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Maintaining a Multilingual Repertoire

Lexical Change in American Norwegian

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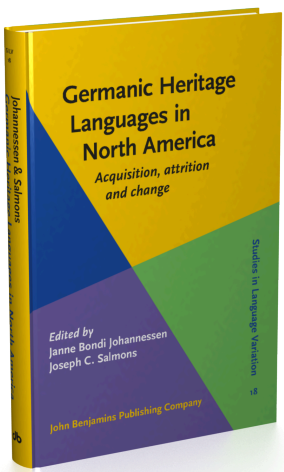

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Maintaining a multilingual repertoire

Lexical change in American Norwegian

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This paper examines change in the lexicon of American Norwegian by investigating phonemic, semantic and lexical transfer from American English into the heritage Norwegian of the American Midwest. We observe these types of transfer when the semantic structure, phonemic structure, or both, are transferred from English to the heritage variety. Drawing on Matras' (2009) insight that languages converge as a result of the need to simplify the selection procedure, we expect lexical transfer (involving both semantic and phonemic structure) to be the most abundant of these three phenomena as it provides more convergence (simplification). Our findings support this hypothesis and corroborate those of Haugen (1953), showing that lexical transfer is the most common route of convergence in American Norwegian.

Keywords: lexical transfer, semantic transfer, phonemic transfer, heritage language, American Norwegian, multilingual repertoire

1. Introduction

This paper examines how the lexicon of the heritage Norwegian as spoken in America (hereafter 'American Norwegian') has been changed as a result of contact with local American English.[1] As early as the 1850s, it was noted that Norwegian immigrants to America spoke a sort of Americanized Norwegian: "The language of the Norwegians over there [America] is famous. They make haste to mix it with English, and the more they can mix the language, the better" (cited in Haugen 1953: 54). This paper picks up the trail of 'Americanized' Norwegian sixty years after Haugen's writing, while

1. We use the definition of "heritage language" given by Rothman (2009: 156): "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."

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taking into account more recent work on the lexicon, such as Hjelde (1992) and Johannessen and Laake (2012, forthcoming). Through an examination of Norwegian spoken by 16 heritage speakers in the American Midwest, we test a claim inferred from Matras (2009): that languages in contact will create as much overlap in their respective lexicons as possible, as a means of coping with the need to maintain a multilingual repertoire. We hypothesize that because lexical transfer (often called 'borrowing') entails the most overlap (both phonemic and semantic), it will be the preferred method of creating overlap. We quantify the occurrence of various language contact phenomena (i.e., coping strategies) with data from heritage speakers of American Norwegian, and see that our theory holds – Norwegian in America has undergone changes favoring full overlap in lexical structure over partial overlap. That is, change is most often in favor of lexical transfer (wholesale borrowing of phonemic and semantic structures) over either phonemic or semantic transfer alone. This preference is most likely due to language acquisition in a bilingual area with no stark cultural differences. While our findings cannot be generalized to other contact situations, our results help explain ever-present language contact phenomena and speakers' language coping strategies.

Part 2 of this paper outlines and defines the language contact phenomena discussed and how these coping strategies vary in terms of amount of overlap they create. Part 3 provides the theoretical background which motivates our test and in which we frame our argument. Part 4 tests this claim using data from American heritage speakers of Norwegian. Results are discussed in Part 5, and concluding thoughts in Part 6.

2. Background

This paper discusses the results of language contact, a situation in which the outcomes are very much dependent on social factors. So, rather than discuss contact phenomena in a vacuum, we take Sankoff's advice about situating "any discussion of the results of language contact within a sociohistorical perspective that considers the historical forces that have led to language contact" (2001:640). Therefore, in addition to background literature and the language contact theory that forms our point of departure, we also provide background on the types of language contact phenomena found in various language contact situations. We go on to describe the social situation of Norwegian in America and of our speakers.

2.1 Theoretical background

The vast majority of language contact phenomena have in common that they create similarity between two or more languages.[2] This fact underpins much of the scholarship on language contact. Romaine writes that "convergence, interference, and borrowing all have as their linguistic outcome an increase in the similarity between two or more linguistic systems" (1995: 75). Beniak, Mougeon and Valois describe convergence as the gradual elimination of non-congruent forms in languages in contact (1984: 73, cited in Romaine 1995). Similarly, Matras writes that "borrowing is viewed as a form of levelling of structures across the multilingual repertoire, with the outcome that a single structure is employed, irrespective of interaction context and so irrespective of choice of 'language'" (2009: 7).[3]

Matras (2009: 151) suggests cognitive motivation for the structural borrowing that creates similarity between languages where there previously was either less or none. This motivation is based on evidence that there is a selection process for choosing context-appropriate forms from a speaker's multilingual repertoire, a process that begins during language acquisition and continues on throughout a speaker's lifetime (2009: 16). Regarding this cognitive motivation Matras writes:

> …the bilingual speaker faces the challenge of maintaining control over the language processing mechanism that enables selection of context-appropriate structures within the repertoire and inhibition of those that are not appropriate. There is pressure on the bilingual to simplify the selection procedure by reducing the degree of separation between the two subsets of the repertoire, allowing the two 'languages' to converge. (2009: 151)

Given this pressure to simplify the selection procedure, we can infer that to ease the cognitive processes surrounding the selection procedure, speakers will to some extent match their lexicon to that of the contact language, creating structural overlap. The extent to which this overlap is manifested in languages in contact, however, is largely dependent on the social situation.

2.2 Social influence on language contact phenomena

Sankoff writes, "Broadly speaking, two major social processes have given rise to contact situations of interest to linguistics: conquest and immigration" (2001: 642). Our focus with American Norwegian is on the latter, which, according to Sankoff, "has

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2. This overlap is of course counteracted by the need to maintain a distinction between the contact languages, therefore studies of language contact are never as straightforward as "Language A becomes Language B."

3. For discussion on non-lexical, semantic convergence, see Brown and Putnam (this volume) on contact-induced extension of the progressive aspect in Pennsylvania Dutch.

usually resulted in rapid linguistic assimilation", and "has often led to borrowing into the immigrant languages" (2001: 642). Language contact as a result of immigration often results in what Matras describes as a situation of dominance and diglossia. Matras attributes the pressure to borrow to the "unidirectionality of bilingualism", where "[m]embers of the weaker group are obliged to maintain tight control over their selection of word forms whilst communicating in the dominant or majority language" (2009: 59). He contrasts this with "lax" control over selection of lexical items "when communicating with fellow speakers of the smaller language" nearly all of whom are bilingual (2009: 59).

Situations of dominance and diglossia, typified by borrowing, are contrasted with situations of linguistic stability, where both social groups and their languages are on equal footing. In such cases of linguistic equilibrium, results of language contact are often seen through the gradual convergence of structures, rather than the transfer of overt lexical items (Matras 2009: 58).

The ancestors of our speakers immigrated to the United States from Norway as long as three or four generations ago, and as recently as second generation settling near or in the rural communities where most of our speakers still live. Though according to Haugen (1953: 23) Norwegian immigration began in 1825, the earliest date that our informants gave for ancestors coming over was 1840. For the communities surveyed, most immigration took place from 1850 though the 1890s, with 1880 through the 1890s being the peak of Norwegian immigration to America. However, immigration certainly did not stop after that time, as at least one speaker from each area reported to have ancestors who immigrated after 1900 and as late as 1922.

Common to all of these waves of immigration, from early on, is the unique brand of Norwegian that was developed due to contact with English. Haugen cites several Norwegians who visited America in the 1850s and observed, "Such Norwegian as they talk here! It is so mixed with English phrases that I was quite annoyed when I first arrived" (1953: 54). Such quotes, including the quote in this paper's Introduction, indicate a lack of social constraints regarding use of American English or of Norwegian that is seen as somehow Americanized. Haugen also makes it clear that loanwords from English frequently went unrecognized by the speakers of those words, and that children acquiring both languages were often unsure in what contexts certain vocabulary items were to be used (1953: 62). Both Haugen (1953: 71, 1956: 99) and Matras (2009) emphasize the contextual (i.e., cultural and social) nature of bilingual language acquisition. For Matras, linguistic socialization is what determines how the repertoire is divided into subsets (i.e., languages) based on what forms are used in what contexts.

In the case of our speakers of American Norwegian, they are all members of the 'terminal' generation of speakers. They were learning Norwegian at a time when English was rapidly taking over areas that had previously been the domain of Norwegian, such as church and family life. If the incorporation of English forms was facilitated by an overlap of contexts in which Norwegian and English were used early on, this overlap was only increased later. The need to speak in Norwegian on topics that were more American culturally (e.g., government and politics, farming, business,

machinery and technology, etc.) led to the transfer of many word-forms and shifts in meaning in others. We focus here on three types of linguistic transfer that result from contact with English and the overlap of contexts.

3. Three types of transfer

That the lexicon of American Norwegian has been affected by English to a large degree (even to the extent of affecting modality and the "supposed to" construction, see Eide and Hjelde this volume) is not surprising given that languages in contact tend to become more similar, even more so in a bilingual setting (Matras 2009, Romaine 1995). Clyne (2003: 76–78) identifies many types of transfer that occur in situations of language contact. In this paper we focus only on those types of transfer pertaining to a lexical word: semantic transfer, phonemic transfer and lexical transfer. We use these terms as defined by Clyne (2003). Table 1 shows the possible ways that these types of transfer interact, and helps explain why we discuss three types of transfer in this paper.

Table 1. Transfer according to contact phenomena, as considered in this paper.[4]

Phenomena	Phonemic structure	Semantic structure
Lexical transfer	X	X
Semantic transfer	(*)	X
Phonemic transfer	*X	*
Loan-shifting (sem. transf.)	*	X
Loan-translation (sem. transf.)		X
Phonemic transfer (undocumented)	X	

Semantic transfer is the transfer of semantic structure (that is, meaning) from one language to another. Semantic transfer is often divided into loan-translation (sometimes called "calquing") and loan-shifting. In **loan-translation**, often used in compound words, the semantic structure is transferred via word-for-word translation from one language into another. In other words, native words retain their original meanings and combine in new ways to express an idea from the model language. For example, *laksørret* in American Norwegian (literally 'salmon+trout') is a loan-translation of 'salmon-trout,' one of the various American English words for steelhead, an anadromous type of rainbow trout. Haugen (1956: 48) gives the Spanish example of *casa de corte* 'court house,' where the idea of a 'court house' has been loaned into Spanish, but is expressed using pre-existing Spanish lexical items. **Loan-shifting**, on the other hand, applies a new meaning to a native word that has the same phonological shape as a word in the model language. Haugen (1956: 52) gives the example: *Du må stikke til det* 'you've gotta

4. Italicized items are the terms we use throughout the paper. An "X" indicates what is transferred, and "*" indicates pre-existing overlap with the contact language (i.e., American English).

stick to it.' The verb *stikke* means 'to stick/stab with a pointed object' just like it can in English. However, the idiomatic usage of *stikke* meaning 'to be persistent' in this particular phrase is not part of the original Norwegian meaning; *stikke* has been used only because of the similarity in sound to the English model. Because both loan-shifts and loan-translations use an existing native word or words to express a new, foreign, concept that has been transferred from the model language, we use the term 'semantic transfer' to cover both phenomena. Table 1 above shows how loan-shifts and loan-translations both involve semantic transfer but differ based on pre-existing overlap in phonemic structure.

Phonemic transfer is the process by which part of the phonemic structure of the word is transferred. Phonemic transfer in our data is most commonly found in what Clyne (2003: 80) refers to as "compromise forms," in which the pronunciation of two lexical items that have similar sound and meaning converges. For example, the English word *what* is similar in sound and identical in meaning to the dialectal Norwegian *å* (a form of 'what') and in fact one of the heritage speakers of Norwegian used the form *wå* (< *w[hat] + å*). This type of phonemic transfer in compromise forms seems to be dependent on pre-existing semantic overlap as well as the pre-existing phonological overlap usual in phonemic transfer (see Table 1). We have not found in the literature or in our own data any instance of the entire phonemic structure of a word being transferred without the accompaniment of the semantic structure.

Lexical transfer includes transfer of both the phonemic and semantic structure of a lexical item from one language into another, where there was previously no similar structure (see Table 1). An example from American Norwegian is use of the word *råd* for the surface that cars drive on. This type of transfer, where the concept for something, in this case 'road,' is borrowed along with its foreign signifier (i.e., the English word 'road'), is often referred to as a 'borrowing,' 'lexical borrowing,' 'loan' or 'loanword;' we use the term 'lexical transfer' for the sake of transparency and consistency.

In sum, Norwegian speakers in the American Midwest utilized three strategies that narrowed the difference between Norwegian and English: (1) when two words had existing phonemic overlap, the meanings often became more similar (semantic transfer); (2) when two words shared similar meaning and a degree of phonemic overlap, the pronunciation often converged (phonemic transfer); and (3) when a word existed in English but not in Norwegian, the English word could be used in Norwegian while retaining English meaning and phonemic structure (lexical transfer). Differentiating between these types of transfer is not always straightforward. Haugen noted difficulties in the word *pæl* in American Norwegian (1956: 62). In Norwegian this word has the meaning of '½ pint,' but in American Norwegian has the same meaning as English 'pail.' Haugen wrote that if it is indeed the same Norwegian word, with a new meaning applied, then it is a loan-shift (just like *stikke*). But because the pronunciation is also different in American Norwegian, it is also possible that it is a case of lexical transfer and has nothing to do with the native word *pæl*. In Part 5 we look at specific words from our data set that posed difficulties.

4. Methods

The following data comes from over 90 minutes of recorded interviews and conversations conducted in Norwegian with 16 speakers from Wisconsin, Minnesota, and Iowa in the winter and summer of 2010. Data from four of the speakers comes from the *Corpus of American Norwegian Speech* (CANS).[5] These speakers are fluent in both American English and the form of Norwegian they learned as children. By considering only fluent speakers, we avoid having our data skewed by 'errors' or lack of confidence, which might lead to unnatural speech.

Our data consists of lexical items, either single-words or compounds, in which we identified all or part of the structure as transferred from American English. We selected only lexical items that were treated as Norwegian by the speaker, based on either phonological and/or morphological evidence. We do not consider here instances of multiple-transference, where an entire phrase from English was used during a Norwegian exchange. Nor do we include items that were immediately corrected (i.e., mistakes).

Due to the difficulty inherent in distinguishing code-switching, nonce-borrowing, and borrowing amongst bilingual speakers, we count as lexical transfers all instances of single-word items from American English that are treated as Norwegian by the speaker. In a multilingual repertoire, the entire repertoire is available at all times, and forms are selected based on their context-appropriateness, regardless of which "language" they are typically associated with (Matras 2009: 308). Not only are all lexical items available regardless of interaction context, but all aspects of the grammar, phonology, syntax, morphology, etc., are available, so that speakers have not only the ability to select a word from one language and use it in the context of another language, but they also have the ability to either integrate or not integrate a word into other aspects of the grammar. For instance, social pressures might induce a speaker to pronounce words of one language with an accent meant to sound funny or educated.[6] There is no evidence that there were social inhibitions against integrating loans into American Norwegian (as noted previously in the quotes Haugen collected). Thus we include as lexical transfers all English lexical items that were treated as Norwegian in the speech context, while those that were clearly used as English (i.e., code-switches) were excluded.

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5. Speakers blair_WI_01gm, blair_WI_02gm, decorah_IA_01gm, and decorah_IA_02gm. Data available at http://www.tekstlab.uio.no/nota/NorAmDiaSyn/index.html (Johannessen and Laake 2010).

6. Oswalt points out that in Kashaya, only lexical transfers from Spanish are integrated phonologically, while those transferred from English are not, since all who speak Kashaya speak English, while few speak Spanish (1985: 528). In other words, they are aware that the words are English and, for social reasons, do not integrate these words. Even though frequency of these items would support interpreting them as instances of lexical transfer, many researchers do not consider them to be such (Oswalt 1985: 528).

Once we had identified lexical items by transfer type, we sorted occurrences into spreadsheets, as in Figure 1. Occurrences were labeled by: transfer type (e.g., "ST" in Figure 1 indicates "semantic transfer"); classification as either function or content words (F.W. and C.W. in column two); classification as noun, verb, or adjective (includes adverbs); and by lemma. The rightmost column shows the occurrence in context. Not shown are speaker identification and location.

transfer type	F.W(1). or C.W.(2)	noun(1), verb(2), adj(3)	token	context
ST	2	2	call	Og eh, vi stopp in der, og *kalt*'n på telefon...
ST	2	1	cousin	det e to tå *kosine* mine her
ST	2	1	cousin	Så e hadde nå ei *kosin* så leve ut i Oregon
ST	2	1	dollar	den trippen den ti kosta han seksti *daLa*.
ST	2	1	dollar	Du fekk ti *daLar* for ei ku kanskje
ST	2	2	go	kå'n k'ai *gå* fra der.
ST	2	2	go	Je kunne *gå* ganske mange plasser men Bergen det var for mye åt me.
ST	2	2	go	Oh ja, vi brukte *går* julebukk kver-, kver Christmastid.
ST	2	1	grade	Så hadde hu meg i andren blad- *grad*.
ST	2	1	grade	så når jeg kom til skolen, uh, i første *grad*

Figure 1. Screen shot of spreadsheet.

5. Results and discussion

Out of approximately one and one half hours of recordings, consisting of introductions, family history, farming, etc., we identified 233 instances of words in which all or part of the structure – phonemic or semantic – had been transferred from American English. Many of these instances were repeats of the same item, and the total number of individual lexical items identified was 125.

Most items were relatively easily placed into one of the three categories described above: lexical transfer, semantic transfer, and phonemic transfer. Instances of lexical transfer were typically the most easily identified category, and they were also the most frequent of the three. These transfers were 86% content words (64% of which were nouns) and 14% function words (prepositions, interjections, discourse markers, etc.).

Table 2. Total number of occurrences by transfer type.

Transfer type	Occurrence	Percentage
Lexical transfer	154	66%
Semantic transfer	51	22%
Phonemic transfer	6	3%
Ambiguous	22	9%

Semantic transfer enjoyed high frequency in terms of total number of instances (Table 2), but this number is bumped down significantly when the data is organized in terms of number of different lemmas attested (see Table 3).

Table 3. Total number of lemmas by transfer type.

Transfer type	Lemmas	Percentage
Lexical transfer	87	70%
Semantic transfer	19	15%
Phonemic transfer	6	5%
Ambiguous	13	10%

In both ways of organizing the data, lexical transfer was the most common form of transfer in our data, and in terms of lemmas, was more frequent than semantic or phonemic transfer, indicating greater diversity of lexical transfers, with a more constrained set of semantic transfers and phonemic transfers.

5.1 Lexical transfer

Lexical transfer comprised the largest amount of our data. Instances of lexical transfer in our data can be seen in Table 4 below.

Table 4. Lemmas undergoing lexical transfer. 154 total occurrences, 87 lemmas.

Lemma	#	Lemma	#	Lemma	#	Lemma	#	Lemma	#
a	1	acre	2	advertising	1	amish	1	and	6
army	1	at	1	auction	5	aunt	2	baby-combine	1
barn	1	Bergenism	1	boxcar	1	break(v)	1	bundle	1
bundle-wagon	2	candy	1	car	2	care(n)	3	care(v)	1
cent	1	chopper	1	college	3	college prof.	1	cord	1
country	2	crop	1	cultivator	1	dust	1	easier	1
English	2	farm(adj)	2	farm(n)	8	farm(v)	5	farmer	1
farming	1	field	2	figure(n)	1	figure out	1	fill(v)	1
fjord	1	flu	1	fourth	1	gee	1	graduate-school	1
guide(n)	4	harvest(v)	1	lake	1	lumbercamps	1	Norway	2
now	1	PhD	1	pioneer	1	plenty	1	probably	2
raise	3	rent	6	research	1	right	1	script	1
show	1	silage	1	silo	2	single-row	1	soybean	1
spend	1	stable	1	stack	1	store	1	straight-combine	1
stuff	3	suppose	1	swather	2	teacher	2	then	1
tour-guide	1	tractor	8	train	2	trip	2	valley	1
visit(v)	4	vote(v)	1	well	1	what	1	when	1
with	1	woman	1						

While many of these lexical transfers require little discussion, as they are quite plainly transfers from English that did not exist previously in Norwegian, some items do need explaining. Perhaps the most obvious of these is the word *fjord*. This has been included as an instance of lexical transfer due to its distinctly foreign treatment morphologically. The speaker, speaking of a trip that he had made to Norway, said, "*…og vi reiste gjennom alle* ***fjordsa***". It is the use of the English plural marker *-s*, in combination with the Norwegian definite marker *-a* to indicate 'the fjords,' as opposed to *fjordene*, *fjordan*, or something of the like. Haugen notes that importing the English plural marker *-s* "becomes such a common thing that the N[orwegian] suffixed article may be added to it, producing a hybrid inflexion *-s* + *-a* 'the,' e.g., *kisa* 'the keys'" (1953: 398). We follow Haugen in treating this instance as an importation of the plural *-s* suffix along with an English noun. Had there been no such distinct morphological indications, *fjord* would have, of course, been treated as its native homonym. An additional item that has been pointed out to us by an outside reviewer is dialectal form [treən] *train*, in Norway, which might indicate that *train* in the above table is an instance of semantic transfer. However, given its pronunciation in our data as either 'monophthongally' with a high, front offglide as [treᵻn], or diphthongally as [traɪn], we have included it here as an instance of lexical transfer. Finally, though the tractor was introduced to Norway in the early 1900s, we follow Haugen (1953) and Hjelde (1992) in considering it a case of lexical transfer.

5.2 Semantic transfer

Table 5. Lemmas undergoing semantic transfer. 51 total occurrences, 19 lemmas.

Lemma	#	Lemma	#	Lemma	#	Lemma	#
anymore*	4	around	1	right*	1	call	1
corn	2	cousin	3	dollar	3	go	3
grade	2	hard	2	high school	3	live	17
mile	1	place	2	small	2	tell	1
to	1	well	1	way	1		

While lexical transfer entails the transfer of phonological and semantic structures, instances of semantic transfer in our data were most often cases where the phonemic shape of the word corresponded with the phonemes in a related English word. For instance, Norwegian *leve* 'to live' is easily identified by speakers as similar to English *live*. The entire semantic structure however, does not correspond to English. While English *live* can mean to reside (e.g., 'I live on the home farm'), the equivalent native construction in most Norwegian dialects is the verb *å bo*. American Norwegian, however, has transferred the meaning of 'to reside' from English and uses *leve* for both meanings of 'to live' and 'to reside.'

Figure 2. Distribution of *levde* (light color) and *livde* (dark color) in Norway. Mapped using the Nordic Dialect Corpus (Johannessen et al. 2009).

The past tense form of *leve* 'to live,' was attested on multiple occasions as *livd* and *livde* by one Minnesota community of speakers we interviewed. Though this pronunciation would appear to be a case of phonemic transfer due to influence from English, it is in fact an attested form in Norway (see Figure 2), and its range includes the Nordfjord area, where a significant number of the informants from that Minnesota community have family origins. Thus what might appear to be a unique form due to contact between Norwegian and English is in fact probably a result of dialect contact, perhaps further propagated locally by existence of the form in English. It should be noted that our classification of the verb *leve* based on this data is different from that of Johannessen and Laake (2012, and forthcoming), who found that the English verb *live* had been borrowed and taken over the Norwegian equivalent *å bo* or *å leve*.

Similar to the transfer of meaning in *leve*, there is already phonemic overlap in *grad*, even though the meanings in Norwegian *grad* and English *grade* are different. While in American English *grade* is most often used for classes in school (e.g., 2nd, 3rd, 4th grade), in modern Norwegian it most often has the meaning 'degree,' as in 'to a greater degree' as well as 'fifteen degrees Celsius.' In American Norwegian, however, the English meaning of *grade* (as in a class grade) has been transferred to *grad*. Semantic transfer then results in the same meaning in both English and Norwegian.

There are two exceptions (marked with asterisks in Table 5) in our data where instances of semantic transfer did not already contain some phonemic overlap. These instances are *beint* and *noe mer*. *Beint* is used regularly in American Norwegian as 'straight' or 'directly' in phrases like, 'he went right/straight/directly to school,' etc. The use of *beint* in this case was in the phrase "*beint nå*" 'right now' (CANS,

blair_WI_02gm), as what Haugen would classify as a loan-translation. The same is the case with *noe mer* to have the adverbial meaning of English 'anymore.' When asked if he could still read Norwegian, one of our informants responded: "*Itt' noe mer*" 'not anymore.' Note that the fact that *beint* and *noe mer* are exceptions and not the rule underscores our thesis that, barring social factors restricting the overt transfer of lexical forms, transfers that result in more structural overlap will be more abundant than those that do not.

5.3 Phonemic transfer

Table 6. Lemmas undergoing phonemic transfer. 6 total occurrences, 6 lemmas.

Lemma	#	Lemma	#	Lemma	#	Lemma	#
are	1	find	1	generation	1	university	1
was	1	what[7]	1				

Phonemic transfer was the most difficult category to pin down. The difficulty in deciding exactly what constitutes phonemic transfer is as follows: if an existing word in Norwegian resembles the English equivalent, and furthermore, those words have the same semantics and similar phonemic shape, then according to our hypothesis there is motivation to lessen the distance between these two forms, resulting in convergence – in this case phonemic. However, if this phonemic convergence is total (i.e., the end result is total overlap in phonemic shape between the languages), then it is unclear whether or not lexical transfer or phonemic transfer has taken place (remember lexical transfer entails transfer of phonemic shape as well). Thus we include no data under the category of phonemic transfer in which there is total overlap of the phonological shape of a word. These ambiguous examples are given below. What we have included are instances of increased overlap where some overlap already existed. For instance [v] was at times replaced by [w] in copulatives, e.g., *var* > *war* 'was.' Phonemic transfer is not limited to high-frequency items such as *var*. *University* was attested as [junɪvɛɪsɪ'tetɛɪ], with the initial glide transferred from English. Thus the only positive identification of instances of phonemic transfer is where there has been only partial phonemic transfer, resulting in more, but not total overlap.

7. The instance of *what* classified here as PT and pronounced [wå], is distinct from the instance of *what* as classified under lexical transfer and pronounced [wʌt].

5.4 Ambiguous cases

Table 7. Lemmas in which it is unclear whether *lexical transfer* or *phonemic transfer* has taken place. 22 total occurrences, 13 lemmas.

Lemma	#	Lemma	#	Lemma	#	Lemma	#
coffee	2	family	5	February	1	hay	1
history	1	home	1	more	1	museum	2
said	1	to	1	we	2	no	3
yes	1						

The cases listed in Table 7 represent lexical items that are similar in phonological shape, both in Norwegian and English. In our data, they have converged towards English in all cases. For example, *kaffe/kaffi* is pronounced [kåffi] in our data. Were we to analyze this as *phonemic transfer*, either /a/ > /å/ and /ə/ > /i/ (if *kaffe* > *kåffi*), or just /a/ > /å/ (if *kaffi* > *kåffi*). While we are inclined to categorize some of these (e.g., *to, no, yes*) under lexical transfer, and some (e.g., *coffee, family, history, more, we*) under phonemic transfer, we are not with confidence able to do so without a more refined test.

5.5 Exceptional cases

It has been pointed out to us that there are a few cases where, based on our hypothesis (and the general trends of language contact), unexpected changes have occurred. These cases are the noun *portrett* and verb *travla* (both discussed in Johannessen and Laake 2012, forthcoming, and mentioned in Hjelde 1992: 118, 126, and the latter in Haugen 1953: 602). *Portrett* 'portrait' exists with similar meaning in both Norwegian and English, but in American Norwegian the meaning has shifted from a painting or photograph of especially the upper body and face, to refer generally to any picture. According to our hypothesis this change is unexpected because it is a change that does not provide more overlap, but rather less. The meaning of *portrait/portrett* in each respective language overlapped previously, but in American Norwegian obtained an almost entirely new meaning. *Travla* is a similar though slightly different case. It is not entirely clear whether or not it is a transfer from English, or if it was an existing word in Norwegian that shifted meaning and gained popularity after leaving Norway. Regardless, with the meaning of 'to walk/go about on foot,' *travla* clearly does not have the same meaning(s) as English 'travel,' nor, according to Johannessen and Laake (forthcoming) does it have the same meaning as it does in Norway. These two items present a problem since despite their similarity in semantics and phonemic shape, there has been no convergence of any sort in American Norwegian, and in the case of *portrett* we see actual divergence.

Despite the problems presented by *portrett* and *travla*, our hypothesis otherwise holds true. That more overlap would be preferred over partial overlap was underscored by the fact that in 89% of the lemmas classified as semantic transfer there was preexisting phonemic overlap (as in the case of *leve*, the exception being the extended meanings of *beint* and *noe mer* in Table 5). In the same way, phonemic transfer always occurred in cases where there was preexisting semantic overlap and partial phonemic overlap.

Our observations supplement an observation by Haugen (1953: 95) regarding transferred English terminology for harvesting in American Norwegian. He notes that of 32 words in Norwegian connected with harvesting, American Norwegian had retained only 17 of these. Of these existing 17 words, two changed meaning to align with the English meaning, and two were already nearly identical to the English equivalent. To round out the vocabulary, another 13 words were transferred from English. In the end there were 30 words associated with the harvest, meaning that "the cultural shift was actually complete, for the E[nglish] and Am[erican] N[orwegian] vocabulary structure in this area was now identical, with a one-to-one correspondence between them" (Haugen 1953: 95).

There are two further points worth commenting on regarding our data and Haugen's. Haugen (1953: 406) notes the following percentages of total loans per word class, reasoning that there are more nouns and verbs borrowed than any other class of words, because nouns and verbs are more abundant in the lexicon:

Nouns – 75.5; Verbs – 18.4; Adj – 3.4; Adv./Prep – 1.2; Interj. – 1.4

Our data shows relatively similar results when borrowings per word-class are a percentage of the total number of lexical items transferred (see Table 8 below). One thing to note immediately is how much lower the percentage of nouns is in our data.

Table 8. Data per word class for number of lemmas borrowed.

	Nouns	**Verbs**	**Adj/Adv**	**Function words**
lemmas per lexical transfer	64%	16%	7%	13%
instances per lexical transfer	62%	18%	5%	14%
lemmas for all transfer types	58%	18%	10%	14%
instances for all transfer types	55%	23%	8%	14%

Looking at the middle row labeled "instances per lexical transfer," the one key difference to be seen comparing our data to Haugen's is that there is a much larger percentage of function words in our data (13–14%) depending on how the data is organized).

This number is much higher than the 2.6% given by Haugen, even if Adv./Prep. and Interj. are combined. This may be an area of the American Norwegian lexicon that has undergone change over the course of the last century. Furthermore, this finding corroborates Brown and Putnam's findings (this volume) regarding the vulnerability of the grammar to discourse-pragmatic changes (in their case at the morpho-syntactic level with the extension of progressive aspect in Pennsylvania Dutch stative constructions).

6. Conclusions

In this paper we have tested a claim inferred from Matras (2009), that the more overlap that is created through borrowing, the better, since this will provide more ease on cognitive processes surrounding the selection of context-appropriate forms, one of the motivations Matras gives for borrowing (2009: 151). To test this claim we used data gathered from speakers of American Norwegian in Minnesota, Iowa, and Wisconsin. Based on social factors, we hypothesized that lexical transfer from English to Norwegian should occur with more frequency than semantic or phonemic transfer because lexical transfer entails more overlap (and thus more ease on cognitive processes), while semantic and phonemic transfer entail only partial overlap.

If Matras' theory did not hold, we would expect American Norwegian to either remain utterly distinct from American English or to have undergone changes such that American Norwegian would lose similarities already shared with American English (as happened with the semantic changes of *portrett*). Haugen, as we saw earlier, noted the Americanization of Norwegian in the United States. Our own hypothesis, that more overlap is better overlap, is also confirmed by our data. Lexical transfer occurred more frequently than both semantic transfer and phonemic transfer, an outcome we attribute to a combination of social and cognitive factors, as outlined above. In further support of our hypothesis, the instances of semantic transfer and phonemic transfer in our data show that semantic transfer and phonemic transfer tend to have the same cumulative effect as lexical transfer by itself: complete or nearly complete overlap in phonemic and semantic structure.

Thus if we consider the final results of lexical transfer, semantic transfer and phonemic transfer, they are essentially the same: overlap in both semantic and phonological structure. Lexical transfer does this in one fell swoop by transferring everything from English. Phonemic transfer and semantic transfer provide even more overlap for structures that already have some.

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