Borrowing in Apparent Time:
With some comments on attitudes and universals

Miriam Meyerhoff*

1 Introduction

Ideologies about language contact tend to view it as a negative, if unpreventable, phenomenon. Linguists and lay users often talk about changes in one language that appear to be the effect of contact with another language as some form of decline. This has certainly been my experience in Vanuatu (SW Pacific), where everyone from university educated employees of the Vanuatu government through to everyday users of one of Vanuatu's many vernacular languages (the groups do not always overlap) venerate prelapsarian, purist views of vernacular languages (Cameron's 2013 notion of 'verbal hygiene' is directly applicable). It seems that interlanguage lexical borrowing is seen as a particularly virulent threat to the health and vitality of vernacular languages, though it is not clear whether this is simply because lexical change is relatively amenable to social comment (cf. Labov 1993, where lexical forms are proposed to be highly accessible to the sociolinguistic monitor), or whether it is because ni-Vanuatu speakers have good reason for seeing lexical incursions from another language as the first stage in language shift. Other variationists have noted these ideologies at play in communities where they have been working, and the perception that borrowing is a threat may be particularly acute in communities speaking endangered (King 2008) or minority languages (Dubois and Melançon 1997).

In this paper, I will try and explore a somewhat different view of language contact from a variationist perspective. I will explore the extent to which borrowing can be treated as a sociolinguistic variable. If borrowing indexes group language shift (as communities often believe), then it may be possible to observe the progress of change in a community in apparent time (Labov 2008, Meakins 2011). To my knowledge, this systematic investigation of borrowing is rare; bridging, as it does, the methods, principles and concerns of variationist sociolinguistics and language documentation. Nagy (2011) provides one such model, but her conclusions are equivocal: "[the potential for acquiring vocabulary across the lifespan] may prevent lexical items from serving as good tools for marking social difference" (2011:379) but she emphasizes the need for further research on this.

The data I will be drawing from is taken from fieldwork I've been doing in Hog Harbour, a village of about 100 people in NE Santo in Vanuatu (15°8'0" S, 167°6'0" E). People in Hog Harbour know their language as Nkep; it is closely related to Sakao (Guy 1972, ISO 639-3 sku) spoken in Port Olry to the north.

2 Borrowing in Hog Harbour

Like many communities in Vanuatu, Hog Harbour has seen considerable social change in the last few decades. Some cultural traditions are well maintained, but there is also considerable concern about the fragility of the local language and traditional knowledge given the increasing ease with which residents can travel back and forth between the village and the main township on the island (known as *Kanal* in the local Bislama, *Santo* to many others and *Luganville* officially on the maps (one might well be reminded of the White Knight's exegesis to Alice in Wonderland in Carroll 2000 on the nature of naming things, but the fluidity of 'proper' names in Vanuatu would be the subject of an entirely difference discussion of variation). Both younger and older speakers in Hog Harbour have expressed to me, directly or indirectly, their concern that the language is being eroded through contact with Bislama. As Nagy and Meyerhoff (2013) note, we find very similar discourses of shame and self-consciousness cropping up in the speech of younger community members and concern about change in the discourses of older speakers when we have been doing fieldwork on lesser spoken and non-official languages in very different parts of the world.

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For an Oceanic language, Nkep has highly marked phonotactics and complex morphosyntax in the verb phrase. It also has a very complex deictic system, though this is much less unusual for languages of the region. We might think that both kinds of structural and typological complexity would make the language amenable to contact-induced levelling of the marked aspects of the systems. However, in other work on variation in the use of subject-verb agreement by speakers of different generations in Hog Harbour (Meyerhoff forthcoming), I have not found any clear evidence of significant loss of productive patterns in the verb paradigm.

But verb morphology is not something that people typically comment on. What they do comment on is the use of Bislama loan words in Nkep.

(1) a. *Necar pentem ün kala vorce*. (Janet, 10 years)
'Flying fox paints [the parrot] in lots of colours.'
b. *Necar mklep ün neria vorce*. (adult 'correction')
(2) a. *"Ale, yën rë na nacpentem i,"* (Janet, 10 years)
'"OK, me now I will paint you."'
b. *"Cei, yën rë nacklenesp lüm."* (adult correction)
(3) a. *Be mcëth kala haan mheth.* (Janet, 10 years)
'But he sees his colours are no good.'
b. *Nara mcëth nelia haan mheth.* (adult correction)

Notice two things about these sentences: first, there are borrowings from Bislama of verbs, nouns and sentential connectors; second, the borrowings are sometimes inflected with Nkep morphology. In (2b) the adult version also corrects the arguments that the verb 'paint' selects for (Janet has a canonical transitive but in the adult version 'paint' selects a PP argument).

It is immediately obvious when transcribing natural speech though that some of these features occur in adults' narratives as well. In (4)–(5), I give examples of similar borrowings in two adults' narratives (I have translated *nthem* and *nangelo* with different English words to retain the stylistic quality of John's story, but it is not clear that there is a meaningful difference between the words in the narrative).

(4) *...temcëth vei wam nthem ... nangelo nio camlro lohe*
'we saw that it was a spirit … angels were in the village'. (John, 40s)
(5) *camthël tevup nmër temcen be tmavngor*
'we uncovered the laplap and we ate it but we couldn't sleep' (Lessie, 60s)

It seemed to me, when evaluating the comments people made to me about borrowing in younger speakers' Nkep and my observations about borrowing when transcribing adults' narratives, that the main difference between the generations might be perceptual rather than material. Although sociolinguists shy away from proposing universals, I think the one universal is that older speakers always think language is going to the dogs—I have never heard a report of any community where older speakers say that the way their children/grandchildren speak is admirable for its beauty and elegance.

Having established that borrowing occurs across all generations, I wanted to see whether it was possible to observe evidence of generational change using the apparent time method (Sankoff 2006).

3 Data and Methods

The corpus is small compared to those exploited by speakers of well-described languages, but where we are building up a description of the language at the same time as a corpus, every hundred words is hard-won. Table 1 shows the number of words for the speakers in three age groups and in brackets the number of speakers represented in each group.

	Younger	Middle	Older	Total
Female	1397 (4)	981 (2)	749 (3)	3127 (9)
Male	2354 (5)	1446 (2)	—	3800 (7)
Total	*3751 (9)*	*2427 (4)*	*749 (3)*	**6927 (16)**

Table 1: Corpus of Nkep narratives. Number of words (number of speakers).

I considered differences in the rate of borrowing by looking at two things. First, I consider the frequency of borrowings by word class. As well as providing a basic count of borrowings, I also consider how often they are nativised, that is, assimilated in any way to Nkep phonotactic norms or given Nkep noun and verb inflections. An example of both of these was the realization of the Bislama word *brata* 'brother' as *nprat* with a nominal prefix and the devoicing of the initial stop. These measures allow us to establish a rough baseline of what the norms for borrowing are within the community. Second, I look at the frequency of tokens and types by generation, since this allows us to determine whether there has indeed been any change in the extent of borrowing over apparent time.

3.1 Frequency by Word Class

Word class	**N tokens**	**Word class**	**N tokens**
Noun	106	Preposition phrase	7
Proper Noun	24	Focus particle	5
Address/respect term	52	Conjunction	101
Verb	28	Adverbial phrase	6
Pragmatic/discourse particle	25	Ordinal number	3
		Date	1

Table 2: Frequency of Bislama borrowings in all Nkep narratives by word class.

Borrowing of proper nouns is not terribly remarkable; even if there previously was a traditional name for a place or region in language, social and cultural change facilitate the shift to new names (I have already noted that it is not so clear to me as an outsider in what sense proper nouns are 'proper' in Vanuatu). I henceforth ignore them. I also exclude address and respect terms such as *Dikon* 'Deacon'*, mama* 'mother' for similar reasons. Setting these forms aside, we can see that nouns and verbs are very frequently borrowed. This is unsurprising since they are frequent overall. The high frequency of borrowed conjunctions/sentential connectors is a little more notable. These are not required constituents in the clause and because of this, perhaps are better indexes of contact-induced change.

There were no clear patterns for nativisation of borrowings by word class, partly because in many cases the number of tokens is so small.

Word class	**Nativised tokens (and % total)**	**Word class**	**Nativised tokens**
Noun	51 (48%)	Conjunction	0
Verb	14 (50%)	Adverbial phrase	0
Pragmatic/discourse particle	3 (12%)	Ordinal number	0
Preposition phrase	6 (86%)	Date	0
Focus particle	1 (20%)		

Table 3: Number of Bislama borrowings into Nkep nativised in any way (number of tokens and percent of all tokens for each word class).

In principle, any word can be nativised, but that is not what we find. What we see is a much stronger tendency for nativisation of some word classes rather than others. Specifically, borrowed

nouns, verbs, and preposition phrases (pace the very small numbers involved here) are more likely to be nativised in some manner by the speaker than the other classes of borrowings.

Conjunctions certainly could be nativised according to this definition; for example, Bislama *be* could be realized as [pe] or [βe], but as we can see, they never are. Part of the reason for this may be that they are generally very short (so there simply is less material to work with if you want to nativise) but I think that this cannot be all of the story, and I will return to another possible account after reviewing the data on token/type frequency.

3.2 Token and Type Frequency

Table 4 shows how often borrowings occur in the three age groups by token and type frequency.

	Older men	**Older women**	**Middle men**	**Middle women**	**Girls**
token/total words	0.03	0.04	0.06	0.07	0.12
types/total words	0.02	0.02	0.02	0.03	0.05

Table 4: Token and type frequency of Bislama borrowings in Nkep across three generations.

The rates of borrowing look very similar across the groups especially when we consider types rather than tokens (the two measures are not significantly different: a t-test returns a value of $p=0.064$). There is a slight increase among the youngest girls, but there is certainly no clear, monotonic pattern of generational change. If we consider the frequency of types/total words, there is a significant increase in borrowings between the middle women and the girls (chi-squared = 6.28, df=1, $p=0.01$) but the differences between older and middle aged speakers is much less clear. Since we are looking at lexical development, and it is clear that people can and do add new vocabulary to their repertoire through their lives, our results may reflect developmental changes rather than change in progress (cf. Nagy's 2011 conclusion that lexical borrowing may not be well-suited to the methods of variationist analysis for just this reason).

Before we dispense with the possibility of generational change entirely, I will consider the question of generational change in a little more depth.

3.3 Generational change

As noted earlier, the picture of language shift people from Hog Harbour of many ages have portrayed to me is that Bislama occurs more often in younger speakers' Nkep than in traditional and older speech. What might people in Hog Harbour be orienting to when they tell me—and each other—this? Here are some possibilities:

1. There are differences in the frequency of Bislama borrowings across the generations. Kids are using more Bislama loans, but this has enriched their Nkep.
2. There is little/no difference in the frequency of borrowing across the generations, but there is a difference in how borrowings are handled by the generations. However, the relationship between borrowing and nativisation is not straightforward:
    a. Older speakers might nativise Bislama borrowings more than younger speakers.
    b. Younger speakers might nativise Bislama borrowings more than older speakers (because they have a less clear sense that the Bislama words are part of a discrete and different linguistic system than older speakers have).

Evidence in support of 1) might be found in the continued productivity of Nkep noun and verb morphology with this enriched vocabulary.

The relationship between borrowing and nativisation posited in 2a) would suppose that if the children's command of Nkep grammar and phonology is less enriched than the older speakers' (due to language attrition), younger speakers might borrow terms from Bislama in their entirety,

while older speakers might have sufficient facility in Nkep to accommodate borrowings to Nkep grammar.

The possibility in (2b) would suppose that younger speakers might nativise borrowings more often than older speakers do because language attrition has eroded the children's vocabulary very quickly, and this lexical erosion has taken place faster than any attrition of morphosyntax. Other work on morphologically complex languages (Dorian's 1978 work on language attrition in Sunderland Gaelic and Schmidt's 1985 work on Dyirbal) suggests that this would not be so likely because language shift and individual language attrition seem to have an impact on speakers' productive use of full morphological paradigms very early. However, we may consider it as a logical possibility.

As we saw already, there is no significant difference in the rates with which the different generations borrow lexical types across all three age groups, only between the girls and the older and middle women. However, as we noted the pattern observed might be attributable to developmental considerations rather than to change in progress. I therefore reject (1).

Table 5 shows the frequency with which borrowings in the three main word classes were subject to any nativisation among speakers in the three age groups under consideration.

	Nouns	**Verbs**	**Prep phrase**
Girls	3/22	3/15	2/2
Middle women	13/17	1/1/	NA
Older women	5/14	5/6	1/1
Middle men	23/26	3/4	2/2
Older men	7/27	2/2	1/1

Table 5: Frequency Nkep speakers nativise Bislama borrowings in the three most common word classes and across three age groups.[1]

In this table, we see that there is a decrease in the frequency with which the girls nativise the borrowed words in their Nkep; however, this difference is not significant (the difference in frequency with which the girls nativise their borrowings is not significantly different from the women in the middle and older generations, chi-squared with Yates correction, p=0.17). So we must reject both hypothesis (2a) and (2b) about borrowing and nativisation. When we look at the data for borrowed verbs, there appears to be a tendency for the girls to nativise borrowed verbs less than the other groups of speakers, but a chi-squared test contrasting girls and the older speakers found this difference is below the level of significance (girls vs. older women, chi-squared with Yates correction = 2.318, p=0.3; aggregating all older speakers versus the girls, chi-squared with Yates correction = 2.734, p=0.098).

4 Looking to the narratives for triggers of borrowing

Matras (2012) notes that although many analyses of borrowing suggest that lexical gaps in one language may be the trigger for a speaker to use a form from one of their other languages, this is not a plausible account for many of the forms we see being borrowed. As Table 2 showed, the most common forms borrowed in the Nkep narratives are conjunctions or sentential co-ordinators like *be* 'but' and *ale* 'so, then, well'. The speakers certainly know the Nkep equivalents of these forms and do use them. Likewise, Matras notes that an analysis of borrowing that proposes that forms in the target (donor) language have more 'prestige' than forms in the source language are

[1]The numbers of tokens are too small to do tests on, but for the record: girls also nativise 3/12 pragmatic particles; older women nativise 2/21 address/respect terms; middle men nativise 3/12 Proper Ns; older men nativise 1/10 Proper Ns, and 1/2 focus particles.

also difficult to motivate empirically. It is not at all clear that use of *be* or *nacpentem* sounds 'better' or more prestigious in Nkep than *nara* and *nacklep*.

Moreover, and crucially, in Matras' opinion, prestige provides a poor account for the hierarchies of borrowing that he has found in his extensive and decades-long research on language contact, especially between Romany and different Indo-European languages. Matras has observed hierarchies of word classes, such that connectors are more likely to be borrowed than pronouns, and internal hierarchies within word classes: 'but' is more likely to be borrowed than 'or' which is more likely to be borrowed than 'and'. Other hierarchies are lexico-semantic (markers of obligation before possibility, possibility before markers of desire, etc.).

Finally, he notes that borrowing seems to occur regardless of whether the addressee will understand,[2] and to Matras this suggests that borrowing is not fundamentally a sociolinguistic phenomenon, but rather a fundamentally cognitive process.

Matras' account of borrowings or insertions form one language into another takes the mental or cognitive repertoire of the speaker as its starting point. When a bi-/multi-lingual speaker choose sot speak in one language, this doesn't mean that the system(s) of all the other languages they speak are unavailable. Speakers monitor their production of lexemes and constructions to make them context-appropriate, but this monitoring can be disrupted by interactional or other cognitive processes. Matras posits this as the reason why conjunctions (especially 'but'-type conjunctions) are so frequently the trigger points for slippage between different linguistic systems. "The function of the contrastive conjunction is to signal a break in the expected propositional causal chain" (Matras 2012:34); that is, they are inserted where the speaker anticipates some mismatch between the hearer's expectations and the speaker's intentions. 'But', Matras argues, signals interactional work that is being done to redirect the hearer's processing.

This contrast between expectations and intentions creates a degree of tension in the speaker's mental processing and the interactional, and cognitive work inherent in bridging the gap is sufficient, Matras argues, to interfere with the monitoring process that multilingual speakers are usually engaged in. In this way, Matras reframes lexical borrowings, especially of such high frequency items as conjunctions, as bridging not some kind of lexical gap but rather markers that the speaker is concentrating on bridging a cognitive gap between the interactants. In turn, and through repetition, these forms can become the bridge for other borrowings or incursions.

In the narratives I have recorded, there seems to be some support for Matras' conjecture that a switch between languages may occur when the monitoring process breaks down in some way. In the following example, taken from a story told by Lessie Warsal about an armed attack on the village in 1980, we can see rapid switches into Bislama (shown with CAPITALS) at a point in the narrative where the dramatic tension is particularly high:

(6) **Extract from Lessie Warsal's story about the Santo Rebellion.**
wei temhö yan thaan pel ton, mheth avei tmneth
if we'd run somewhere else, probably we'd be dead
BE temhö yanp lthe
BUT we ran and went into the ocean
cam cavorcei wesi camhö yan lthe
there were lots of us, we ran away into the ocean
YANGFALA camhö camian
and *THE YOUNG MEN* ran away
camcer hov liviect the
they swam out to sea

[2]Many people find this resonates. I recently realized the Bislama word for 'because' had slipped seamlessly into a German sentence of mine. Why some people's "go-to" language for these switches is *another* non-native one rather than their native language is not something I am aware of any literature on; all Matras' examples seem to involve the insertion of lexemes from the speaker's (other) dominant language. My personal hunch is that because of their personal and linguistic histories, some people some people may police the boundaries between some languages more strictly than between others. For instance, in my example, the lexical boundary between English and Bislama (because it is an English-based creole) is one that I am very aware of. If I am struggling with my rusty German, I am unlikely to be monitoring the boundary between German and Bislama. I look forward to seeing psycholinguists take on some of these conjectures experimentally.

BE cam nmama cei nwalthac kikri camlro latieth
BUT us, the mothers and the little children, we hid in the holes in the rock
caml- camlroke, camroke ün caple
we were- we were listening, we heard the guns
(NK-20130419-Lessie-rebellion1.eaf, 03:25.583-03:40.940)

5 Conclusion

I have shown that speakers of Nkep of all ages make ready use of Bislama lexical borrowings, that is, there is no apparent time evidence that there is an increasing amount of Bislama in younger speakers' Nkep, *pace* perceptions in the community. In particular, Nkep speakers are prone to insert Bislama conjunctions in fluent Nkep. Virtually all the items have an Nkep equivalent so it is implausible to argue that borrowing indicates lexical gaps in the speaker's Nkep system. Instead, the data are in line with Matras' conclusions based on his cross-linguistic study of borrowings in contact languages and in the speech of bilinguals. Following Matras, I have argued for the importance of interactional considerations when analyzing borrowings. Under this view, instead of indicating the lack of control of the boundary between two or more languages, a borrowing reflects pressure on the speaker when they are trying to control not only the languages that they know, but also their assessment of the needs and attentional states of the participants in the here-and-now.

Is there a larger significance to this conclusion? I would hope so, both for the community of linguists and the community of Hog Harbour. From the perspective of a sociolinguist, I'd like in the future to consider this data alongside data on other variables. We seldom engage in triangulation of data from different sources that was foundational in the field (cf. Labov's 1972 use of the department store data to complement his data from conversational interviews), but if Matras is on the right track with the cognitive basis for the kind of variation I have found in this dataset (and I believe he is), then it should be possible to complement this with data from structural variables. There would be two purposes to this. One would be to consider whether variation in lexical borrowing serves as a bridge not to other borrowing as Matras suggests, but to other variables. Can we find any evidence other variation is facilitated in these conditions as well, and if so whether lexical borrowings preferentially serve as the bridge for certain other kinds of variables?

Finally, although this study is based on a relatively small dataset, and the languages concerned are not well known, and the findings support existing work rather than propose any radical need to rethink what we are doing, there is a larger sense in which the results matter. As I noted, the reason I have been working in Hog Harbour is because the community is concerned about the long-term vitality of their language, and anyone I have talked to there about this variation is fascinated and finds it very thought-provoking. My sense is that Hog Harbour's current demographics and the number of younger speakers one can find there mean that the language itself is by no means doomed. But what will make a difference to the long-term vitality of Nkep is whether speakers in Hog Harbour *believe* it has a future. Grenoble (2010) has observed that there are important applied reasons studying variation and change in endangered languages—if we normalize change for the communities concerned, and can either show them that their perceptions are out of line with the facts, or show them that the change they have noticed is materially no different from the change that takes place in more vital languages, then our linguistic research can contribute positively to the long-term future of these languages.

My data suggests that people in Hog Harbour are more aware of Bislama borrowings in younger speakers' Nkep than they are in older speakers'. And, as in communities everywhere, people latch onto these differences and attribute them to the degradation and decline of the language. These ideologies equate linguistic stability with purity and purity with vitality. By the internal logic of this system, therefore, the instability of change entails degradation and degradation entails debility. Although these ideologies are strong and almost universal, they are not immune to change. This raises the possibility that variationist sociolinguistics may have practical and constructive insights to on precisely the kinds of variable that speakers in minority and endangered language communities may be most concerned about.

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Linguistics & Applied Language Studies
Victoria University of Wellington
PO Box 600
Wellington, NZ
Miriam.Meyerhoff@vuw.ac.nz