The future of dialects

Selected papers from Methods in Dialectology XV

Edited by

Marie-Hélène Côté

Remco Knooihuizen

John Nerbonne

Language Variation 1

language science press

Language Variation

Editors: John Nerbonne, Dirk Geeraerts

In this series:

1. Côté, Marie-Hélène, Remco Knooihuizen and John Nerbonne (eds.). The future of dialects.

The future of dialects

Selected papers from Methods in Dialectology XV

Edited by

Marie-Hélène Côté

Remco Knooihuizen

John Nerbonne

language science press

Marie-Hélène Côté, Remco Knooihuizen & John Nerbonne (eds.). 2016. *The future of dialects*: *Selected papers from Methods in Dialectology XV* (Language Variation 1). Berlin: Language Science Press.

This title can be downloaded at:
http://langsci-press.org/catalog/book/81

ISBN: 978-3-946234-18-0 (Digital)
978-3-946234-19-7 (Hardcover)
978-3-946234-20-3 (Softcover)

Cover and concept of design: Ulrike Harbort
Typesetting: Remco Knooihuizen, Felix Kopecky, John Nerbonne, Sebastian Nordhoff, Oscar Strik
Illustration: The authors, Adam Liter, Sebastian Nordhoff
Proofreading: Željko Agić, Mario Bisiada, Alireza Dehbozorgi, Carola Fanselow, Martin Haspelmath, Andreas Hölzl, John Judge, Felix Kopecky, Sebastian Nordhoff, Mathias Schenner, Alec Shaw, Debora Siller, Benedikt Singpiel
Fonts: Linux Libertine, Arimo, DejaVu Sans Mono
Typesetting software: XeLaTeX

Language Science Press
Habelschwerdter Allee 45
14195 Berlin, Germany
langsci-press.org

Storage and cataloguing done by FU Berlin

Contents

1 Dialect levelling and changes in semiotic space
Ivana Škevin **3**

Indexes **29**

remove non-humans from name index

Chapter 1

Dialect levelling and changes in semiotic space

Ivana Škevin
University of Zadar

The Betina variety is a local Čakavian Croatian variety spoken on the island of Murter in central Dalmatia. The influence of Romance languages has left visible traces on the island's vocabulary, just as it has in many other Čakavian varieties of the Eastern Adriatic coast. The Betina variety, through contact with other, more dominant dialectal varieties or the Croatian standard variety, and as a consequence of language accommodation, is losing many of its most salient, mostly Romance, characteristics. This process is leading to a loss of local distinctiveness. The paper proposes a semiotic approach to the problem of dialect levelling. It assumes that it occurs not only because of language accommodation, but also as a consequence of the alteration and transformation of the culture and of the ways of life referred to as semiotic spaces. Since a language or dialect can function only in interaction with its semiotic space, its change leads to language change. The analysis was conducted on a collection of words of Romance origin and involved interviews with young speakers living in Betina. The results of this study are expected to confirm that in Betina, particularly in the vocabulary of young speakers, Romance elements are disappearing. It occurs as a consequence of the disappearance of human practices and of utilitarian and sociocultural objects that once had an important role and which used to create very particular and distinctive semiotic spaces.

1 Introduction

Over the centuries, our needs as humans change. The objects we use and the activities we engage in disappear and get (re)constructed. Our way of life changes together with the ways in which we make a living, eat, get our food, and dress. All these components of life are intimately connected. One cannot exist without the other. They all create meaning and are generally considered to be secondary

modeling systems. These systems are secondary in relation to the primary system of language because, like all semiotic systems, they are constructed on the model of language (**lotman_culture_2009**). It is possible to suggest that, in reality, clear and functionally mono-semantic systems do not exist in isolation. No one system, in fact, is effective when taken individually. The starting point of this research is Lotman's assumption that, without the semiosphere-that is, the semiotic space of the culture in question-language not only does not function but does not exist (Lotman 1985 [2015]: 218–219). Accordingly, the current article deals with linguistic and semiological signs. **barthes_elements_1968** claims that a semiological sign, like its linguistic model, comprises a signifier and a signified, but that it differs from a linguistic sign at the level of the substance of its expression, the essence of which is not to signify but to have function and utility in everyday use.

2 Linguistic, historical, geographic and socioeconomic background

The Croatian language has three main groups of dialects: *Kajkavian*, *Čakavian*, and *Štokavian*. Their names derive from the form of the interrogative pronoun (*kaj*, *ča*, and *što* 'what') used in each dialect. Standard Croatian is based on Štokavian. The dialects of the Čakavian group, one of which is the subject of this study, are spoken along the East Adriatic Coast. Čakavian has many local varieties, which vary in terms of accentuation, morpho-syntax, or lexicon. The local dialect spoken in Betina belongs to the group of Southern Čakavian Ikavian varieties. In the Ikavian varieties the reflex of the Slavic *jat* phoneme is /i/, and in standard Croatian it is /ije/ or /je/. Thus, in Ikavian, we have *lipa divojka* 'beautiful girl', as opposed to the Croatian standard form *lijepa djevojka*. One of the main characteristics of Betina dialect, which it shares with most other Čakavian varieties, is that a significant portion of its technical vocabulary in specific fields is of Romance origin.[1] Romance lexical elements originate from the now extinct Dalmatic languages as well as from old dialectal varieties of Italian that functioned as proper languages in past centuries (Venetian and Triestine, as

[1] Research undertaken in 2008, 2009, and 2010 has revealed that in the Betina dialect, loanwords of Romance origin account for 61.96% of fishing terminology, 65.12% of maritime terminology, 29.41% of wine terminology, 36.73% of olive cultivation terminology, 57.14% of barrel-making terminology, and finally, 61.54% of agricultural terminology (tools and maintainance of arable land) (**skevin_etimoloska_2010**).

Figure 1: The location of Betina.

well as Italian).[2] Previous research and etymological analysis have shown that a great majority of the loanwords used in the Čakavian variety of Betina are of Venetian origin (**filipi_betinska_1997**; **skevin_etimoloska_2010**). Croatians borrowed from the Venetians the objects and the corresponding words they needed to understand and sail the sea, to build boats, and to cultivate wine and olives, thus creating their semiotic space. The borrowed words naming these everyday needs and ways of life became integral lexical forms and structures of the Čakavian Croatian Adriatic varieties.

This research concentrates on the case of Betina, though we claim that in fact it reflects the dialectal situation of many other small local varieties of central

[2] Dalmatic languages were spoken on the eastern Adriatic coast from the 9th until the 13th century in central Dalmatia, until the 16th century in Dubrovnik, and until the 19th century on the northeastern Adriatic island of Krk. Venetian, very often referred to as Colonial Venetian, was the *lingua franca* of the eastern Adriatic for many centuries. Its influence was the strongest between the early 16th and the late 18th century. After the fall of the Serenissima, Trieste became the centre from which spread a new Venetian variety – Triestine. At the beginning of the 20th century, especially during the First World War, began the expansion of the Italian language, which lasted until the Second World War.

Dalmatia. As shown in Figure 1, Betina is situated on the island of Murter, which stretches in a northwest-southeasterly direction in the Adriatic Sea, in central Dalmatia. Although situated on an island, we cannot define Betina as an isolated island community, but as part of the Adriatic coast, since it is connected to the mainland by a bridge. The bridge makes it easily accessible and was one of the key factors for the community's rather early development of tourism, which started in the 1960s (**kulusic_murterski_1984**). Betina, the smallest of four villages (the others are Tisno, Jezera and Murter), is situated on the northeastern side of the island. It developed on the edge of the Murter-Betina fertile zone, which extends close to the sea (see Figure 1). The position itself explains the population's extensive orientation towards agriculture in the past (**skracic_otok_2010**). The main economic activities in Betina in 1971 were agriculture, fishing, and the building of traditional wooden boats. Agriculture was the primary activity of most villagers and a source of income because the inhabitants produced fruits and vegetables, olive oil, and wine for sale and for their own needs, whereas fishing served mostly to satisfy the dietary needs of every household. Before the Second World War, there were numerous small private shipyards, which in 1948 were merged into one (**filipi_betinska_1997**).[3] In 2014, besides the main shipyard, there are two smaller ones. Table 1 represents the percentage of the population of Betina working in different economic sectors in the years 1971 and 2001 (**skracic_otok_2010**).

Table 1: Percentage of the population of Betina employed in different economic sectors in the years 1971 and 2001 (**skracic_otok_2010**).

Economic sector	1971	2001
agriculture, fishing	38%	21%
industry (wooden boat building)	30%	18%
service (tourism)	9%	45%
public sector	0%	6%
people working abroad	20%	8%

There was a noticeable decline in the primary (agriculture and fishing) and secondary (industrial) sectors, as well as an increase of 36% in the tertiary sector

[3] In 1926 there were one large and nine small shipyards. Betina's shipyards covered a total of 11,200 square meters, which was greater than the total surface area of shipyards in the rest of Northern Dalmatia, which was 10,330 square meters. In 1930, ten private shipyards were registered in Betina. The 1930s marked the beginning of a crisis in the sector of traditional wooden boat building (**filipi_betinska_1997**).

Table 2: Decrease of the number of people living in Betina from 1971 to 2011 (**skracic_otok_2010** and **drzavni_zavod_za_statistiku_republike_hrvatske_1**)

Year	1971	2001	2011
No. of inhabitants	988	774	697

(tourism), during the period between 1971 and 2001. The population's reorientation to the tertiary sector of the economy led to the abandonment of arable land, excessive urbanization, and the degradation of the natural and cultural identity of the island. As a consequence of these social changes, the dialectal identity of Betina's population changed as well. Besides that, as Table 2 shows, the population of Betina has dropped by almost 30% in the last four decades.

3 Methodology and hypothesis

This study focused on a collection of words of mostly Romance origin, and it involved interviews conducted by the present author (an in-group researcher) with seven young adult speakers (ranging in age from 22 to 40) living in the village of Betina on the island of Murter in central Dalmatia. The questionnaire consisted of 70 lexemes. This collection is a small subset of a much wider corpus collected and registered during interviews with older speakers between the ages of 50 and 90 conducted in Betina during the years 2008, 2009 and 2010 (**skevin_etimoloska_2010**). The lexemes were chosen so that they would belong to different spheres of life: household, maritime and fishing, viticulture and olive cultivation, folklore and church. These are (or at least used to be) very important aspects of the life and culture of Betina.

This study concerns intergenerational variation mainly in connection with the social context of variation and change. It is expected to confirm a hypothesis that in Betina, particularly in the vocabulary of young speakers, the Romance elements are disappearing for two reasons:

1. as a consequence of the local variety's convergence toward the Supraregional Dalmatian Dialect (SRDD) and toward Standard Croatian (SC)

2. as a consequence of the disappearance of human practices and utilitarian objects that once had an important role and which used to create very

specific and distinctive semiotic spaces.

Since a language or a dialect can function only in interaction with its semiotic space, changes in that space should lead to language change.

4 Sociolinguistic and semiotic approach to dialect levelling

The results presented in Table 3 suggest that there is a pattern which determines the speakers' knowledge and usage of the variants. The least-known variants (numbers 1-34, with the exception of the variant *gvantijera* 'a tray') refer to referents or concepts that have lost importance in the daily life of Betina (e.g., *batusić/batusigaj* 'an inside, hollowed-out part at the bottom of a well where water gets trapped', *gaštaldo* 'a person who helps the priest in the church', *štiva* 'the interior part of a boat under the bow') or whose referent is not in use any more (e.g., *bujo(l)* 'a wooden bucket held on traditional Dalmatian boats, used to remove sea water', *burača* 'a leather sack for keeping wine', *dumplir* 'a wooden candlestick carried during a funeral'). The second group of variants (from number 35 onwards), which the users know better and use more often, mostly, but not always, name referents or concepts whose function in everyday life has not changed. These include words that, for example, refer to household objects (such as *prsura* 'a frying pan', *kočeta* a bed', *škabelin* 'a nightstand', *čikara* 'a mug'). In this second group, though, there are also variants that name objects whose function in the daily life of Betina has changed. For example, variants like *škohuni* 'type of shoes worn during work in the fields', *bukara* 'a large wooden wine cup', *brganja* 'a type of a fishing tool', *kajin* 'a round metal vessel used for washing clothes', *pičona* 'a metal cup with a handle' name objects that are out of use, whereas *burtižati* 'to sail into the wind', *paj* 'a scoop used for throwing sea-water out of a boat' and *rehud* 'a sudden, brief gust of wind' name referents or concepts whose role in the daily life of Betina has become less prominent. These results suggest that, contrary to the anticipated hypothesis, a change in the semiotic space does not always lead to dialect change. They also show that in some cases there is a divide between familiarity with a variant and its actual use. For example, all speakers know the meaning of the variants *bruncin* and *kočeta*. However, all of them also declare that they do not use them in any communication situation. In this article we propose two approaches to the challenges of dialect levelling: a sociolinguistic approach, which concerns changes in the use of variants in different social contexts, and a semiotic approach, which concerns change in the way

of life of the community and the transformation of its semiotic spaces.

5 Salience of Romance loanwords

Etymological analysis has revealed that all of the lexical variants listed in Table 3 are of Romance origin, besides *kopanja* and *soha*, which are of Slavic origin, while the origin of the variant *dumplir* is not clear. A systematic approach to the research of Romance loanwords is essential for three reasons. Firstly, they are integral lexical forms and structures of the Čakavian Croatian Adriatic varieties. Secondly, they are a cultural and a linguistic specificity of Betina and of other Čakavian varieties. Thirdly, they, as primary semiotic systems, name everyday needs and ways of life, thus creating and reflecting the cultural and social distinctivness of Betina and of wider Dalmatian semiotic spaces. All of these characteristics make them an expression of the Čakavian language, regional and cultural identity. In some cases, it is not possible to decide whether a dialect feature is salient or not, but in our case it is the variants' Romance origin that makes them overtly stigmatised in comparison with standard Croatian (e.g., *prsura* 'a frying pan' as opposed to SC *tava*; *tangati* 'to dye, such as fishing-nets, clothes', as opposed to SC *bojati*; *čikara* 'a mug' as opposed to SC *šalica*). Some of the Betina examples can be considered stigmatised in comparison with their equivalent SRDD Romance variants as well, such as *loštijera* 'a baking tray' as opposed to the more common variant *roštijera* or to the SRDD *padela*, or *škabelin* 'a night-stand' as opposed to the more common *kantunal*. Their overt stigmatisation in comparison with their SC or SRDD lexical variants makes them more liable to change. **jutronic_spliski_2010** claims that the dialect levelling of Čakavian varieties is mostly caused by the fact that those dialect features which a speaker of a standard or of a dialect variety perceives as socially stigmatised or salient (that is, as some kind of error) first disappear from a dialect. As a rule, stigmatised and salient features disappear faster, while features that are less stigmatised and less salient last longer. Romance loanwords are perceived as markers of geographical differentiation, often in connection with stereotypes, but also as markers of geographic affiliation, when it can play a role in the process of linguistic accommodation among young adult speakers (see **auer_study_2004**). The dialect convergence of the Betina variety towards broader regional dialect varieties or standard Croatian implies the abandonment of Betina features (such as lexemes or accentuation). Thus, dialect levelling in Betina can be manifested in phonetic/accent levelling and in lexical levelling, which concerns the reduction of intrasystemic-especially quantitative lexical-variation.

Table 3: Vitality of lexical variants

	lexeme	meaning	informants who knew the word's meaning		informants who use the word	
			n	%	n	%
1	*brganjaš*	'the wind that favors bottom trawling with a *brganja'*	0	0	0	0
2	*bujo(l)*	'a wooden bucket held/kept on traditional Dalmatian boats, used to remove sea water'	0	0	0	0
3	*goče*	'a part of a fishing net'	0	0	0	0
4	*koslata*	'a type of a barrel vertically placed on a trailer'	0	0	0	0
5	*tinac*	'a type of a vessel similar to *mastač*, but smaller and without handles'	0	0	0	0
6	*batusić/ batusigaj*	'an inside, hollowed-out part at the bottom of a well where water gets trapped, so there's water even when the well is almost empty'	1	14.28	0	0
7	*burača*	'a leather sack for keeping wine'	1	14.28	0	0
8	*dumplir*	'a wooden candlestick carried during a funeral'	1	14.28	0	0
9	*gaštaldo*	'a person who helps the priest in the church'	1	14.28	1	14.28
10	*komoštra*	'one of the metal rings of the chain used to hang pots over the fire'	1	14.28	0	0
11	*murtar*	'a stone container used for storing olive oil. It comes in different sizes'	1	14.28	1	14.28
12	*taraban*	'a church custom that consists in making lots of noise by striking an object with one's hands or with a stick'	1	14.28	0	0
13	*štiva*	'the interior part of a boat under the bow'	2	28.57	2	28.57
14	*butarga*	'fish eggs'	2	28.57	1	14.28
15	*baraškada*	'a small sea storm'	2	28.57	1	14.28

	lexeme	meaning	informants who knew the word's meaning		informants who use the word	
			n	%	n	%
16	*brenda*	'a flat wooden vessel carried on one's back or on a donkey, used for the transportation of grapes'	2	28.57	0	0
17	*buklija*	'a flat wooden wine container'	2	28.57	0	0
18	*kopanja*	'a wooden vessel used for kneading dough'	2	28.57	2	28.57
19	*maškul*	'an iron part of a steering wheel' (**filipi_betinska_1997**)	2	28.57	1	14.28
20	*šijun*	'a squall, a sudden, strong and sharp increase in wind speed'	2	28.57	1	14.28
21	*hildošpanja / fildošpanja*	'wrapping nylon thread (used in fishing)'	3	42.85	3	42.85
22	*bava*	'a very small gust of wind which you can hardly feel'	3	42.85	3	42.85
23	*gvantijera*	'a tray'	3	42.85	0	0
24	*konistra*	'a type of a wicker basket'	3	42.85	3	42.85
25	*mankul*	'a thick wooden post around which a mooring rope is tied (there are usually two, one on each side of the boat)'	3	42.85	0	0
26	*ogrica*	'a shirt, part of the national costume'	3	42.85	3	42.85
27	*soha*	'boat oar holder made of wood'	3	42.85	3	42.85
28	*škapular*	'an image of a saint held around the neck or sewn onto clothes'	3	42.85	3	42.85
29	*zmorac*	NE	3	42.85	2	28.57
30	*lustra*	'fish scales'	4	57.14	2	28.57
31	*kaca*	'a wide wooden vessel used for the transportation of grapes'	4	57.14	0	0
32	*karutula*	'a type of braided cake made for children at Easter'	4	57.14	4	57.14
33	*koha*	'a type of a wicker basket, flat and rounded'	4	57.14	4	57.14
34	*lebić*	'a type of SW wind'	4	57.14	2	28.57
35	*burtižati*	'to sail into the wind'	5	71.43	5	71.43
36	*bušt*	'a red vest, part of the national costume'	5	71.43	5	71.43
37	*dekmar/ drkmar*	'a small anchor-shaped object used to grab and lift a bucket out of a well or a fishing net out of the sea'	5	71.43	5	71.43

	lexeme	meaning	informants who knew the word's meaning		informants who use the word	
			n	%	n	%
38	*puca*	'a stone frame or a kind of a small wall around a well'	5	71.43	4	57.14
39	*bruncin*	'a large cylindrical pot with handles (in the past it hung above the fire)'	6	85.71	0	0
40	*dontrina*	'religious education'	6	85.71	0	0
41	*herijada*	'a small barred window'	6	85.71	0	0
42	*kandelir*	'a candlestick used in church'	6	85.71	6	85.71
43	*kurenat*	'sea current'	6	85.71	4	57.14
44	*lehunara/ lohunara*	'a type of a small fishing net in the form of sack on a long stick'	6	85.71	6	85.71
45	*mastač*	'a type of a vessel with handles used for squeezing grapes and for wine making'	6	85.71	6	85.71
46	*mašte*	'a type of a deep plastic vessel, mostly used for washing clothes'	6	85.71	6	85.71
47	*paj*	'a (usually wooden) scoop used for throwing sea-water out of a boat'	6	85.71	6	85.71
48	*pot, potić*	'a smaller metal bowl with a handle'	6	85.71	6	85.71
49	*škohuni*	'type of shoes worn during work in the fields'	6	85.71	6	85.71
50	*tangati*	'to dye, such as fishing-nets, clothes'	6	85.71	5	71.43
51	*trmuntana/ tremuntana*	'a northern wind'	6	85.71	5	71.43
52	*bukara*	'a large wooden wine cup'	7	100	7	100
53	*gučica*	'undershirt'	7	100	7	100
54	*brganja*	'a type of a fishing tool used to collect different kinds of seashells by dragging it across the sea floor'	7	100	7	100
55	*bublija*	'a round Easter cake, a type of sweet bread'	7	100	7	100
56	*čikara*	'a mug'	7	100	7	100
57	*hrtuna*	'a very strong and sudden storm'	7	100	7	100
58	*intimela*	'a pillowcase'	7	100	7	100

	lexeme	meaning	informants who knew the word's meaning		informants who use the word	
			n	%	n	%
60	*kamara*	'a bedroom'	7	100	0	0
61	*kamenica*	'a large stone container used to store olive oil'	7	100	7	100
62	*kočeta*	'a bed'	7	100	0	0
63	*loštijera*	'a baking tray'	7	100	7	100
64	*pajoli*	'each of the wooden boards that cover the floor of a boat'	7	100	7	100
65	*pičona*	'a metal cup with a handle'	7	100	7	100
66	*prova*	'a bow'	7	100	7	100
67	*prsura*	'a frying pan'	7	100	7	100
68	*rehud*	'a sudden, brief gust of wind'	7	100	7	100
69	*škabelin*	'a nightstand'	7	100	7	100
70	*torkulati/ trkulati*	'to produce olive oil or wine'	7	100	7	100
		Average %		61.42		48.16

6 Linguistic accommodation among young adults

So far, the research undertaken in Betina has shown that young speakers are influenced by the current process of globalisation and language homogenisation (mostly through schools, media, and tourism) and that they use and know significantly fewer Romance loanwords than older speakers. The results of a study done in 2011 (**skevin_izmedu_2012**)[4] show a significant decline in the use of Romance loanwords.

The results of the interviews held in 2014 have confirmed the decline in the knowledge and use of the Romance lexical variants. They have shown that 7 interviewed speakers between the ages of 22 and 40 know 61.42% and use 48.16%[5]

[4] This study, conducted in 2011, involved questionnaire-based interviews with 21 speakers living in Betina and belonging to four different generational groups. The questionnaire contained a collection of 100 words of Romance origin, and the informants were asked whether they knew the meanings of the words. The study confirmed that in Betina, particularly in the vocabulary of young speakers, Romance elements are rapidly disappearing.

[5] Both percentages are relative and used for illustrative purposes only because the complexity of speakers' answers cannot be simplified and displayed in numbers. Sometimes they would claim that they would use the variant if they've seen the object that is no longer in use; sometimes they would say that they would use it only in specific situations or only with other speakers of

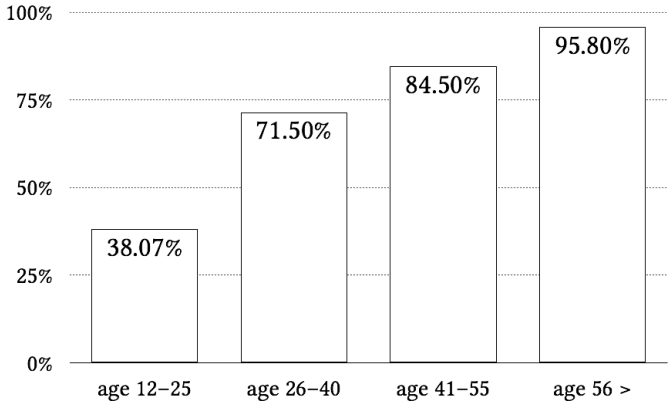


Figure 2: Knowledge and use of Venetian loanwords vs. age of informants (**skevin_izmedu_2012**).

of the words from the questionnaire. The speakers of the Betina dialect in some cases claim to avoid a number of lexical variants, as shown in Table 4. Even though 6 out of 7 speakers know the meaning of words like *bruncin* 'a type of a cooking bowl', *dontrina* 'religious education' and *herijada* 'a small window', they also say that they would never use them in a conversation with speakers of either their own or of another dialect variety because, according to them, these words are rare or no longer used. For the same reason, they claim not to use words like *kamara* 'room' and *kočeta* 'bed'. This means that these Betina variants have already been replaced by SC or SRDD variants. As far as the variants *gučica* 'undershirt', *intimela* 'pillowcase', and *trkulati* 'to produce olive oil' are concerned, they would use them only in conversations with speakers from Betina. This means that, over time, these variants are also likely to be replaced by SRDD or SC expressions.

On the other hand, there are variants (which are listed in Table 5) that can also be considered salient because they are used only in the Betina dialect (e.g., *lohunara/lehunara*) or only in the varieties of the island of Murter (e.g., *bublija*). Still, the speakers claim that they use them in communication with speakers of other varieties. It is unlikely that the speakers are not aware of their markedness, so we can presume that, for some reason, these variants signal the speaker's identity as a member of a group (**chambers_dialectology_2004**).

the Betina dialect. In either of these cases, we would mark their answer as if they had claimed that they use it in all social contexts and situations.

Table 4: Examples of intrasystemic quantitative reduction as a consequence of a convergence toward SRDD and toward SC.

Betina lexical variant	Meaning	No. of informants of the seven interviewed who know the meaning	No. of informants of the seven interviewed who claim to use the word	SRDD variant	SC variant
Variants that have already been replaced by an SRDD or SC variant					
bruncin	'a type of cooking bowl'	6	0	–	*lonac*
dontrina	'religious education'	6	0	–	*vjeronauk*
herijada	'a small window'	6	0	*ponistr(ic)a*	–
kamara	'a room'	7	0	–	*soba*
kočeta	'a bed'	7	0	*posteja*	–
Variants that the speakers use only in conversations with speakers of the Betina dialect. In conversations with other speakers they use either the SRDD or the SC variant					
gučica	'an under-shirt'	7	7	*kanotijera*	*potkošulja*
intimela	'a pillow-case'	7	7	–	*jastučnica*
trkulati	'to produce olive oil'	7	7	*napraviti ulje; (u)činiti uje*	–

Table 5: Examples of divergence

Betina lexical variant	Meaning	No. of informants of the seven interviewed who know the meaning	No. of informants of the seven interviewed who claim to use the word with speakers of their own and of other varieties
lehunara/ lohunara	'a type of a small fishing net in the form of sack on a long stick'	6	6
bublija	'a round Easter cake, a type of sweet bread'	7	7
čikara	'a mug'	7	7
loštijera	'a baking tray'	7	7
prsura	'a frying pan'	7	7
škabelin	'a nightstand'	7	7

7 Semiotic space as the space of identity

Objects that seem to be merely utilitarian are often part of a particular space; they signify and issue messages about the society's priorities, ways of life, culture, and traditions (see **hawkes_structuralism_2004**). Each utilitarian object, such as *brganja*, *lohunara*, *hildošpanja*, *karutula* and *pot* acknowledges the way people used to organize their lives and the way they structured their social and cultural identity. *Brganja*, *lohunara* and *hildošpanja* issue presuppositions concerning inhabitants' adherence to fishing and to the sea. *Karutula* 'a type of braided cake' was traditionally prepared for children at Easter. As an additional gift, one whole egg would be baked inside the cake on the bottom end of the cake. Also, *pot* is not merely 'a metal container with a handle' out of which people used to drink, but the manifestation of a custom to make *bevanda* (red wine with water) and to pass it around the table so that everyone could drink out of

the same *pot*. The meaning of an object is largely attached to its function, its utility in relation to the repertoire of human needs (**moles_theorie_1972**); that is, as soon as there is a society, every usage is converted into a sign of itself (**barthes_elements_1968**). In this work we use the Lotmanian term of semiotic space to refer to all aspects of human existence and to stress that external factors, such as culture, society, fishing, wooden boat building, and ways of earning money or getting food, can acquire semiotic meaning. In Lotman's words, they influence the consciousness of man only when they have corresponding signifiers to name them because "for human thought all that exists is that which falls into any of its languages" (**lotman_culture_2009**). This means that, even if some social or cultural aspects of Betina still exist, if the speakers don't know the signifiers to name these aspects, it is as if they did not exist, which means that the local identity and distinctiveness are lost to their thought. It also works the other way around: if the cultural and social aspects are lost, it won't take long for the signifier, emptied of its signified, to be lost as well.

8 Changes in semiotic space *vs.* the reduction of intrasystemic variation

In the case of dialect levelling caused by the linguistic accommodation of speakers, the replacement of dialect variants with SRDD or SC variants occurs. In the case of dialect levelling caused by changes in the semiotic space, no such replacement occurs because the object or a human practice that has been lost doesn't need a new signifier. Nonetheless, dialect levelling still occurs because there is a reduction in intrasystemic variation, which leads to simplification, homogenization and the levelling of a dialect variety and of its cultural and local distinctiveness, making it more similar to a supra-regional or standard variety.

Changes in semiotic space are parallel to changes in human needs and praxis, and can be analysed from three standpoints:

1. the complete disappearance of utilitarian objects that used to be very effective sociocultural signs
2. the loss of an object's utilitarian and functional importance in everday life
3. the transfer of such an object from one semiotic space to another.

These are three hypothetical reasons that supposedly cause the loss of intrasystemic quantitative variation as a consequence of change in a semiotic space. To

illustrate these points and to show our interest in the cognitive effect on the interpreter, the variants and their referents are represented through Peirce's semiotic triangle. The semiotic triangle begins with an understanding of the sign as the primary element of any semiotic system. Strictly speaking, semiosis, and not the sign, is the proper object of semiotic study. The realization of a semiological sign in a communication process depends on the interlocutors, on the objects, and on the context in which the communication occurs. In this case, the analysis of the communication process is relevant both to the addresser and to the addressee.

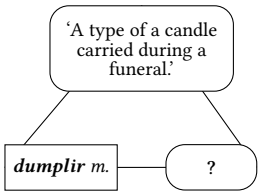
8.1 The disappearance of utilitarian objects

It is common knowledge that very often a word survives even though the object it represents has disappeared, which is the case with the word *dumplir*. All of the older speakers who participated in the 2008, 2009 and 2010 interviews knew its meaning, while only one of the young speakers was familiar with its meaning.

8.2 The loss of an object's utilitarian and functional importance in everyday life

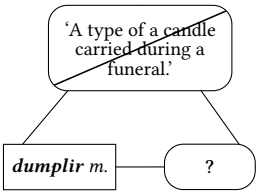
Table 1 shows that in Betina the traditional wooden boat building sector decreased by 12% in the period from 1971 to 2001. The same happened to agriculture and fishing, which in the same period decreased by 17%. These trends lead to a loss of importance in these human practices and consequently of the utilitarian objects affiliated with them. They also affect the general familiarity of speakers with other topics of conversation, such as the weather, the winds, the behaviour of the sea, the points of the compass, fishing tools, boat-building tools, and boat parts. Consequently, they also affect the speakers' recognition and awareness of the signifiers. For example, young speakers know the terms for some of the most prominent parts of a traditional boat (e.g., *prova* 'bow' or *pajoli* 'wooden floor of a boat'), but they are uncertain when asked about less prominent and smaller parts, such as *mankul* 'a thick wooden post around which a mooring rope is tied' or *maškul*, *soha* or *štiva*. In the case of *mankul*, 3 out of the 7 speakers interviewed guessed that it was something on a boat but could not identify the exact referent. *Why should they know these words?* someone might ask. Because they used to be, and on paper still are, signs that create the semiotic space of Betina, whereas today they belong to very specialized semiotic spaces whose language is accessible only by those who work in that field. Just as people live nowadays with their tablets, computers, and smart-phones, people in Betina, only a few decades ago, used to live with the sea and their boats. This is in fact what Lotman refers

Older speakers



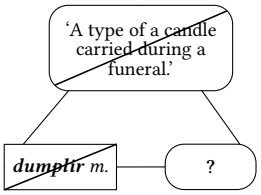
Dumplir 'a wooden candlestick carried during a funeral' is not in use anymore, although the older speakers still have a mental picture of it in their minds and are able to describe it.

Young adults



Over time, there will not be any speakers who can describe it (unless it has been described in some written text such as a dialectal glossary).

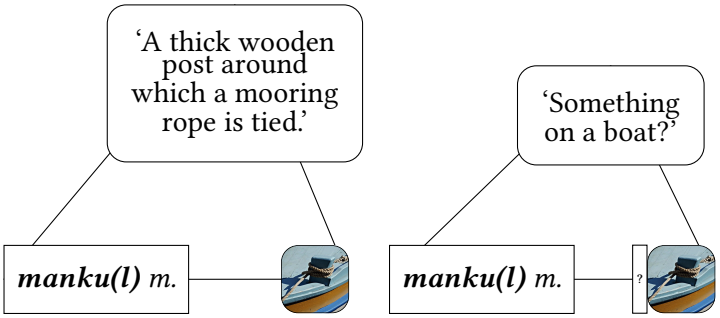
Loss of the lexical variant



When an object has disappeared, the addresser and the addressee cannot communicate, the object as a semiological sign cannot have any cognitive effect on the addressee, and it is no longer possible to close the circle of semiosis by finding exclusively the same interpretant at both ends of the communication process. Meaning without communication is not possible, so, over time, the word disappears as well.

Figure 3: Loss of intrasystemic quantitative variation.

Figure 4: A *mankul*.



(a) **Older speakers** can identify without any problem the referent as 'a thick wooden post around which a mooring rope is tied'.

(b) **Young speakers** suppose that it is something on a boat, but cannot identify the referent.

Figure 5: Restriction of the number of users.

to as a secondary modeling system interwined with a primary modeling system, that is, with a natural language. The different substructures of the semiosphere are linked in their interaction and cannot function without the support of each other. (Lotman 1985 [2015]: 219).

This analysis has shown that speakers know 53.05% of the words that name objects and concepts that have lost importance in everyday life in Betina. This means that there is still some adherence to the traditional and that the identity of Betina is still recognized in some traditional crafts, although the average speaker's knowledge of words does not always keep pace with this identity projection. To this list belong the names of parts of the National costume (*bušt*, *ogrica*), parts of some fishing tools (*hildošpanja/fildošpanja*), fish parts (*lustra*, *butarga*), or the names of the winds and sea storms (*brganjaš*, *baraškada*, *šijun*). There are also variants whose meanings are more well known, which can be explained by the fact that they also belong to the lexis of SRDD (e.g., *trmuntana/tremuntana*) or by their semantic transparency (e.g., *kamenica, mastač*).

8.3 The transfer of an object from one semiotic space to another

8.3.1 The resemantization and refunctionalization of traditional utilitarian objects

Brganja is a Venetian loanword *par excellence*. To this day, it has always had a very imporant role in the everyday life of Betina. The fact that, through the centuries, new words were formed by adding Croatian endings to the original Venetian form *bragagna* testifies to the importance of its uses in the past. For example, the verb *brganjati*, meaning to collect sea shells with this tool', or the name of the wind *brganjaš*, which favors bottom trawling with a *brganja*. With

Figure 6: A *brganja* (l.) and a *vrša*.

the birth and development of tourism, a new expression, *Dan Brganje* (Brganja Day) has also been coined. This is the name of a festival celebrated in Betina every summer on the first Sunday of August. Today, the use of this fishing tool is forbidden. Still, *brganja* is one of the most vital fishing terms in Betina, and all of the interviewed speakers knew the word.

This is an example of the extension, or rather, the commercialization of the meaning, since *brganja*, removed from its original semiotic space, that of a fishing tool, has produced a new one, closer to and more appropriate for today's society and economy, which is oriented mostly toward tourism and no longer toward fishing. Trudgill explains this phenomenon in the following way:

> The remaining variation, i.e. the forms that are not removed during koineisation… will tend to be re-assigned according to certain patterns. This reallocation can cause variants to take on a specialised linguistic (allophonic) or extra-linguistic (social, stylistic, or geographical) function. (1986: 110-126 in **auer_study_2004**)

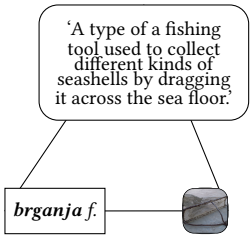
There are other examples of semantic extension, such as the variant *škohuni*, which used to refer to a type of shoes, usually made of rubber and rags, worn to work in the field, whereas today, young speakers, besides the original meaning, also know a metaphoric one, i.e., 'cumbersome, usually old and not very elegant shoes'.

8.3.2 The aestheticisation and refunctionalization of traditional utilitarian objects

A change in the utilitarian value of the objects, through their aestheticisation and refunctionalisation as decorative items or objects primarily used to re-evoke tradition, can cause a shift in the stylistic meaning of the variants such as in the case of the use of traditional cups and dishes (*pot*, *potić*, *pičona*, or *bukara*) or of different kinds of baskets and vessels (*koha*,*konistra*, or *kopanja*).

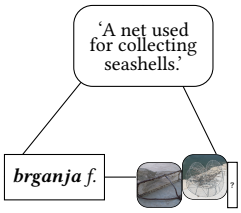
The refunctionalization of the objects listed in Table 6 consists in using them as decorative or even utilitarian items in traditional restaurants, hotels, and houses for rent. Their purpose is to re-evoke tradition and old customs such as kneading dough in a *kopanja* or serving wine in a *bukara*. They still serve a purpose by means of their traditional utilitarian function being switched to a new aesthetic function: to attract tourists in a changed context and in a changed economy that today relies on tourism up to 45% (as illustrated in Table 1). Thanks to these processes, some of the variants, like *bukara*, *pot*, and *pičona*, by taking on a new social and stylistic function, are better known to the speakers.

Older speakers

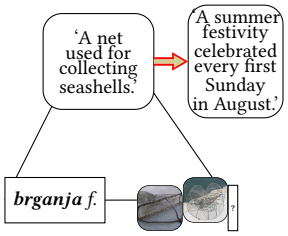


This is a triadic relation formed in the mind of an older speaker but not in the minds of the young informants. This word has a different effect on young speakers.

Young adults: semantic extension



This is a triadic relation formed in the mind of a young speaker. The second element of Peirce's semiotic triangle, the *thing signified* or *referential object*, varies. Five out of seven speakers are unsure about the correct referential object; they either describe another fishing tool, or they don't know how to describe it. But all of them, without exception, know its function. Thus, communication is still fulfilled at the pragmatic level.



Young speakers know this word thanks to the fact that the community of Betina has refunctionalized it; that is, it has changed its function and accordingly its semiotic space. This word traditionally signified a tool which for centuries was used by the inhabitants of Betina on a daily basis, mostly to get food. A few decades ago, a new substance was attributed to this word: the value of tradition and of collective memory through the name of the festival *Dan Brganje* (Brganja Day).

Figure 7: Change in intrasystemic qualitative variation through resemantization and refunctionalization of the utilitarian objects.

Table 6: The aestheticisation and refunctionalization of objects

Lexeme	meaning	No. of informants of the seven interviewed who know the meaning	No. of informants of the seven interviewed who claim to use the word
bukara	'a large wooden wine cup'	7	7
pičona	'a metal cup with a handle'	7	7
pot, potić	'a smaller metal bowl with a handle'	6	6
koha	'a type of a wicker basket, flat and round'	4	4
kopanja	'a wooden vessel used for kneading dough'	2	2

9 Conclusions

This study has confirmed that young speakers, when talking about familiar and everyday subjects, converge in their communication with speakers of other dialect varieties by eliminating salient lexical variants that they consider rare or "out of use" (*kamara*, *kočeta*). On the other hand, it has also shown that the informants diverge from their interlocutors by using lexical variants typical of island varieties (*bublija*) or of the Betina variety in particular (*lehunara/lohunara*). This indicates that young adults still want to be identified with their speech community and recognized as members of that group of speakers.

The study has also confirmed that a change in semiotic space can lead to quantitative or qualitative intrasystemic variation or to a reduction of the number of users.

A complete disappearance of objects causes a reduction in intrasystemic quantitative variation, i.e., a loss of lexical variants, which leads to cultural and dialect levelling. Therefore, a loss of referents will over time cause a loss of local variants such as *bujo(l), dumplir, murtar, taraban,* and *škapular.*

There are cases in which, due to the object's refunctionalization, resemantization, or aestheticisation, no such loss occurs. It has proven that the transfer of objects from one semiotic space to another, when an object gets refunction-

alized, leads only to semantic change because of the extension of the meaning of the variants (*brganja*, *škohuni*). However, only a very small number of lexical variants belong to this group. If refunctionalization and resemantization does not occur, over time this will lead to a reduction of intrasystemic lexical variation, as well as cultural and dialect levelling.

The analysis shows that speakers know the meanings of 53.05% of the words referring to objects and concepts that still exist but have lost their utilitarian and functional importance in everday life (e.g., *mankul*, *butarga*, *šijun*, *fildošpanja/hildošpanja*, *burtižati*). Since these words have ceased to be important to the wider speech community, this implies a restriction in the number of users and consequently, a loss of cultural and dialect diversity as well as cultural and dialect levelling.

Since the interviews and the analysis have shown that young adults in Betina converge and diverge in more or less the same number of situations and variants, this research has shown that changes in semiotic space (at least in the case of Betina) are in fact the most prominent reason for dialect levelling.

Naturally, with this change of approach we do not claim to have found all the reasons for dialect levelling. We just claim that this is another possible approach to understanding this phenomenon. On the contrary, in our corpora there are some lexical variants whose status in the lexis of the Betina dialect cannot be explained by means of any of the proposed approaches (i.e., the saliency factor, linguistic accommodation, or the loss of utilitarian objects and human praxis). For example, we could not find a valid answer to why the variant *gvantijera*, which refers to such an ordinary and everyday object as a tray is almost lost to the knowledge and usage of the young adults (3 out of 7 speakers know its meaning, but none of them uses the word), whereas *kajin* 'a round metal vessel used for washing clothes', a household object as well, but no longer in use, is very familiar to all the speakers, and all of them claim that they would use the word if they saw the object. This and many other questions on the future of dialects have yet to be answered and can be explained neither through the semiotic nor through the sociolinguistic approach.

References

Auer, Peter. 2005. Europe's sociolinguistic unity, or: A typology of European dialect/standard constellations. In Nicole Delbecque, Johan van der Auwera & Dirk Geeraerts (eds.), *Perspectives on variation: Sociolinguistic, historical, comparative*, 7–42. Berlin / New York: Mouton de Gruyter.

Auer, Peter & Frans Hinskens. 1996. The convergence and divergence of dialects in Europe. New and not so new developments in an old area. *Sociolinguistica (1996)* 10. 1–30.

Auer, Peter, Frans Hinskens & Paul Kerswill (eds.). 2004. *Dialect change: Convergence and divergence in European languages*. Cambridge, New York: Cambridge University Press.

Chambers, J. K. & Peter Trudgill. 1980. *Dialectology*. Cambridge, New York: Cambridge University Press.

Chambers, J. K. & Peter Trudgill. 1998. *Dialectology*. 2nd edn. Cambridge, New York: Cambridge University Press.

Goebl, Hans. 1984. *Dialektometrische Studien: Anhand italoromanischer, rätoromanischer und galloromanischer Sprachmaterialien aus AIS und ALF*. Tübingen: Niemeyer.

Goebl, Hans. 2006. Recent advances in Salzburg dialectometry. *Literary and Linguistic Computing* 21(4). 411–435.

Grieve, Jack, Dirk Speelman & Dirk Geeraerts. 2011. A statistical method for the identification and aggregation of regional linguistic variation. *Language Variation and Change* 23(2). 193–221.

Hickey, Raymond (ed.). 2010. *The handbook of language contact*. Hoboken, NJ: Wiley.

Kleiner, Stefan. 2014. Bericht. Methods in Dialectology XV 11.-15. August 2014, Groningen. *Zeitschrift für Dialektologie und Linguistik* 81(1). 61–66.

Kretzschmar, William A., Brendan A. Kretzschmar & Irene M. Brockman. 2013. Scaled measurement of geographic and social speech data. *LLC: Journal of Digital Scholarship in the Humanities* 28(1). 173–187.

Lenz, Alexandra N. 2003. *Struktur und Dynamik des Substandards: Eine Studie zum Westmitteldeutschen (Wittlich/Eifel)*. Stuttgart, Wiesbaden: F. Steiner.

Lotman, Juri. 1985 [2015]. On the semiosphere. *Sign Systems Studies* 33(1). 215–239.

Munske, Horst Haider & Andrea Mathussek. 2013. *Handbuch zum Sprachatlas von Mittelfranken: Dokumentation und Auswertung*. Heidelberg: Universitätsverlag Winter.

Myers-Scotton, Carol. 1993. *Duelling languages: Grammatical structure in codeswitching*. Oxford: Oxford University Press.

Nerbonne, John & Peter Kleiweg. 2007. Toward a dialectological yardstick. *Journal of Quantitative Linguistics* 14(2). 148–166.

Nerbonne, John, Rinke Colen, Charlotte Gooskens, Peter Kleiweg & Therese Leinonen. 2011. Gabmap – a web application for dialectology. *Dialectologia* Special Issue II. 65–89. http://www.gabmap.nl/.

Nerbonne, John, Sandrien van Ommen, Charlotte Gooskens & Martijn Wieling. 2013. Measuring socially motivated pronunciation differences. In Lars Borin & Anju Sacena (eds.), *Approaches to measuring linguistic differences*, 107–140. Berlin: De Gruyter.

Niedzielski, Nancy. 1999. The effect of social information on the perception of sociolinguistic variables. *Journal of Language and Social Psychology* 18(1). 62–85.

Prokić, Jelena, Çağri Çöltekin & John Nerbonne. 2012. Detecting shibboleths. In *Proceedings of the EACL 2012 Joint Workshop of LINGVIS & UNCLH*, 72–80. Association for Computational Linguistics.

Purschke, Christoph. 2011. *Regionalsprache und Hörerurteil. Grundzüge einer perzeptiven Variationslinguistik* (ZDL-Beihefte 149). Stuttgart: Franz Steiner.

Sayers, Dave. 2014. The mediated innovation model: A framework for researching media influence in language change. *Journal of Sociolinguistics* 18(2). 185–212.

Spruit, Marco René. 2008. *Quantitative perspectives on syntactic variation in Dutch dialects*. University of Amsterdam PhD thesis.

Trudgill, Peter. 1986. *Dialects in contact*. Oxford: Blackwell.

Trudgill, Peter. 2004. *New-dialect formation. the inevitability of colonial Englishes*. Edinburgh: Edinburgh University Press.

Wieling, Martijn & John Nerbonne. 2011. Bipartite spectral graph partitioning for clustering dialect varieties and detecting their linguistic features. *Computer Speech & Language* 25(3). 700–715.

Wolk, Christoph. 2014. *Integrating aggregational and probabilistic approaches to language variation*. Freiburg: University of Freiburg PhD thesis. https://www.freidok.uni-freiburg.de/data/9656/.

Name index

Abadía de Quant, Inés, 266
Abercrombie, David, 158
Adank, Patti, 248
Alber, Birgit, 324
Aldenderfer, Mark S., 232
Allbritten, Rachael, 178
Anders, Christina Ada, 80
Anderwald, Lieselotte, 227
Andres, Marie-Christine, 200
Androutsopoulos, Jannis, 248
Angkititrakul, Pongtep, 159
Archangeli, Diana, 316
Ash, Sharon, 86, 123, 160, 177–179, 184, 185, 190, 191, 315
Assmann, P. F., 315
Auer, Peter, 3, 16, 17, 23, 37, 38, 41, 42, 56, 59, 82, 116, 293, 302
Azuma, Shoji, 308

Babel, Molly, 248
Bailey, Guy, 27, 57
Baker, Adam, 316
Barbiers, Sjef, 44, 45
Barthes, Roland, 284, 297
Baur, Siegfried, 323
Bayerisches Statistisches Landesamt, 91
Becker, K., 315
Bekkering, Harold, 248
Bell, Allan, 41
Belletti, Adriana, 68
Bellmann, Günter, 103, 197, 198
Berns, J. B, 66
Berruto, Gaetano, 81
Berthele, Raphael, 80
Bertolotti, V., 266
Biber, Douglas, 84
Bielenstein, August Johann Gottfried, 79
Bivand, Robert, 185
Blake, Barry J, 280
Blashfield, Roger K., 232
Boberg, Charles, 82, 86, 123, 160, 177, 179, 184, 185, 190, 191, 315, 319
Boersma, Paul, 43
Bouchard, Chantal, 17
Bourdieu, P., 278
Bright, Elizabeth, 191
Brockman, Irene M., 5, 218
Brun-Trigaud, Guylaine, 139, 145
Bucheli Berger, Claudia, 198–200, 210, 213
Budzhak-Jones, Svitlana, 24
Bybee, Joan L., 218, 227

Cacoullos, Rena, 23
Cano Aguilar, Rafael, 264, 279
Carignan, C., 316
Carpenter, Malinda, 247
Carver, Craig M, 177, 217
Catalán Menéndez-Pidal, Diego, 264, 279
Cattell, Raymond Bernard, 87

Chambers, J. K., 1, 23, 78, 126, 176, 229, 267, 278, 294, 337
Chelliah, Shobhana L., 270
Cheshire, Jenny, 37, 310
Childs, Becky, 270
Chomsky, Noam, 247
Christen, Helen, 80
Chumak-Horbatsch, Roma, 24
Ciccolone, Simone, 323
Clark, Wilma, 284, 297
Clopper, Cynthia, 85, 177, 178, 181
Coco, Alessandra, 21
Coll, M., 266
Corbett, Greville G, 265
Cornips, Leonie, 44, 45, 66, 67, 199
Corrigan, Karen P., 199
Costa, Patrício Soares, 45
Costaouec, Denis, 138, 141
Council of Local Authorities for International Relations [CLAIR], 309, 310
Coupland, Nikolas, 40
Coursen, Charlotte, 17
Cucurullo, Nella, 121
Cummins, James, 16
Cysouw, Michael, 252

Danesi, Marcel, 16, 18, 21, 22
Davidson, Lisa, 325
De Caluwe, Johan, 37–39, 42
De Decker, P. M., 315, 316
De Decker, Paul, 29
de Reuse, Willem J., 270
De Schutter, Georges, 44, 45
De Sutter, Gert, 45, 50
De Vogelaer, Gunther, 38, 44, 45, 49
De Wulf, Chris, 44, 45
Delaere, Isabelle, 45, 50
Delarue, Steven, 40
Detges, Ulrich, 67
Devos, Magda, 44, 45
Dhillon, Inderjit S., 120
Di Franco, Giovanni, 52
Dossey, Ellen E., 248
Drager, Katie, 178
Državni zavod za statistiku Republike Hrvatske, 287

Echenique Elizondo, Maria Teresa, 264, 279
Eckert, Penelope, 310, 313, 397
Elspaß, Stephan, 254
Espinal, Maria Teresa, 69, 70
Evans, Betsy, 177
Evans, Bronwen, 178

Falc'hun, François, 140–142
Farrington, Charlie, 176
Fidell, Linda S., 84
Filipi, Goran, 285, 286, 290
Fitch, William Tecumseh Sherman, 247
Fleischer, Jürg, 214, 253
Flynn, Patrick J., 232
Foley, W., 20
Fox, R. A., 315
Frey, Natascha, 200
Fridland, Valerie, 175, 176, 179–184
Fruehwald, Josef, 315
Fuchs, Susanne, 324
Fukushima, Chitsuko, 365, 367

Gabel, Heidi, 39, 42
Gao, Lili, 159
Garside, Roger, 229
Geeraerts, Dirk, 5, 45, 50, 51, 53, 85, 120, 175, 176, 185, 186
German, Gary, 138, 140
Getis, Arthur, 185, 186, 208

Ghyselen, Anne-Sophie, 38, 39, 41, 45
Giacomelli, Gabriella, 120, 125, 130, 218
Giannelli, Luciano, 125, 127
Giles, Howard, 41
Giovanardi, Claudio, 21
Girard, Dennis, 79
Glaser, Elvira, 198–200, 210, 214
Glück, Helmut, 101
Goebl, Hans, 5, 83, 141, 201, 217, 228, 232
Goeman, Ton, 44, 45
Gooskens, Charlotte, 177, 234
Goossens, Jan, 44, 45
Gordon, Matthew J., 376
Gries, Stefan Thomas, 51
Grieve, Jack, 5, 82, 85, 120, 175, 176, 180, 185, 186, 208, 227, 236
Grishakova, Marina, 284, 297
Grondelaers, Stefan, 38–40, 50, 51
Grosjean, François, 325
Gu, Chong, 317
Gualdo, Riccardo, 21
Guiter, Henri, 138
Gynan, Shaw Nicholas, 159

Haas, Walter, 212, 213
Haeseryn, Walter, 44
Hagoort, Peter, 248
Hansen, John HL, 159
Hauser, Marc D., 247
Hawkes, Terence, 296
Hay, Jennifer, 178
Heap, David, 266
Heemskerk, Josée S, 44
Heeringa, Wilbert, 37, 39, 43, 138, 228, 232
Henry, Alison, 199
Herk, Gerard van, 270
Hernández, Nuria, 229
Herrgen, Joachim, 103, 197
Hickey, Raymond, 3
Hinskens, Frans, 3, 16, 17, 23, 37–39, 43, 56, 59, 293, 302
Hirano, Keiko, 310, 311
Hondô, Hiroshi, 336
Horn, Laurence R., 70
Hotzenköcherle, Rudolf, 102, 106, 116, 198
Hudyma, Khrystyna, 22
Hueber, T., 316
Hundt, Markus, 80
Hyvönen, Saara, 84, 85

Iannozzi, Michael, 19
Ichii, Tokiko, 336
Inagaki, Shigeko, 348, 351
Inoue, Fumio, 336, 340, 341, 348
ISTAT (Istituto Nazionale di Statistica), 26
Iverson, Paul, 178

Jacewicz, E., 315
Jackson, Kenneth Hurlstone, 142
Jain, Anil K., 232
Jarvis, E. D., 247
Jekosch, Ute, 159
Jespersen, Otto, 67
Jutronić, Dunja, 293

Kambhamettu, C., 316
Kang, Yoonjung, 19
Kasai, Hisako, 336
Kasper, Simon, 214
Katz, W. F., 315
Kaufman, Terrence, 27
Kayne, Richard, 198

Kehrein, Roland, 43
Kendall, Tyler, 175, 176, 179–184
Kerswill, Paul, 3, 16, 17, 21, 23, 103, 108, 116, 293, 302
Kilgarriff, Adam, 237
Kleiner, Stefan, 1, 248
Kleiweg, Peter, 5, 217, 222, 228, 236
Klepsch, Alfred, 106, 108
Kobayashi, Takashi, 335
Koch, G. G., 44
Kochetov, Alexei, 19
Kokuritsu Kokugo Kenkyûjo (NLRI), 337, 338, 349
Kokuritsu Kokugo Kenkyûjo (NLRI), 335–337, 339, 350
Kretzschmar, Brendan A., 5, 218
Kretzschmar, William A., 5, 80, 176, 218, 376
Kristiansen, Gitte, 80
Kristiansen, Tore, 38, 40
Kroch, Anthony, 199
Kubozono, Haruo, 391–393, 395, 396
Kulušić, Sven, 286
Kumagai, Yasuo, 339, 356–359
Kunath, Stephen A, 160, 162
König, Werner, 85, 103, 106

Labov, William, 27, 28, 41, 80, 86, 123, 160, 177–179, 184, 185, 190, 191, 265, 310, 315
Lakoff, George, 80
Lameli, Alfred, 257
Landis, J. R., 44
Language Factory, 22
Lanthaler, Franz, 324
Lapesa, Rafael, 264, 279
Lara, Víctor, 264, 268, 270
Larmouth, Donald, 79
Lasch, Alexander, 80
Lauttamus, Timo, 238
Lebart, L., 51
Lee, Jay, 176, 376
Leino, Antti, 84, 85
Leinonen, Therese Nanette, 85
Lenz, Alexandra N., 3, 43, 82, 214
Leser, Stephanie, 254
Le Dû, Jean, 137, 138
Le Roux, Pierre, 140
Li, M., 316
Liberman, M., 316
Lijffijt, Jefrey, 238
Llop, Ares, 70, 71
Lončar, Nina, 286, 287
Loporcaro, Michele, 119
Lotman, Juri, 6, 284, 297, 301
Löffler, Heinrich, 198
Lötscher, Andreas, 200

Macaulay, Ronald K. S., 278
Mallinson, Christine, 270
Manning, Christopher D, 217, 218
Markham, Duncan, 247
Marradi, Alberto, 52
Martinet, André, 147
Mase, Yoshio, 381
Mathussek, Andrea, 4, 102, 109–112, 114, 115
Mayer, Benedikt, 248
Mayer, Thomas, 252
McDermott, Richard A, 314
Menéndez Pidal, Ramón, 264, 279
Medda, Roberta, 323
Meltzoff, Andrew, 247
Meyerhoff, Miriam, 16, 25, 28
Mielke, Jeff, 316
Milroy, Lesley, 310
Mioni, Alberto, 323
Mirkin, B. G., 51

Moles, Abraham A., 297
Mondéjar, Jose, 264, 279
Montemagni, Simonetta, 120, 124, 218, 220
Montgomery, Chris, 201
Moore, M. Keith, 247
Moran, P. A. P., 185
Moseley, Chris, 137
Munske, Horst Haider, 4, 102
Murty, M. Narasimha, 232
Myers-Scotton, Carol, 6
Möller, Robert, 254

Nagy, Naomi, 16, 19, 25, 28
National Language Research Institute, 365
Nerbonne, John, 2, 4, 5, 79, 83, 85, 109, 111, 119–123, 138, 158, 160–162, 172, 176, 201, 217, 219, 222, 228, 232, 234, 236, 238
Neuhauser, Sara, 248
Niedzielski, Nancy, 5, 69, 177, 178
Nycz, J. R., 315, 316
Nádasdy, Ádám, 166, 171
Nübling, Eduard, 87

Ogura, Mieko, 108
Ohashi, Katsuo, 367
Onishi, Takuichiro, 366, 382, 388
Ord, J. Keith, 185, 186, 208
Ota, Ichiro, 394

Paolillo, John C., 85
Pellegrini, Giovanni Battista, 125, 127
Penny, R., 264, 279
Petkov, C. I., 247
Petrova, Olga, 167
Pickl, Simon, 85, 86, 93, 119
Pisoni, David, 177, 178, 181
Plevoets, Koen, 40, 45, 50, 51
Plichta, Bartek, 178, 315
Poggi Salani, Teresa, 130
Poletto, Cecilia, 66, 67
Powesland, Peter Francis, 41
Preston, Dennis, 69, 80, 177, 178
Prinz, Wolfgang, 247
Prokić, Jelena, 4, 83, 158, 160, 161
Pröll, Simon, 85, 86, 119
Purschke, Christoph, 6, 248
Pustka, Elissa, 80

Recasens, Daniel, 328
Reed, Carroll E., 191
Reed, David W., 191
Reichel, Sibylle, 109
Richter, Matthias, 256
Riemann, Andreas, 248
Rifkin, Benjamin, 159
Rigau, Gemma, 67, 72
Roberts, Ian G., 67, 69
Rosch, Eleanor, 80
Rosenfelder, Ingrid, 315
Rumpf, Jonas, 236
Ryan, Ellen Bouchard, 158
Ryckeboer, Hugo, 49
Rys, Kathy, 42

Salmenkivi, Marko, 84
Samuel, Arthur G., 178, 179
Sanada, Shinji, 381–383, 387
Sanchís Guarner, M., 266
Sanders, Nathan C., 238
Satô, Ryôichi, 335, 351
Sayers, Dave, 9
Schaden, Stefan, 159
Scherrer, Yves, 238
Schilling-Estes, Natalie, 41, 267, 276
Schmidt, Jürgen Erich, 103, 197

Schmidt, Tanja, 43
Schneider, Edgar W., 16, 119
Schwegler, Armin, 67
Schwenter, Scott, 68
Schütze, Hinrich, 217, 218
Seara, I. C., 278
Sebregts, Koen, 169
Segerup, My, 248
Seiler, Guido, 199, 205
Shackleton, Robert, 83–85, 120
Sibata, Takesi, 359
Sibler, Pius, 208, 209
Siedle, Christine, 232
Siegel, Jeff, 248
Smith, Nicholas, 229
Snyder, William, 314
Soete, Nel, 57
Solliec, Tanguy, 138
Speelman, Dirk, 5, 50, 51, 85, 120, 175, 176, 185, 186
Spettl, Aaron, 85, 119
Spiekermann, Helmut, 38
Spruit, Marco René, 5
Statistics Canada, 16, 20
Stellmacher, Dieter, 43
Stoeckle, Philipp, 201
Stone, Maureen, 316, 325
Story, Brad H., 316
Strand, Elizabeth A., 178
Strange, Winifred, 180
Strassel, S., 315
Struk, Danylo, 20–22
Stuart-Smith, J., 394
Sumner, Megan, 178, 179
Szmrecsanyi, Benedikt, 84, 176, 218, 227–229, 231–234, 241
Séguy, Jean, 119, 138, 217

Tabachnick, Barbara G, 84
Taeldeman, Johan, 37, 40, 42, 44, 45, 53
Tagliamonte, Sali, 27, 236
Takada, Makoto, 336
Tanaka, Akio, 345
Thieberger, Nick, 270
Thomas, Erik R., 180
Thomason, Sarah Grey, 27
Thompson, Ann, 121, 160, 218–220
Thorburn, Jennifer, 29
Toda, Martine, 324
Tokugawa, Munemasa, 335
Tomasello, Michael, 227, 247
Travis, Catherine, 23
Trevelyan, G. D, 278
Trudgill, Peter, 1, 3, 4, 16, 21, 23, 66, 72, 78, 126, 176, 229, 235, 267, 278, 294, 308, 337, 376
Tse, Holman, 28

Upton, Clive, 121, 160, 218–220
Užgiris, Ina Čepėnaitė, 247, 250

van Bezooijen, Renée, 177
Van de Velde, Hans, 53
van den Doel, Rias, 158, 159, 164, 168–172
Van Herk, Gerard, 29
van Hout, Roeland, 38–40
Van Keymeulen, Jacques, 39
van Marle, Jaap, 66
Vandekerckhove, Reinhild, 37–40
Vandenberghe, Roxanne, 44, 45
Vandenbussche, Wim, 42
Verleyen, Geert, 44, 45

Walker, Douglas C, 166, 171
Walker, James A, 27
Waltereit, Richard, 67

Wang, W. S.-Y., 108
Waniek-Klimczak, Ewa, 158
Warren, P., 178
Weenink, David, 43
Weinberg, Beatriz Fontanella de, 266
Weinberger, Steven H, 160, 162
Wells, John C, 158
Wenger, Etienne, 314
Wieling, Martijn, 4, 83, 85, 119–124, 160–162, 172, 217–220, 236
Wiersma, Wybo, 238
Wiesinger, Peter, 78, 323
Wikipedia, 21
Willemyns, Roland, 37, 38, 40, 42
Wmffre, Iwan, 147
Wolfram, Walter, 267, 276
Wolk, Christoph, 6, 84, 228, 231, 236, 239
Wong, A. W., 315
Woolhiser, Curt, 119
Worner, K., 43
Wright, Susan, 103, 108, 116
Wälchli, Bernhard, 227

Yanagita, Kunio, 379
Yonekawa, Akihiko, 313
Yuan, J., 316

Zadeh, Lotfi A., 79
Zimmerer, Peter, 248
Zonneveld, Wim, 44

Çöltekin, Çağri, 4, 158, 160, 161

Čuka, Anica, 286, 287

Škevin, Ivana, 284, 285, 287, 293, 294

Language index

Breton, 137–156

Catalan, 65–74
Chinese, 20*, 20, 29, 159
    Cantonese, 15, 17, 20–22, 24
Croatian, 283–307

Dutch, 37, 39, 40, 43, 44*, 45–47, 50, 52, 53, 55–58, 120, 157–160, 163, 164, 166, 168–171
    Flemish, 39*, 36–65, 171, 250, 253, 259

English
    American English, 166, 168–170, 175–196
    British English, 168–170, 227–242

Faetar, 15, 19, 20, 24, 25, 27
French, 163–166

German, 77–118
    Alemannic, 213, 250, 253
    Hessian, 250, 252, 254, 255, 258
    Low German, 250, 252, 253, 259
    Swiss German, 200, 212
    Tyrolean, 322–332
    Upper German, 250, 260

Hungarian, 27, 157, 160, 163, 164, 166–168, 172

Italian, 118–137
    Tuscan, 120, 121, 124, 125, 127–132, 217, 218, 221, 223
    Tyrolean, 322–332
    Venetian, 284, 285*, 285, 294, 301

Japanese, 307–315, 335–400

Korean, 15, 19, 20, 24, 27

Spanish, 263–283

Yiddish
    Eastern Yiddish, 250, 256, 257
    Western Yiddish, 256

Subject index

19th century, 256–257

accent classification, 159
accent perception, 158, 168
accent transcription, 160
accentuation pattern, 392, 393
age differences, 236, 273–276
aggregated Levenshtein distance, 162
alignment, 252
animation, 352, 354*, 355, 357*
ANOVA, 183, 184
apparent-time changes, 365, 366
articulatory phonetics, 329
Atlas of North American English, 179, 191
audiovisual stimuli, 266

bilingualism, 323, 324, 393, 396
bipartite spectral graph partitioning, 82–83
bootstrap clustering, 79, 83
broadcasting media, 396, 397
buffer, 355
bundle of isoglosses, 126, 133

California vowel shift, 190
category, 78–79
changes in progress, 370
characteristic accent feature, 159–160, 170–172
chi-squared, 273, 276
cluster analysis, 51, 82, 83, 87, 93, 257
clustering, 219–221
code-switching, 307–309, 311, 313, 314
community of practice, 313, 314
comparative variationist linguistics, 23
completed changes, 368
concept-lexicalization pair, 121, 133
condensation, 84
conservative vs. innovative dialect areas, 212–213
continuum, 78, 83
convergence, 287, 293, 295, 304, 305
core linguistic, 247
corpus-based dialectometry, 228–241
correlation, 234, 235, 238*, 239
correspondence analysis, 50, 51
cross-over points, 182
cue validity, 81

data elicitation, 266
de-dialectization, 399
de-standardization, 399
Delaunay triangulation, 356
demotisation, 40
density, 311
dental fricative, 164, 166
destandardisation, 40
diachrony, 249
diaglossia, 38
dialect area, 3, 82–84, 88, 93, 137
dialect areas, 154
dialect awareness, 69

dialect border, 127
dialect classification, 93, 94
dialect clustering, 120, 122, 127–129, 131, 134
dialect continuum, 256
dialect divergence, 15
dialect geography, 101
dialect levelling, 6, 7, 288, 293, 297, 304, 305
dialect loss, 38
dialect perception, 248
dialect radiation theory, 379
dialect syntax, 198, 214
dialect type, 79–93
dialectal border, 366
dialectometry, 83, 85, 102–108, 137–154, 158, 175–177, 180, 191, 228, 232, 242
diffusion, 368, 369
diffusion route, 336, 341, 342, 348, 353
diglossia, 38
distance matrix, 357
distinctiveness, 122–123, 125, 127, 130, 133, 160–161, 220
divergence, 296, 304, 305
dynamism, 199, 212, 213

edit distance, 137–154, 162
educational level differences, 273, 277
emic, 80, 95
emphatic negation, 67–70
emphatic particles, 71
English teacher, 308–313
ethnic orientation, 18, 27
etic, 80, 95

factor analysis, 79–95
feature validity, 81, 87
fiction, 256
fictional language, 249
flap, 311, 312
foreign accent, 158–163
formation process of Japanese dialects (FPJD), 380
forms of address, 281
fortis/lenis neutralization, 169
Freiburg Corpus of English Dialects, 229
fricatives, 328, 329
fundamental dialectological postulate, 236, 237
fuzzy clustering, 82
fuzzy set, 79–80

Gabmap, 109–115, 162
gender differences, 236
generalized additive model, 236
geographic information system (GIS), 176, 201, 208, 340
geographical information systems (GIS), 367, 376
geolinguistics, 365
georeferencing, 376
geospatial autocorrelation, 176, 180–186, 191
Getis-Ord Gi, 185–190, 192*, 208*, 208, 209
granularity of dialectal areas, 127, 130, 133
gravity model, 276
group phraseology, 313

heritage language, 15–30
hierarchical bipartite spectral graph partitioning, 120, 121, 219
hierarchical clustering, 232, 233, 240
hot spot analysis, 208, 210*

I-language, 248

image database, 338
importance, 123, 125, 130, 132, 220
indexical meaning, 397
informant's comment, 349–351
integrated research and teaching, 28, 30
interactive speaker-sample map, 30
internet survey, 251
interpersonal variation, 199
intrasystemic qualitative variation, 303
intrasystemic quantitative variation, 297, 299, 304
isogloss, 79, 101, 126, 127, 129, 130, 133

Jespersen's Cycle, 67

k-means clustering, 122, 219
koinéization, 23

language acquisition, 247
language change, 198, 199, 214
language contact, 16, 27, 307–309, 313
language perception, 253
lay concepts, 253
layer, 79–84
layer model, 81
leveling, 23
Levenshtein distance, 137–154
lexical area, 123, 130, 132, 133
lexical change, 120, 130, 131, 134
lexical features, 119–121, 125–127, 129–131, 133
lexical innovation, 370
lexical variable, 86
lexical variation, 86, 120, 133, 367, 369, 370
lexicon, 85
lexis, 248
linear regression, 316, 317
linguistic accommodation, 293, 297, 305
linguistic change, 309
linguistic geography, 137–154
linguistic maps, 366, 367, 369, 376
localized system, 375
logistic regression, 273, 276, 395, 396, 398

mass media broadcasting, 397
Matlab, 316*
matrix language frame model, 248
metacorpus, 69
micro-syntax, 65, 67
microvariation, 198
minimiser, 67
morphological variable, 85
morphological variation, 85, 86, 369
morphology, 85, 87, 248
multi-dimensional scaling, 83
multiple answers, 335, 338, 348, 349, 351
multiple regression, 311, 312
multiplexity, 311

n-grams, 238*, 238, 239, 241, 242
natural stimuli, 248
nested isoglosses, 129, 130, 133
network representation, 356–358
network structure, 310
new dialect, 16–18
noisy clustering, 79, 83
non-native speakers of English, 311

optionality in grammar, 199
orality, 253

participant observation, 69

parts-of-speech, 238, 242
past-tense negative verb suffix, 382–386, 388
Pearson correlation, 312
perceptual dialectology, 177
permutation, 238, 239, 241
person disagreement, 281
phonetic variable, 85
phonetic variation, 86, 137–154
phonetics, 85, 87
phonology, 248
pop culture program, 396, 397
primary modeling system, 301
principal components analysis, 84, 184, 186, 316
pronoun doubling, 253
pronunciation error hierarchy, 164
pronunciation teaching, 166, 171
prototype theory, 80, 95

qualitative analysis, 137–154
qualitative methodology, 280
quantitative analysis, 137–154
quantitative methodology, 270, 280
quantitative methods, 158, 168

rapid change, 384
reading sentence, 394
real-time, 380, 381, 384, 388
real-time changes, 365
real-time comparison of dialectal distributions, 382
real-time interval comparison, 389
real-time interval research, 366
real-time research, 380
regiolect, 3
regression modeling, 236
regressive assimilation, 167
representativeness, 121–123, 125, 127, 130, 133, 160–161, 220
road network, 342*, 342, 348*, 358
RuG/L04, 242

s-retraction, 324, 329
saliency, 292–294, 304, 305
Satzklammer, 256
schema theory, 80
scripted conversation, 394, 397
secondary modeling system, 283, 301
segment, 160
self-assessment, 252
semiological sign, 284, 298
semiosis, 298
semiosphere, 284, 301
semiotic space, 285, 287, 288, 292, 296–298, 301, 302, 304, 305
semiotic triangle, 298
shibboleths, 158
Short-a, 315
similarity, 354–357
singular value decomposition, 122
smoothing-spline ANOVA, 317
social meaning, 397
social network, 307–313
sociolinguistic interview, 28
sociophonetics, 324, 329
Southern vowel shift, 179, 190
spatial autocorrelation, 208
spatial distance matrix, 185
spatial pattern, 84
spatial weighting function, 185
Speech Accent Archive, 160
speech atlas, 102–115
speech errors, 171
standard form, 335, 340–344, 354
standard system, 375
standardisation, 281

standardization, 370, 375
standstills, 386
style-shifting, 41
superimposing maps, 367, 376
synchrony, 249
syntactic hierarchy, 268, 279, 280
syntactic theory, 199
syntactic variation, 198, 206, 208, 210, 212, 213
syntax, 248

tensing, 317–319
time-aligned transcription and integrated coding, 28, 30
tonal change, 392, 393, 395, 396
transcription, 101–115
transition area, 81
transportation, 342, 345, 353, 359
tussentaal, 39
typicality, 80

ultrasound, 316–317, 319
ultrasound tongue imaging, 325
ultraspeech, 316
usage data, 228, 242

variability, 249
variation index, 205–213
variationist sociolinguistics, 24, 25*, 27
variety, 81–91
verb doubling, 200
vowel reduction, 165
VRT-Dutch, 53, 55

word frequency, 218

The future of dialects

Traditional dialects have been encroached upon by the increasing mobility of their speakers and by the onslaught of national languages in education and mass media. Typically, older dialects are "leveling" to become more like national languages. This is regrettable when the last articulate traces of a culture are lost, but it also promotes a complex dynamics of interaction as speakers shift from dialect to standard and to intermediate compromises between the two in their forms of speech. Varieties of speech thus live on in modern communities, where they still function to mark provenance, but increasingly cultural and social provenance as opposed to pure geography. They arise at times from the need to function throughout the different groups in society, but they also may have roots in immigrants' speech, and just as certainly from the ineluctable dynamics of groups wishing to express their identity to themselves and to the world.

The future of dialects is a selection of the papers presented at *Methods in Dialectology XV*, held in Groningen, the Netherlands, 11-15 August 2014. While the focus is on methodology, the volume also includes specialized studies on varieties of Catalan, Breton, Croatian, (Belgian) Dutch, English (in the US, the UK and in Japan), German (including Swiss German), Italian (including Tyrolean Italian), Japanese, and Spanish as well as on heritage languages in Canada.

ISBN 978-3-946234-18-0