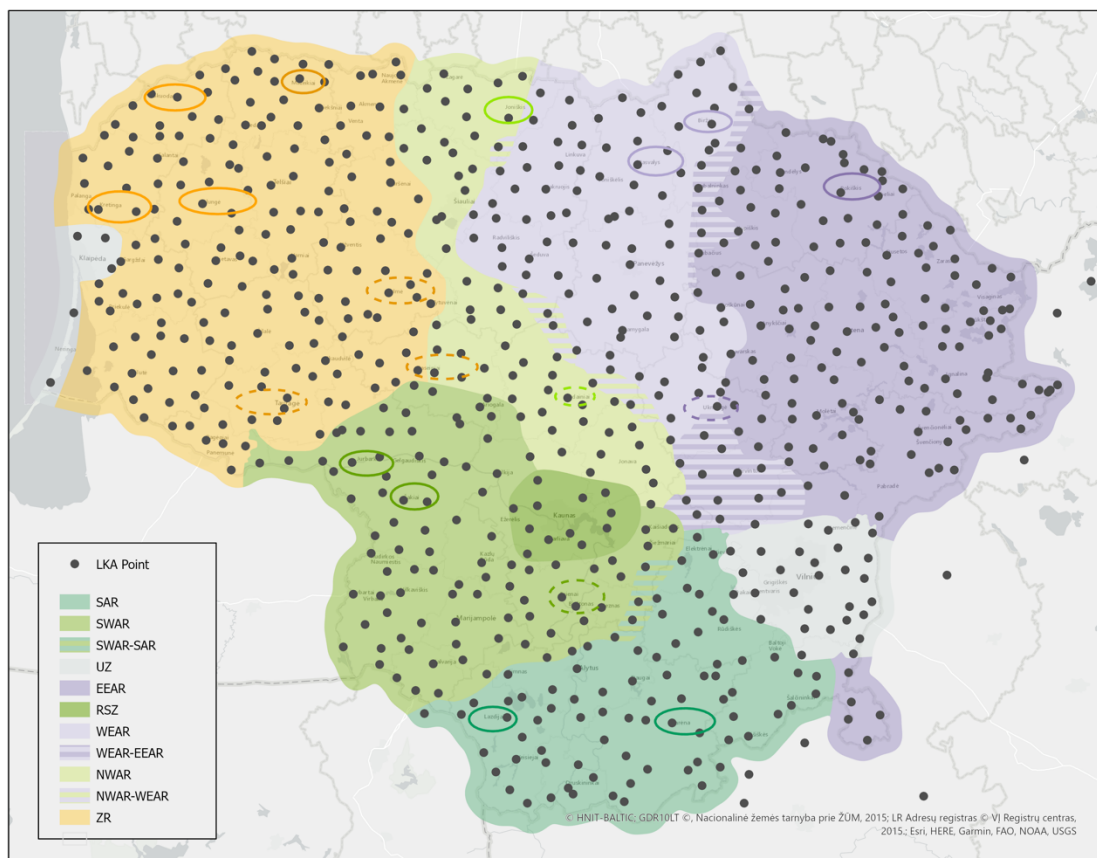
Map 5. New dialect derivations (Mikulėnienė & Meiliūnaitė 2014)

The extent to which a variant is transitional depends on certain linguistic as well as sociocultural elements characteristic to local communities.

Regiolect	Legend Abbreviation	Geolect
South Aukštaitian Regiolect (Centre: Alytus)	SAR	Geolect of Lazdijai (stable)
		Geolect of Varėna (stable)
South-Western Aukštaitian Regiolect (Centre: Marijampolė)	SWAR	Geolect of Šakiai (stable)
		Geolect of Jurbarkas (stable)
		Geolect of Prienai (transitional)
Eastern East Aukštaitian Regiolect (Centre: Utena)	EEAR	Geolect of Rokiškis (stable)
Western East Aukštaitian Regiolect (Centre: Panevėžys)	WEAR	Geolect of Biržai (stable)
		Geolect of Pasvalys (stable)
		Geolect of Ukmergė (transitional)
North-Western Aukštaitian Regiolect (Centre: Šiauliai)	NWAR	Geolect of Joniškis (stable)
		Geolect of Kėdainiai (transitional)
Žemaitian Regiolect	ZR	Geolect of Skuodas (stable)

(Centre: Telšiai)	Geolect of Mažeikiai (stable)
	Geolect of Kretinga (stable)
	Geolect of Plungė (stable)
	Geolect of Tauragė (transitional)
	Geolect of Kelmė (transitional)
	Geolect of Raseiniai (transitional)

Table 9. New dialect derivation (regiolects and geolects)[2]

3. Discussion

The various dialect classification systems developed throughout the entire period of Lithuanian dialectology can be compared according to the following aspects: 1) the spread of linguistic (dialect) variants, i.e. the territorial aspect; 2) the distinguishing features compared to other variants (the markedness aspect); and 3) the relationship between a linguistic (dialect) variant and the written (from mid-20th century – standard) language, i.e. the normative aspect (Mikulėnienė 2018: 20).

Comparing the early, traditional classifications according to the afore-mentioned criteria, their contribution to Lithuanian dialectology is significant. Baranauskas identified specific phonetic features and applied the Neogrammarian principles in his classification, while Salys managed to categorise the entire area of the Lithuanian language into separate dialects and create the residential point network for the *Atlas of the Lithuanian Language* (Morkūnas 1977, 1982, 1991). Zinkevičius and Girdenis specified the boundaries between the dialects, as well as identifying their differentiating features and creating a consistent labelling system.

Qualitative and quantitative analysis of all previous classifications shows that discrepancies between the different systems could have occurred due to multiple factors (Table 10 and Maps 6-8).

Firstly, all classification systems are asymmetrical with respect to time and place. Each of them is based on a slightly different area of the Lithuanian language. This is particularly true in the case of the linguistic variant of Kaunas. Salys included the entire

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[2] UZ – Urban Zone, RSZ – Regional Standart Zone.

area of the Lithuanian language in his classification, therefore managing to identify a more linguistically and geographically accurate basis for the Western Aukštaitian subdialect. This was subsequently confirmed by Zinkevičius and Girdenis.

Secondly, some of the discrepancies may have been caused by certain linguistically challenging dialect zones which existed during each of the classification periods, e.g., the transitional areas and dialect variants used in the southern part of Lithuania.

The dendrograms illustrating point connections in all three classification periods confirm that both Žemaitian and Aukštaitian points within the researched areas were being grouped together in the order of weakening dialecticism or individualization: from strong, traditionally Žemaitian or Aukštaitian points to several (sub)dialects or localities displaying certain specific features. This principle is not affected by the method of clustering.

The discrepancies identified between the earlier classifications require a more extensive quantitative and qualitative investigation.

Table 10. The development of theoretical systems of Lithuanian dialectology

Period	Dialect Classification	Theoretical Basis	Distinctive Features
Late 19th – early 20th c.	Dialect classification by Antanas Baranauskas	Neogrammarian theory of language change	Not specified by author
Mid-20th c.	Scientific dialect classification by Antanas Salys	Comparative historical linguistics	Distinctive vowel and consonant system
2nd half 20th c.	Dialect classification by Zigmas Zinkevičius and Aleksas Girdenis	Structuralist principles of Aleksas Girdenis' school of phonology	Vowel and consonant system (full set of phonological features)
Early 21st c.	Geolinguistic classification of new dialect derivations	Multimodal dialectology	Dialecticism markers (full set)

Map 6. Quantitative assessment of Antanas Baranauskas' dialect classification (Mikulėnienė et al. 2019: 219-291).
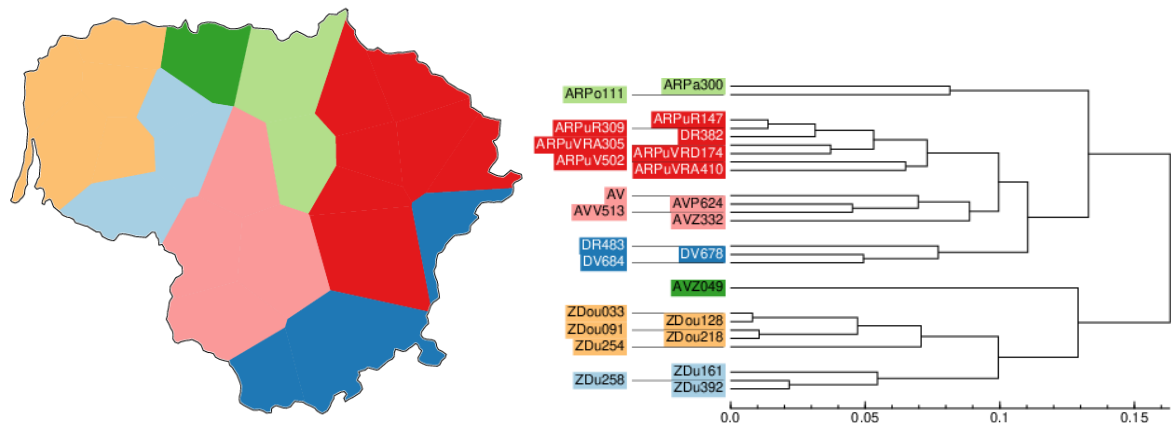
Map 7. Quantitative assessment of Antanas Salys' dialect classification (Mikulėnienė et al. 2019: 291)
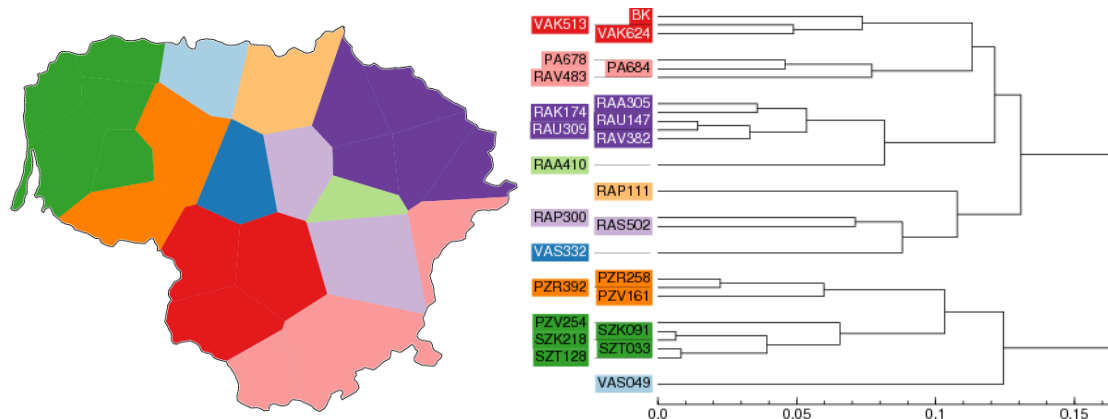
Map 8. Quantitative assessment of dialect classification by Zigmas Zinkevičius and Aleksas Girdenis, showing the currently existing new dialect derivations (regiolects) (Mikulėnienė et al. 2019: 209).

4. Conclusions

Changing dialects and new dialect derivations (both the existing ones and those which are currently emerging) inevitably have an impact on the theoretical and methodological approaches followed by Lithuanian linguists today. Multimodal dialectology, which includes perceptive dialectology as well as quantitative methods, is currently the dominant discourse amongst researchers of Lithuanian dialects. It is used as the basis for assessing traditional dialect classifications.

The perceptive classification of Lithuanian dialects which is currently being developed will be based on the materials and research data collected by Aliūkaitė et al. 2017, 2020.

The quantitative classification of Lithuanian dialects currently in development will be based on the materials and research data collected by Mikulėnienė et al. 2019. Designed using the tools of geographic information systems (GIS), the new classification will also refer to the data of actual language usage.

All Lithuanian dialect classifications, as well as the latest visual, audio, survey, and other data, are stored and made available to the public in a GIS-based database of Lithuanian local language variants, or Tarmynas (for more information see Čepaitienė & Mikulėnienė 2021).

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