• I •

# Real-Time Sound Changes in a Minnesota-Norwegian Dialect between the 1980s and 2010s

Arnstein Hjelde

# Background

Over the last decade, intensive fieldwork has been conducted under the leadership of Professor Janne Bondi Johannessen (1960–2020) to document the language of the last American Norwegian speakers as part of the so-called NorAmDiaSyn project. Recordings of Norwegian-American speakers have been collected, many of which have been transcribed, and constitute the backbone of the Corpus of American Nordic Speech (CANS).<sup>1</sup>This online corpus also includes various older recordings, such as some of Haugen's from the 1940s, Seip and Selmer's from 1931, and my own from the 1980s and 1990s. This corpus is searchable, and its existence has completely changed the research in this field.

Although research on this topic was sparse before 2010, around forty scholars have published more than one hundred articles in the last decade. I took part in most of Professor

<sup>1.</sup> Johannessen 2015.

Johanessen's field trips, and this work has also brought me back to the places where I conducted field work for my study on the Inntrøndelag dialect in America thirty-five years ago.<sup>2</sup> At that time, Arne Kruse was the coordinator of the Norwegian Language and Culture Project at the University of Wisconsin– La Crosse, and when I arrived there on a scholarship in the early fall of 1986, he introduced me to the field of Norwegian-American studies and supported me in my work; he even housed me for a year while I was criss-crossing the upper Midwest looking for speakers of this particular dialect spoken in Trøndelag.

As fieldwork among Norwegian-Americans in general – and particularly the way they spoke the heritage language<sup>3</sup> – was the theme of many of our numerous late-night conversations, I find it very natural that this present chapter focuses more on language data than linguistic theory. By comparing my general findings from the 1980s – especially the data included in CANS, integrating the last decade – I describe what has happened to the Inntrøndelag dialect since Arne returned to Europe some thirty-five years ago.

A great challenge for me during the 1980s was to find speakers of this dialect, and I depended on contacts who could guide me in the neighbourhood, introduce me to local speakers, and direct me to new contacts in other communities.

Arne introduced me to Thor (see 'speakers, data, and method' section below), my first contact in Wanamingo, and the first one I recorded. From there, I was taken to Zumbrota – a neighbouring town, both being in Goodhue County, MN

<sup>2.</sup> Hjelde 1992.

<sup>3. &#</sup>x27;A language qualifies as a heritage language if it is a language spoken at home or otherwise readily available to young children, and crucially this language is not a dominant language of the larger (national) society'. Rothman 2009: 156.

- then directed to Madison and Appleton in Lac qui Parle County, MN. These two areas on the Minnesota prairie were settled by emigrants from Stjørdalen, in the southern part of Inntrøndelag. The oldest of them is the settlement in Goodhue County in the eastern part of the state; the first settlers from Stjørdalen arrived here in the mid-1850s. This community served as a mother settlement for the one in Lac qui Parle County in western Minnesota, as many of those who emigrated in the 1870s first came to Goodhue County before continuing westwards to Lac qui Parle County, where they could claim land and settle down as farmers.



Figure 1: Maps illustrating the location of Stjørdalen in Norway, as well as Goodhue and Lac qui Parle Counties in Minnesota.

In 1987, I was able to record a total of fourteen speakers in these two communities; there were many more heritage speakers around, but only a fraction of them wanted to commit their voice on tape, or they found it more rewarding to spend the time working in the field rather than talking with me. At that time, I was sure that those I had found belonged to the last generation of heritage speakers and that Norwegian would be totally gone in a decade or so. However, I recently visited these two communities again, and, to my surprise, I found a new generation of Stjørdal Americans who still speak the heritage language. This opens exciting possibilities for comparing the language of the 1980s to that of the 2010s and thereby investigating cross-generational change over time.

Each recording in CANS typically lasts between one and two hours. The whole corpus contains about 750,000 tokens – or individual words – collected from around 250 speakers in nearly fifty different communities in the United States and Canada. This represents a tremendous opportunity to study many different aspects of the language, including syntax, lexicon, and code switching. However, when the number of speakers is limited – such as here, where corpus data from a very small group of individuals were used – it is sensible to study features that are frequently found in speech. Thus, the focus of this chapter is on phonology and the development of three different sounds in Stjørdal American (StAm) speech.

Benmamoun et al.<sup>4</sup> claim that, in heritage languages, 'phonological competence seems to be the best-preserved aspect of linguistic knowledge in heritage speakers', a statement supported by several other scholars.<sup>5</sup> However, 'best-preserved' does not mean that this competence is totally resistant to change – even if the sound system as a system per se seems to prove rather stable in language-contact situations, this does not mean that the realisation of the phonemes will not be altered. Therefore, we cannot totally rule out the possibility that the phoneme system might change over time – even if it is expected to be stable.

In the 1980s, I thought I could see tendencies towards several sound changes in StAm, and I found it reasonable to

<sup>4.</sup> Benmamoun et al. 2013: 136.

<sup>5.</sup> Westergaard and Kupich 2015: 470; Johannesen and Putnam 2020.

interpret these as a result of cross-linguistic influence (CLI) from English. In particular, three phonemes were affected: the high front rounded /y/ was sometimes realised as an unrounded [I] or [i]; the apical vibrant /r/ was at times produced as a retroflex continuant [J]; and the same could happen to the 'thick I', a retroflex flap, /t/, which could also manifest as [J]. There was, however, great individual variation in the use of these forms; for some heritage speakers, these innovations had become a frequent part of their repertoire, while others had hardly any of these changes at all.

The aim of this chapter is to look at how these tendencies of change, which I documented in the 1980s, evolved over time and across generations (or rather age-based cohorts idealised as generations). A question often addressed regarding changes in the language of heritage speakers is whether they are due to attrition or differential acquisition (previously referred to as 'incomplete acquisition') – that is, a change during an individual's lifespan caused by limited use of the language or never fully mastering a certain feature.<sup>6</sup> The latter might be the case for some of the speakers, as the typical story told by many of them was that Norwegian was the first language they learned but that as soon they started school around the age of six, they rapidly switched to English as their dominant language and they hardly speak Norwegian today.

The data used in this study are not suited for determining whether the changes were the result of decades of very limited use of the heritage language (attrition) or differential acquisition, when the feature in question is not (fully) acquired before the speaker changes their dominant language from the heritage language to the community language. However, by comparing the language of these two age groups, we can see which sounds

<sup>6.</sup> Cf. Montrul 2008.

are more stable and which are more prone to change across generations. Also included is data from a non-Inntrønder male individual who was recorded as a teenager in the 1940s and again when he was approaching ninety in 2017. By comparing the StAm data with the data from this particular heritage speaker, I hoped to get at least some indication of which sounds were more or less stable.

Speakers, data, and method

Seven StAm speakers were chosen for a more detailed study. All were born in the United States, and their ancestors came from the Stjørdal area in Trøndelag. They all had strong ties to farming – they grew up on farms, and as adults, they were either farmers or lived on farms. All of them grew up with Norwegian as a heritage language, as it was spoken at home and in the neighbourhood, and they encountered English when they started school. They were all of relatively advanced age, as the youngest were in their late seventies and the rest were in their eighties or early nineties when they were recorded. These were third- or fourth-generation immigrants; three of them came from Lac qui Parle County and four from Goodhue County. Two of them, Thor and Lloyd, were recorded in 1987, while the five others were recorded in the 2010s.

An obvious difference between these two cohort groups is that those recorded in the 1980s still had many Norwegianspeaking peers; thus, their heritage language was used almost on a daily basis. It must be said that the two from the 1980s included here were partly chosen for transcription in CANS due to their willingness and ease of speaking their heritage language. Furthermore, these two were confirmed in Norwegian and were, to some degree, able to master written Norwegian. Among those recorded during the 2010s, the language was only sporadically used – if at all. Even Iris and Olaf, a married couple, hardly used it between themselves.

The recordings from the 1980s and 2010s represent two different groups of speakers that can be idealised as different generations; the two speakers from the earliest recordings were born during the first decade of the twentieth century, while the speakers in the newer recordings were born in the mid-1920s or later. In fact, Thor and Iris are father and daughter.

Year recorded	Name <sup>7</sup>	County	Year of birth	Comment
1987	Thor	Goodhue	1908	Father of Iris
1987	Lloyd	Lac qui Parle	1905	
2011	Iris	Goodhue	1939	Married to Olaf
2011	Olaf	Goodhue	1935	Married to Iris
2012	Annie	Goodhue	1928	
2018	Morgan	Lac qui Parle	1924	
2018	Peter	Lac qui Parle	1926	
1948 2017	Mark	Rock Prairie, WI	1929	Recorded seventy years apart

Table 1: Background information on the speakers

When I conducted my first study on the material from the 1980s, I only transcribed parts in which the speech deviated

<sup>7.</sup> The names used in this chapter are pseudonyms; however, the fictive names correspond to participants' actual genders.

from the baseline. This enabled time to be saved during transcribing and left me with data documenting phonological and lexical influence from English. This provided insight into which structures in the participants' heritage language were prone to change and how many tokens there were, but I could not draw conclusions regarding the frequency of these changes. The CANS and transcriptions upon which this more recent study is based feature a phonetic transcription of the entire collection of recordings, thereby making it possible to conduct systematic searches of certain features, including the sounds studied in this chapter. Having access to data on their whole speech and not just selected stretches makes it possible to determine how common the changes are.

The recordings from the 1980s and 2010s were done in a similar way through semi-structured interviews or conversations between the heritage speaker and fieldworker. The conversations were organised to cover a set of topics, such as childhood and the 'old times', everyday life, ethnic traditions and celebrations, language use, contact with Norway, and so on. The aim was to encourage the interviewees to talk as freely as possible and put their focus more on the content rather than on how they said it (even though the latter is of greater interest in the present study).

The transcriptions are based on an impressionistic approach, as I – or other transcribers – base these on what is heard – or thought to be heard. This is not ideal for a study on phonetics. However, my own dialect, including its phonological system, is very similar to the one found in the Stjørdalen dialect; thus, I feel confident that I – at least in most cases – was able to spot any major deviations from the dialect as spoken in Norway.

# Findings

### Vowels



Figure 2: The vowels of the Stjørdalen dialect.

Unlike 'standard' Norwegian<sup>8</sup> (whatever that is), the traditional Stjørdal dialect has – like many other dialects in this region – ten vowels, namely /i, y, e, ø, æ, ʉ, ʌ, u, o, a/. In the contemporary Euro-Stjørdal dialect, one of these vowels, / $\Lambda$ /, has merged with /æ/, reducing the number of vowels to nine, which is in line with this 'standard'. This change has not taken place among the StAm speakers, as seen in Example 1; it is intact among virtually all the heritage speakers I found and recorded.

### Example 1

(a)	fл:r	før	'earlier, before'
(b)	spл:r	spørre	'ask'
(c)	stA:r	større	'larger'

<sup>8.</sup> This includes the written standards, as well as many of today's dialects. At the same time, Norwegian has no officially standardised spoken variant. It is also worth noting that Trondheim is the 'city' for people in Stjørdalen, and the dialect here also has a system of nine vowels.

This does not mean that the sound system in this variety is not affected by tendencies towards change but that these changes follow a different path. The high fronted /y/, which is stable among speakers of this dialect in Norway, is a target for change in America. In the 1980s, I found that this phoneme showed tendencies towards being delabialised. Typically, the speakers could shift between a rounded (labialised) and unrounded (delabialised) pronunciation, but with individual variation, as some hardly had an unrounded variant, while among others, it was prevalent.

### Example 2

(a)	bI:	by	'town'
(b)	dI:t	dyrt	'expensive'
(c)	<sup>2</sup> tI:vende	tjuande	'twentieth'
(d)	<sup>2</sup> bIce	byttar	'change'
(e)	<sup>1</sup> tIskera	tyskararar	'Germans'

In a study on Texas German, Pierce et al.<sup>9</sup> found that the use of rounded front vowels decreased over time. Moreover, in this variety, the vowels affected were /y/ and /ø/. They argued that markedness is a factor to consider when it comes to phonetic changes in language-contact situations. As Haspelmath<sup>10</sup> demonstrates, the notion of markedness is ambiguous and thus problematic. However, Pierce used this term for sounds that are cross-linguistically rare, and the hypothesis was that such sounds are more easily targeted for change than widespread crosslinguistic sounds are.<sup>11</sup> Based on Eikel's observations of Texas German that 'individual speakers are consistent: if a speaker

<sup>9.</sup> Pierce et al. 2015.

<sup>10.</sup> Haspelmath 2006.

<sup>11.</sup> Pierce et al. 2015: 124.

unrounds /y/, he invariably also unrounds  $/\emptyset/,^{12}$  paired with the assumption that  $/\emptyset/$  is more cross-linguistically rare (that is 'marked') than /y/,<sup>13</sup> these combined considerations suggest that  $/\emptyset/$  might be more prone to delabialisation than /y/. The present StAm data do not support such a general claim, as  $/\emptyset/$  remains unaffected, while /y/ is the target for delabialisation.

They also point to the German dialects involved, as front rounded vowels in many of these are even absent in the European variants. If it is not part of the baseline inventory, its absence is not surprising in a diaspora context.

The baseline is also an issue in Norwegian contexts, as there are dialects in Norway in which /y/ has been delabialised. This phenomenon is probably best known in Solør (south-eastern Norway), but we also find it in parts of Hallingdal, Sogn, Nordfjord, Romsdal, Møre, Trøndelag, and Senja, an island in northern Norway.<sup>14</sup>

Even if a rounded /y/ seems to have been re-established in most of these places today, delabialisation of /y/ was common during the era of emigration and could thus be a part of the baseline. This is also documented in old varieties of the dialect in Frosta, a neighbouring municipality to Stjørdalen. This trait has been imitated and ridiculed by others and is probably extinct today.<sup>15</sup>

Delabialisation of /y/ has never been reported in Stjørdalen, and it is likely that it would have been noted and remembered in the district, given the low status that it was assigned. However, we cannot totally rule out the possibility that a delabialised allophone was present in Stjørdalen around the time of emigration and that it was not salient enough to be mentioned, or perhaps not considered representative of the dialect. In such a scenario,

<sup>12.</sup> Eikel 1954: 28, quoted from Pierce et al. 2015.

<sup>13.</sup> Maddieson 2013.

<sup>14.</sup> Skjekkeland 1997: 48.

<sup>15.</sup> Dalen et al. 2008: 48.

the heritage speakers would have continued the change, while it would have been decommissioned in the homeland variety.<sup>16</sup>

In Norwegian, the two high-fronted vowels /y/ and /i/ are distinguished by the feature [+/- rounding], a feature not relevant for distinguishing vowel phonemes in American English (AmE). Thus, the likeliest explanation for the StAm tendency towards delabialisation is contact with AmE. Furthermore, the distinction between /y/ and /i/ is not a crucial one, as few words are distinguished by these two vowels, and any potential misunderstandings can normally be avoided through the context. That this delabialisation has happened in Norway – and not only in one dialect but in several different dialects that are independent from each other – demonstrates that the rounded /y/ is an easy target for change and that delabialisation of /y/ does not have a devastating effect on the vowel system.

### Table 2: Delabialisation of y

1987	Thor	0
1987	Lloyd	0
2011	Iris	2
2011	Olaf	86
2012	Annie	33
2018	Morgan	50
2018	Peter	45
1948	Mark 1	11
2017	Mark 2	12

#### Delabialisation of y (%)

<sup>16.</sup> This tendency of delabialisation of /y/ is found among most Norwegian American heritage speakers today, regardless of their dialect background, which strongly indicates that it is due to language contact.

While working on these data during the 1980s, I considered delabialisation of /y/ to be widespread in StAm, given that many of the speakers showed examples of such delabialisation. However, some of the speakers, such as Thor and Lloyd, did not show any such tendencies.

By contrast, we see that delabialisation of /y/ is quite common among the subsequent generation recorded in the 2010s. All of them show delabialisation of /y/, and for all except one, we see that this trait is very frequent, ranging from 33% to 86% of the tokens. The exception among this group of speakers is Iris, with only 2%. One interpretation of this is that this trait is stable at an individual level in the sense that once it is acquired, it does not change much over a lifespan. An argument for this is Iris' input – her father Thor does not have any delabialisation at all; thus, she was shielded from this change while acquiring the language, and input regarding this particular feature later in life did not affect it.

Her husband Olaf has a very high tendency to delabialise /y/ (in 86% of the instances), but this has not affected Iris. Mark's tendency to delabialise has not changed from eighteen to eighty-nine years of age, unlike some of the other phonological traits in his speech, which have changed. Of course, more data are required to establish a clearer picture of how this particular change happens over time and across generations, and such research should be possible, as we have access to several recordings of both individuals and parents-children recorded some thirty years apart.

Analysis of the data from the 1980s revealed that despite delabialisation of /y/, this phoneme did not merge with /i/, as there was still an articulatorily distinction between /i/, realised as [i], and the delabialised /y/, realised as [I].<sup>17</sup> This latter allo-

<sup>17.</sup> Hjelde 1996: 288-290.

phone was realised as more open and a bit further back than [i], but the main difference was still in the lips: while [i] was pronounced with tense lips, [I] was articulated with relaxed lips. My analysis at that time revealed that this was a case of reinterpretation of distinctive factors,<sup>18</sup> from [+/-rounding] to [+/-tense lips].<sup>19</sup>

At that time, I thought that delabialisation was a fairly new development among Norwegian-Americans, as it was not mentioned by Haugen in any of his numerous publications on the American-Norwegian language. However, when some of Einar Haugen's field notes (written by his assistant Magne Oftedal) emerged from basement storage at the University of Oslo a few years ago, we could see that the same delabialisation phenomenon was commented on regarding one speaker from Elroy, WI.<sup>20</sup> Oftedal, who was a trained phonetician, concluded - as I did - that delabialisation did not result in a merge with /i/ but a new allophone: [I]. The same phenomenon is described in some Norwegian dialects with iotacism, namely the previously mentioned Frosta dialect, where the distinction was kept even after delabialisation.<sup>21</sup> Most of the speakers in the 1980s data also had a rounded allophone in their repertoire, [y]; and [I] and [y] were in free variation, as seen in Example 3.

### Example 3

(a)	bI:n – by:n	byen	'the town'
(b)	cI:r – cy:r	kyr	'cows'
(c)	mI: – my:	mykje	'much'

<sup>18.</sup> Weinreich 1953: 18.

<sup>19.</sup> Hjelde 1996: 289.

<sup>20.</sup> Oftedal 1948b.

<sup>21.</sup> Dalen 1985: 244.

All speakers from the 2010s still had a rounded allophone [y], but now the delabialised element can be [i], in addition to [I]. Thus, there are indications that this change is not purely phonetic, but might also involve the phoneme system through a merge of /i/ and /y/.

# Consonants

The two Norwegian consonants that seem to be most prone to influence from English are the rhotic /r/ and the so-called thick 1/t/, both of which can have a realisation similar to that of the American r, [J].<sup>22</sup>

### /r/

In Norwegian dialects, /r/ might be realised in several different ways, but in the Stjørdalen dialect, like other eastern Norwegian dialects, it is an alveolar vibrant [r] or tap [f];<sup>23</sup> thus it is realised in a different manner than in AmE, where it can be described as a retroflex approximant [I]. My 1980s data contain many examples of the use of [I] in an otherwise Norwegian context, as shown in Example 4. This innovation is sometimes referred to as r-approximation.<sup>24</sup>

<sup>22.</sup> The Oftedal field notes (1948c) comment on one person in Stoughton, WI who sometimes pronounced /r/ as [1]; I also document the same phenomenon in the speech of one individual in Vernon Co., WI. But this realisation is so rare that it will not be commented on in this study, as none of the speakers studied here have it. The Oftedal field notes also provide insight into some of the challenges a fieldworker could be confronted with seventy-five years ago, especially as parts of the transcriptions had to be done simultaneously in the field. One of the speakers lacked his teeth, posing considerable problem for the classification of dental consonants; another one had such an oversized moustache that the articulation was very unclear and hard for the fieldworker to plot.

<sup>23.</sup> In the transcription used here, I do not distinguish between the vibrant and the tap; both are transcribed as [r], in opposition to the retroflex approximant [1].

<sup>24.</sup> Natvig 2021.

### Example 4

(a)	Jæt	rett	'correct'
(b)	<sup>1</sup> .re:gel	regel	'rule'
(c)	sp10:k	språk	'language'

Furthermore, what I found in the 1980s was that the [J] allophone was in free variation with the 'traditional' vibrant/tap allophones [r], as seen in Example 5.

### Example 5

(a)	0:r – 0:I	år	'year'
(b)	<sup>1</sup> læ:vra – <sup>1</sup> læ:vıa	levra	'the liver'
(c)	<sup>2</sup> somor – <sup>2</sup> somo.	sommar	'summer'

As discussed above, the method of transcribing only sequences of speech that showed deviation from the baseline was good enough if the purpose was to document that this kind of deviation existed and to get an idea of how widespread it was. However, it could not reveal how frequent such deviations were when compared to the apical pronunciation. My data from that time contained numerous examples of [I] used in an otherwise Norwegian context, but we should also keep in mind that /r/ is among the most frequent phonemes in speech. I had numerous examples of [I], but [r] was still by and large the dominant realisation of /r/. So [I] was relatively less frequent than I thought it was; at least, that is what the data used for this chapter indicate.

		л for r (%)
1987	Thor	1
1987	Lloyd	0
2011	Iris	1
2011	Olaf	0
2012	Annie	5
2018	Morgan	6
2018	Peter	1
1948	Mark 1	1
2017	Mark 2	1

Table 3 shows that all but two speakers have [I] in their repertoire but that it is not very frequent, and it is difficult to see a clear pattern showing that this trait is more widespread among the younger generation. Peter, Olaf, and Iris show the same usage pattern as Thor and Lloyd. While Annie and Morgan are the two 'super users' of [I] among the investigated speakers, their tendency to use [I] for /r/ is still fairly low – only about one token for every twenty instances. Therefore, even for these two, [r] is the dominant realisation of this phoneme. Mark does not show any increase in the use of [I] between 1948 and 2017; it is stable at one token for every one hundred instances.

This r-approximation affects the realisation of the phoneme /r/, but that does not change the phoneme inventory per se. The same tendencies towards change of the realisation of /r/ was also documented in a study on speakers from Coon Valley

and Westby, WI.<sup>25</sup> Here, all American-born speakers showed r-approximation, but only to a limited extent; the vibrant [r] was still by far the most common realisation of this phoneme.

There is, however, one position where the use of [1] has become more widespread between the 1980s and today, and that is in positions together with retroflex consonants. The Old Norse consonant combinations rl, rn, rd, rt, and rs have, in many Norwegian dialects, been assimilated to a retroflex  $\eta$ , l, t, d and  $\int$ .<sup>26</sup> These retroflexes might be a part of the root or stem, as in Example 5, but we also see that this retroflexion is productive, both in relation to word inflection (Example 6d–f) and across word boundaries (Example 6g–h).

### Example 6

(b) <sup>2</sup> æ:le <i>arleg</i> honest	
(c) <sup>1</sup> æter <i>ert</i> pies	
(d) hør <i>høyre</i> hød <i>høyrde (pret)</i> heard	
(e) su:r sur su:t surt (neu) sour	
(f) ra:r rar ra: t rart (neu) strange	
(g) $\int e:r du$ $\int e: du$ ser du? 'see you?' Do you	see?
(h) fer <sup>1</sup> li:te fe <sup>1</sup> li:te for lite 'for little' too littl	e

AmE also has retroflex consonants, such as the allophones of alveolar /n, l, t, d/ ([n, l, t, d]), but normally these do not appear alone as a single segment, as in Norwegian; they are found in combination with the rhotic I, as in [In, Il, It, Id]. As we see in Table 4, this distributive pattern from AmE is spreading among many of the 'younger' speakers of heritage Norwegian.

<sup>25.</sup> Natvig 2021.

<sup>26.</sup> This assimilation is found in eastern and northern dialects in Norway but not in the western part of the country.

We see that, in the 1980s, Thor and Lloyd have few instances of J in positions before retroflex consonants, while we find it frequently used in such positions by Peter, Morgan, and especially Annie in the 2010s. These observations are in line with Natvig's findings from Wisconsin, where he observed the insertion of [J] in front of retroflex consonants to expand from the 1940s until today.<sup>27</sup> Our data also indicate that the tendency to use [J] in this position might change at an individual level, as Mark more than doubled his tendency to use [J] in combination with retroflex consonants over a span of about seventy years.

Table 4: The use of I + retroflex

J + retroflex (%)

1987	Thor	1
1987	Lloyd	0
2011	Iris	2
2011	Olaf	0
2012	Annie	29
2018	Morgan	15
2018	Peter	16
1948	Mark 1	10
2017	Mark 2	23

The Thick 1

The last sound discussed here is the so-called thick 1 (t). This consonant is not found in all varieties of Norwegian, and within

<sup>27.</sup> Natvig 2021.

dialectology, it is one of the fundamental characteristics used to divide Norwegian dialects into two main groups: east and west Norwegian. The thick l is typical among east Norwegian dialects, to which the Stjørdalen dialect belongs, while west Norwegian dialects lack this sound.

The thick l is classified as a retroflex flap and has two historical origins. One is the result of the assimilation of the Old Norse consonant group  $r\partial$ , while the other originates from the Old Norse *l* in certain environments or positions. Although I do not describe the distribution of [t] when originating from Old Norse *l* in detail, I provide the following general sketch: it is often found in internal and final positions after long vowels (except i:, ei, and rarely after e:, y:, or  $\phi$ y; cf. Examples 7a–c). Furthermore, we find it in clusters with certain consonants (such as k, g, p, b, m and v; cf. Examples 7d–f).<sup>28</sup> However, as Sandøy points out, today it is impossible to identify absolute rules for when the Old Norse *l* is rendered as a thick l, as there will always be exceptions.

### Example 7

(a)	sta:ľ	stal	stole
(b)	ptu:g	plog (noun)	plough
(c)	hø:ť	hol	hole
(d)	<sup>2</sup> krase	klasse	class
(e)	Ելս։	blod	blood
(f)	kæŗv	kalv	calf

In the 1980s recordings, the most common realisation of this phoneme is as [t], a retroflex flap. However, a new retroflex allophone was also introduced to the repertoire of most of the

<sup>28.</sup> Sandøy 1985: 185.

speakers at that time. This one was not a flap but a retroflex approximant [1], and as far as I am able to judge, similar to the American r (Example 8).

# Example 8

b.a:	blad	'magazine/
		newspaper'
bu:1	bord	'table'
²gæ:.ii	gale	'wrong'
p.1as	plass	'place'
p.ıøy	pløye (inf.)	ʻplough'
	ыа: bu:л ²gæ:лі pлаs pлøy	bia: blad bu:.i bord <sup>2</sup> gæ:.ii gale pias plass piøy pløye (inf.)

This change was obviously not a new development in the 1980s. This phenomenon is commented on in the Oftedal field notes from Haugen's study, and between Argyle and Wiota in southern Wisconsin, the thick 1 is reported to be replaced by such an approximant. Magne Oftedal, as Haugen's assistant, writes:

Thick l has for the most part lost its flap and is very similar to English r. Still, I think that I can often hear a difference and in such cases I have used the common symbol l for this variant without the flap. In some cases, I can clearly hear the flap and put a point under ł. But often do I hear English r for thick l. The flap seems to be especially common in consonant groups, and it is possible that these two or three sound types are in combinatorial variation.<sup>29</sup>

In my data from the 1980s, the allophone [I] was in free variation with the flapped allophone [t], as seen in Example 9.

<sup>29.</sup> Oftedal 1948a. Author's translation.

### Example 9

(a)	²gæ:ŗi	²gæ:.ii	gale	'wrong'
(b)	<sup>2</sup> gamet	<sup>2</sup> game1	gammal	'old'
(c)	ptøy	рлøу	pløye	ʻplough'
(d)	²prasa	<sup>2</sup> p.1asa	plassar	'places'

In his publications, Einar Haugen also comments on the fact that the thick 1 might be pronounced as [J]. When he describes how AmE /J/ is rendered in loanwords, he finds that 'the sound is commonly imported in loanwords, especially in dialects having  $l^{30}$  already, with which it is often confused',<sup>31</sup> In a 1938 article, he comments on the same, as for one speaker's thick 1, 'the slap is entirely lacking so that his [r] and [l] are indistinguishable'.<sup>32</sup> Thus, this cannot be a new development in the American-Norwegian language; it is a process that at least goes back to the 1930s and probably even earlier.

In the data upon which this chapter is based, we get a rather good indication that the approximant allophone was common in the 1980s (Table 5). We see from the recordings of Lloyd that, in four out of ten instances, he produces a continuant, and this realisation is also found in the speech of Thor, even if it is quite rare in his repertoire. Among the young generation recorded in the 2010s, we see that the continuant is very frequent; for four of these five StAm speakers, it is the dominant allophone, and for the fifth speaker, it represents nearly half of the instances. We also see that the tendency to replace the flap with an approximant might change dramatically over a lifespan. For Mark, as a teenager, the ratio between approximant and flapped allophones was about 1:15; seventy years later, the ratio had changed to 1:1.

31. Haugen 1969: 435.

<sup>30.</sup> Haugen's notation of the thick l.

<sup>32.</sup> Haugen 1938: 66.

		א for <u>ך</u> (%) ג
1987	Thor	3
1987	Lloyd	41
2011	Iris	98
2011	Olaf	92
2012	Annie	69
2018	Morgan	74
2018	Peter	45
1948	Mark 1	6
2017	Mark 2	50

Table 5: Realisation of the thick l as I

It is obvious that the thick l is rather prone for change in realisation among the StAm speakers, and I think there are several reasons for this.

One obvious reason is related to articulation. Flapping is common for intervocalic t and d after a stressed vowel in AmE, but it is not a distinctive feature as it is in the Stjørdalen dialect. And the way from a [t] to [I] is fairly short, as the tongue's starting position for the [t] is very similar to how it is raised when pronouncing [I]. Thus, by eliminating the flap element in the pronunciation of [t], we are left with a retroflex approximant – an [I].

Furthermore, even if it is common to consider thick 1 as a phoneme in Norwegian, it is hard to find minimal pairs, and dialects lacking these sounds fill the slot with /r/ when the historical origin is  $r\partial$ , or with /1/ when that is the origin. The fact

that the thick l is not carrying much 'distinctive force' might also make it more vulnerable to change.

Finally, we can be sure that the older generation was exposed to Norwegian varieties without the thick l. In Goodhue County, there was a significant group from western Norway, and Thor, for example, utilised the negation particle /ice/, *ikkje*, which we find in that part of Norway, instead of the Stjørdalen /ic/, which we would expect. Thus, dialect contact might also play a role here. The older generation also had some experience with a more literary language, both written and spoken. In writing, Norwegian is not codified with a letter denoting the thick l, and this sound was probably lacking in the educated speech of the clergymen.

# Discussion and concluding remarks

There have been changes in the Norwegian sound system on both sides of the Atlantic, but these changes have followed different paths and have been motivated by different factors.

The Stjørdalen dialect of today has lost the phoneme  $/\Lambda/$ , and it is reasonable to assume that this change, at least in part, is due to pressure from urban speech and proximity to the regional centre of Trondheim, as well as influence from the written standard. In America, influence from English plays an important role, and cross-linguistic influence can, to a great extent, explain the changes we observe for /y/, /r/, and /t/. However, these three phonemes also seem somewhat fragile in a Norwegian setting.

We know that /y/ was delabialised in several Norwegian dialects, and that these areas are independent, scattered pockets around the country with great distances between them. Thus, this delabialisation can hardly be explained by dialect contact

and spread from one area to another; the likeliest explanation is that these changes constitute independent developments in these areas. When such delabialisation occurs in several places, this should strongly indicate that y is prone to delabialisation even in a fairly stable monolingual setting; and when exposed to intense contact with a language lacking the rounded /y/, it is not a great surprise that we find this kind of delabialisation.

Likewise, /r/ is pronounced differently depending on the dialect, and in parts of Norway, this rhotic is also a sound prone to change. In western areas of the country, we find that the old apical thrill is losing terrain to a uvular or velar fricative [R]; it is assumed that this sound came to Bergen and Kristiansand around 1800, expanded rapidly during the last century, and continues to do so.<sup>33</sup> One of the explanations given for this is that the apical vibrant is 'difficult' to articulate and among the last sounds a child masters; thus, it is prone to replacement by a less complex realisation.<sup>34</sup> It is fair to assume that the same mechanism might work when the vibrant or tap r shows a tendency to be replaced by an approximant among Norwegian Americans.

Regarding the thick l, the situation is somewhat different, as this phoneme is found in only some Norwegian dialects. Even though this feature seems to be fairly stable inside its isogloss borders, the number of words distinguished by this phoneme is small.

The point here is that none of these three sounds are found in all the 'Old World' Norwegian dialects; there are varieties

<sup>33.</sup> Skjekkeland 1997: 89-90.

<sup>34.</sup> Fintoft et al. 1983: 42–44. They examine the spoken language of fouryear-old Norwegian children and show that among speakers of dialects with apical [r], there is a high proportion of children who show deviations from the target apical pronunciation, while this is not the case among speakers of dialects with the uvular/velar pronunciation [R].

lacking one or more of these dialectal traits. The most surprising aspect of our findings is that, perhaps, the overall low tendency for [I] to replace [r] and that the approximant does not show any clear and strong tendency to increase over generations. This conflicts with the general impression Norwegians have of how Norwegian Americans speak. When Norwegian Americans are caricatured in Norway, the /r/ is often an approximant, and even Norwegian scholars might claim that Norwegian Americans are quite quick to adopt this pronunciation.<sup>35</sup> All Norwegian Americans have the approximant in their speech, since it is commonly found in AmE loanwords, but as we see, the approximation of [r] to [J] is not very common, and the increase over generations is moderate.

Table 6: The use (in percentages) of i for y; I for r; I + retroflex for a 'bare' retroflex; and I for [.

		i for y (%)	.1 for r (%)	+ I.	., for <b>г</b> (%)
				retroflex(%)	
1987	Thor	0	1	1	3
1987	Lloyd	0	0	0	41
2011	Iris	2	1	2	98
2011	Olaf	86	0	0	92
2012	Annie	33	5	29	69
2018	Morgan	50	6	15	74
2018	Peter	45	1	16	45
1948	Mark 1	11	1	10	6
2017	Mark 2	12	1	23	50

35. Torp 2007: 35.

The only position where the approximant is expanding across generations is in a junction with a retroflex, where the segmented rhotic + retroflex is replacing a bare retroflex. This was especially frequent among some of the speakers from the 2010s, while it was rare among the oldest group. A somewhat similar, though more extreme, pattern was found for delabialisation of /y/; it was not present among the oldest cohort of speakers but very common among the youngest speakers. The most widespread change was the approximation of the thick 1, the only change we documented among all the speakers, and the most frequent realisation of /t/ for four out of five of those recorded in the 2010s.

If we contrast these findings with the data on Mark, who was recorded as a teenager, we see that in his speech when approaching ninety, the distribution of two of the features are extremely stable: /y/, and /r/ in a non-retroflexed environment. Segmentation of Norwegian retroflexes to /I/ + retroflex shows a growing tendency from one out of ten instances to about every fourth instance. The most prominent change is related to the thick l, where the realisation as an approximant [I] raises from 6% to 50%. We know that this particular speaker had spoken hardly any Norwegian during the fifty years before he was recorded in 2017; thus, the most reasonable explanation for this increase in the use of [I] is attrition.

In my view, attrition is also the main explanation for the changes we found among the speakers from the 2010s. We know that those recorded in the 1980s grew up in a Norwegianspeaking community where the language had been passed on over several generations, with only some minor tendencies towards language change. At that time, many of them still used the language on a regular basis. The massive changes have occurred among the speakers recorded in the 2010s, those who have typically not spoken much Norwegian over the last few decades. Frequency of use has been shown to be an important factor in language attrition, and that seems to be the main difference between the speakers recorded in the 2010s and 1980s.

StAm is a moribund heritage language, as the limited number of speakers today are of advanced age and the last generation to have mastered it. It has been argued that this kind of heritage language is likely to show accelerated language decay, leading to reduced complexity.<sup>36</sup> In this study, it was found that even if tendencies towards variation in pronunciation of the examined phonemes are observed among the older generation, this accelerates among the young cohort. But still, the core structure of the StAm phoneme inventory is maintained and the status for these three targeted sounds in StAm varies across dialects in Norway as well. One could argue that despite the variations highlighted, these findings neither contradict nor challenge the previously mentioned claim of Benmamoun et al.<sup>37</sup> that phonological competence is a very well-preserved aspect of a heritage language.

The research reported in this chapter was partially supported by the Research Council of Norway. Project 301114, 'Norwegian across the Americas'.

### Bibliography

- Benmamoun, Elabbas et al. 2013. 'Heritage Languages and Their Speakers: Opportunities and Challenges for Linguistics'. *Theoretical Linguistics* 39:3–4, 129–181.
- Bousquette, Joshua and Putnam, Michael T. 2020. 'Redefining Language Death: Evidence from Moribund Grammars'. *Language Learning* 70:S1, 188–225.

<sup>36.</sup> See Bousquette and Putnam 2020 for a discussion and references on this matter.

<sup>37.</sup> Benmamoun et al. 2013: 136.

- Dalen, Arnold. 1985. Skognamålet: ein fonologisk analyse. Oslo: Novus forlag.
- Dalen, Arnold et al. 2008. *Trøndersk språkhistorie: Språkforhold i ein region*. Trondheim: Tapir akademisk forlag.
- Eikel, Fred Jr. 1954. 'The New Braunfels German Dialect'. PhD thesis. Johns Hopkins University.
- Fintoft, Knut et al. 1983. *4 år: en undersøkelse av normalspråket hos norske 4-åringer.* Trondheim: Universitetet i Trondheim.
- Haspelmath, Martin. 2006. 'Against Markedness (and What to Replace It with)'. *Journal of Linguistics* 42:1, 25–70.
- Haugen, Einar. 1938. 'Phonological Shifting in American Norwegian'. Language 14:112–120.
  - ------. 1969. *The Norwegian Language in America: A Study in Bilingual Behavior* (2nd ed.). Bloomington: University of Indiana Press.
- Hjelde, Arnstein. 1992. *Trøndsk talemål i Amerika*. Trondheim: Tapir akademisk forlag.

——. 1996. 'Some Phonological Changes in a Norwegian Dialect in America'. In P.S. Ureland and I. Clarkson (eds), *Language Contact across the North Atlantic*. Tübingen: Max Niemeyer, 283–295.

- Johannessen, Janne B. 2015. 'The Corpus of American Norwegian Speech (CANS)'. In B. Megyesi (ed.), Proceedings of the 20th Nordic Conference of Computational Linguistics. Linköping: Linköping University Electronic Press, 297–300.
- Johannesen, Janne B. and Putnam, Michael T. 2020. 'Heritage Germanic Languages in North America'. In Michael T. Putnam and B. Richard Page (eds), *The Cambridge Handbook of Germanic Linguistics*. Cambridge: Cambridge University Press, 783–806.
- Lie, Sven. 1993. Kontrastiv grammatikk: med norsk i sentrum. Oslo: Novus.
- Maddieson, Ian. 2013. 'Front Rounded Vowels'. In Matthew S. Dryer and Martin Haspelmath (eds), *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology, http://wals.info/chapter/11. Accessed 21 March 2022.
- Montrul, Silvina. 2008. Incomplete Acquisition in Bilingualism: Re-Examining the Age Factor. Amsterdam: John Benjamins Publishing.

- Natvig, David. 2021. 'Variation and Stability of American Norwegian /r/ in Contact'. In *Linguistic Approaches to Bilingualism*, https://doi.org/10.1075/lab.20085.nat. Accessed 21 March 2022.
- Oftedal, Magne. 1948a. 'Questionnaire: Informant 3C1. Argyle, Wisconsin'. Field notes. http://tekstlab.uio.no/norskiamerika/opptak/ haugen.html. Accessed 21 March 2022.
  - ——. 1948b. 'Questionnaire: Informant 13N4. Elroy, Wisconsin'. Field notes. http://tekstlab.uio.no/norskiamerika/opptak/haugen.html. Accessed 21 March 2022.
  - ——. 1948c. Field notes. Manuscript. http://tekstlab.uio.no/media/ lydogbilde/amerikanorsk/einar\_haugen/Informantbeskrivelser-fra-Oftedal. Accessed 21 March 2022.
- Pierce, Marc et al. 2015. 'The History of Front Rounded Vowels in New Braunfels German'. In Janne B. Johannessen and Joseph C. Salmons (eds), German Heritage Languages in North America. Acquisition, Attrition and Change. Amsterdam, John Benjamins Publishing Company, 117–131.
- Rothman J. 2009. 'Understanding the Nature and Outcomes of Early Bilingualism: Romance Languages as Heritage Languages'. *International Journal of Bilingualism* 13:2, 155–163.
- Sandøy, Helge. 1985. Norsk dialektkunnskap. Oslo: Novus forlag.
- Skjekkeland, Martin. 1997. Dei Norske Dialektane: Tradisjonelle Særdrag i Jamføring med Skriftmåla. Kristiansand: Høyskoleforlaget.
- Torp, Arne. 2007. R: ei urokråke i språket. Oslo: Samlaget.
- Weinreich, Uriel. 1953. *Languages in Contact: Findings and Problems*. The Hague: Mouton & Co.
- Westergaard, Marit and Kupich, Tanja. 2015. 'Stable and Vulnerable Domains in German Heritage Languages'. Oslo Studies in Language 11(2):503–526.