English *r* and American Norwegian: Sound systems in contact

Rhotics in Germanic display widespread synchronic and diachronic variability in their phonetic realizations (Howell 1991; Natvig & Salmons forthcoming) and these sounds have been shown to be early targets for transfer in language contact between English and Germanic heritage languages in the United States. For example, Salmons (2016) shows that the English approximant [ɹ] was adopted early among Wisconsin German speakers but does not completely replace other German /r/ variants. Additionally, Hjelde (1996) demonstrates variable transfer of English [ɹ] for both /r/ and /l/ phonemes (phonetically [r] or [ɾ] and [ɽ], respectively, where the Norwegian /l/ has a so-called 'thick' allophone as a retroflex tap) in American Trønder, often resulting in a partial loss of contrast (290–3). In this paper I therefore investigate the transfer of English [ɹ] for Norwegian /r/ among Norwegian of Heritage Norwegian (HNw) speakers with 'thick-l' dialects in order to analyze this transfer's effects on the maintenance of the HNw phonological system, especially its phonemic contrasts and phonological rules.

Data come from three conversations, each between one female and one male HNw speaker, from three towns in western Wisconsin: Blair, Coon Valley, and Westby. The interviews were conducted in 2010 and are transcribed and housed in the Corpus of American Norwegian Speech (CANS; Johannessen 2015). Transcripts are coded based on transcribed variants for Norwegian /r/ — [r]/[ɾ], [ɹ], and [Ø] — and tokens' phonological environments are recorded. I have supplemented these data with acoustic analysis of the transcribed tokens to verify transcribed patterns and determine the presence or absence of vibration for [r]/[ɾ] and [ɹ] tokens, respectively. Preliminary results are consistent with Salmons' (2016) findings for Wisconsin German, namely that although English [ɹ] appears for Norwegian /r/, it occurs as one of many possible phonetic variants, typically at a low rate compared to other realizations (Table 1). Furthermore, among speakers with the highest instances of HNw /r/ transcribed as [ɹ], it primarily occurs preceding coronal consonants within and across word boundaries (Table 2). These are same the phonological environments in which /r/ induces the retroflexion of following coronals (Kristoffersen 2000:96–102; Stausland Johnson 2012:509). Accordingly, I argue that the HNw adopt the English [ɹ] variant as a means to perform a Norwegian phonological operation. The evidence suggests, then, the maintenance of the Norwegian sound system — phonemic contrasts and phonological rules — albeit with the introduction of a newer phonetic variant from an English source. The results speak to the processes and effects of phonetic and phonological contact: specifically, the increased use of one language influences the phonetic targets of the other — and may introduce novel variants in the recipient language (RL) — but RL phonological structures and operations tend to be considerably resilient over time (Benmamoun et al. 2013:137; Polinsky 2018:115; Natvig 2019).

Table 1. Speakers' distributions of HNw /r/ variants, per transcription.

Speaker	[r]/[ɾ]		[ɹ]		Ø		Total
	n	%	n	%	n	%	n
blair_WI_07gm	153	65.7	18	7.7	62	26.6	233
blair_WI_04gk	207	69	43	14.3	50	16.7	300
coon_valley_WI_07gk	166	57.6	21	7.3	101	35.1	288
coon_valley_WI_06gm	170	62.5	9	3.3	93	34.2	272
westby_WI_03gk	100	49.0	2	1.0	102	50.0	204
westby_WI_05gm	82	50.9	2	1.2	77	47.8	161

Table 2. Speakers' distributions of HNw [ɹ] preceding (a) coronals, (b) non-coronals, and (c) vowels, per transcription.

Speaker	/_ (#) Coronal		/_ (#) Non-cor.		/_Vowel		Total
	n	%	n	%	n	%	n
blair_WI_07gm	12	66.7	4	22.2	2	11.1	18
blair_WI_04gk	34	79.1	7	16.3	2	4.7	43
coon_valley_WI_07gk	17	81	4	19	0	0	21
coon_valley_WI_06gm	3	33.3	4	44.4	2	22.2	9
westby_WI_03gk	1	50	1	50	0	0	2
westby_WI_05gm	2	100	0	0	0	0	2

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