

Transfer of derivational morphology without borrowing of stems: Resígaro (Arawakan, Peru) and Chabacano (Creole, Philippines)

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1. Introduction

How does bound derivational morphology get borrowed and come to be used on native stems of another language?

A case of transfer of morpheme shapes, not just structures (“MAT”ter, not just “PAT”tern, Sakel 2007)

Documented cases suggest that derivational morphemes are transferred from one language to another attached to lexical stems, and used with native stems at a later stage (Winford 2005: 387), e.g. Norman French morphology in English (Dalton-Puffer 1996)

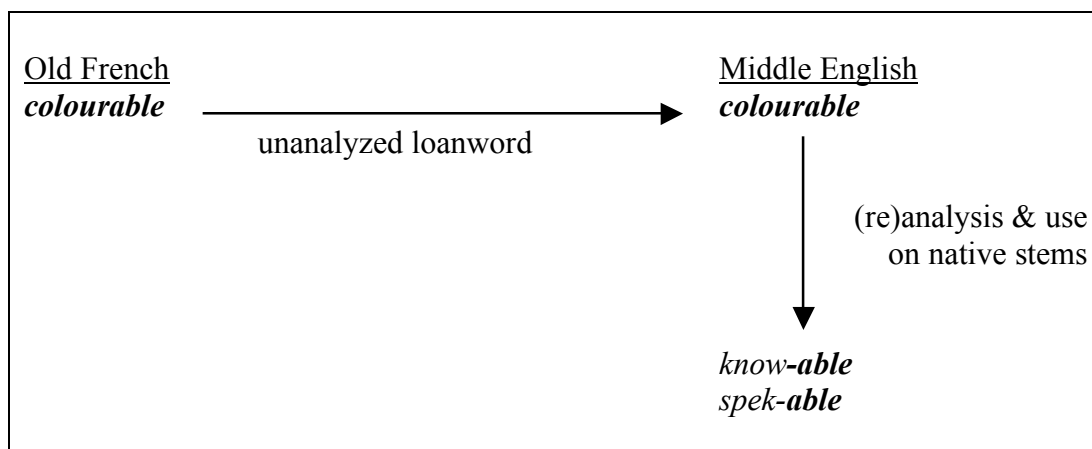


Figure 1: Borrowing of complex forms and subsequent reanalysis and spread of affix to native stems (based on Dalton-Puffer 1996: 183, 221)

Affixes of Romance origin are unproductive in Middle English, e.g. the only two occurrences of *-able* on Germanic stems are *know-able* and *spek-able* (Dalton-Puffer 1996: 221)

An alternative, less well-documented scenario emerges from new data discussed here: direct borrowing of derivational (and inflectional) morphology without borrowing of stems: Bora morphology in Resígaro (North West Amazon) (§2) and Bisayan morphology in Chabacano de Zamboanga (Mindanao, Philippines) (§3).

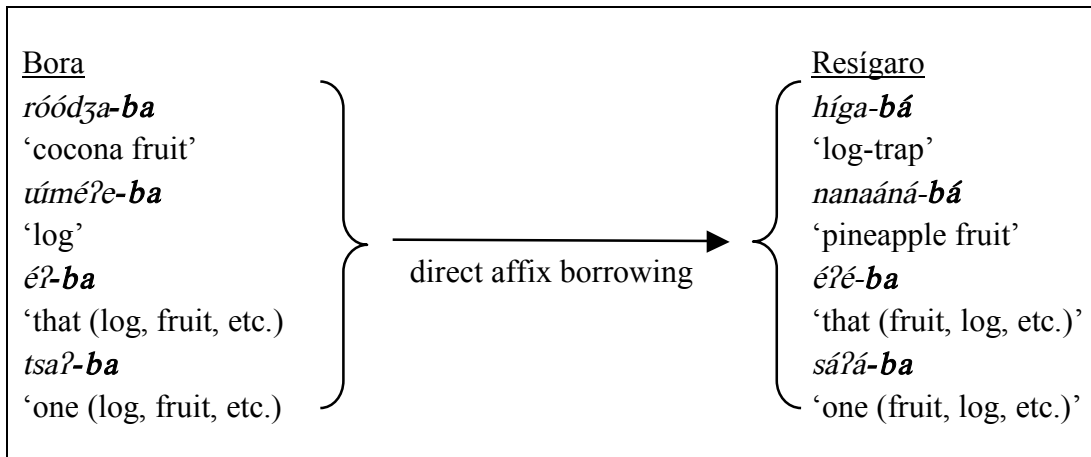


Figure 2: Direct morphological borrowing (Bora classifier for fruits, logs, etc.)

2. Bora morphology in Resígaro (North West Amazon)

2.1. The languages and their contact history

Resígaro is an Arawakan language: over 50 % cognates with Tariana, Baniwa, and other North-Amazonian Arawakan languages (Payne 1991, Aikhenvald 2001)

Bora is relatively closely related to Muinane (75% shared basic vocabulary; Aschmann 1993); possibly distantly related to Witoto and Ocaina (Aschmann 1993)

Borrowed forms identifiable through presence in proto Bora-Muinane (PBM) and (hypothesized) absence in other North-Amazonian Arawakan languages

Early 20th century: Resígaro a minority group living in close contact with Boras in Southern Colombia (Whiffen 1915; Valcárcel 2004 [1915]), Wordlist from 1920s (Rivet and Wavrin 1951), see maps in Queixalós & Renault Lescure (2000)

Resígaros are probably newcomers in the area, culturally assimilated to Boras (and other members of the “People of the Center”: Muinane, Witoto, Ocaina, Nonuya, Andoke, Resígaro; Echeverri 1997):

- intermarriage
- shared ceremonial systems, including festivals with repertoires of hundreds of songs in each language

Current language endangerment: Forced labor for rubber gatherers and deportation to Peru in 1930s together with Boras, Witotos, and Ocainas (see map in Gordon 2005); as a result, only two native Resígaro speakers alive today

2.2. Overview of elements borrowed from Bora into Resígaro

Resígaro data from Seifart (2009) (on Resígaro see also Allin 1974, Payne 1985, Aikhenvald 2001); Bora source forms identified through Thiesen (1996) Thiesen & Thiesen (1998), Seifart (2005).

Overall ratio of borrowed vocabulary well below 25%

Kind of element	Element and number of types
21-23 lexical roots	- 17 nouns, including ethnobotanical and -zoological terms, proper names (personal, geographic, and ethnic) - 4-6 verbs (status of ‘come’ and ‘go’ uncertain)
27 suffixes	- 19 inanimate classifier, one form of a gender marker - 6 number markers - 1 augmentative marker - 1 dative case marker
7 bound grammatical roots	- roots of numerals ‘one’ and ‘two’ - 4 roots of pro-forms and quantifiers - root of possessive pronouns
structural borrowing without transfer of forms	- use of second-position tense-aspect-mood clitics - tail-head linkage - loss of object cross-referencing suffixes

Table 1: Elements borrowed from Bora into Resígaro database of about 50.000 words, including various genres of texts, excluding wordlists and other elicited material

- (1) Portion from Resígaro text, forms borrowed from Bora underlined
- tók^ho-húúú?ó-hí-gí-ŋa = píi* *oβéetsí* *βa-k^há-á-gí = píi*
tree-CL.STRING-PL-INST-REST =TAM trap 1PL-do-NMZ-INST=TAM
- té-paasí-hí* *φé-?nó*
PN-CL.RING-PL 1PL-put
- ‘We make the *oβéetsí*-trap with strings from the *tók^ho*-tree, we put the rings’
- (2) Borrowed number (and gender) markers for animates
- | | Bora | Resígaro |
|----|--|---|
| a. | <i>okáhi-mútsi</i>
‘two tapirs’ | <i>aṅóogi-músi</i>
‘two tapirs’ |
| b. | <i>okáhi-múpi</i>
‘two female tapirs’ | <i>aṅóogi-múpi</i>
‘two female tapirs’ |
| c. | <i>okáhi-mu</i>
‘tapirs’ | <i>aṅóogi-mu</i>
‘tapirs’ |

(3) Borrowed elements in personal pronouns

	<u>Bora</u>	<u>Resígaro</u>
a.	<u>muítsi</u> 1DL.MASC 'we two'	<u>φa-muítsi</u> 1PL-DL.MASC 'we two'
b.	<u>mu:ʔa</u> 1PL 'we'	<u>φa-ʔa</u> 1PL-PL.ANIM 'we'

(4) Borrowed dative case marker

a.	<u>mí=ʔpe</u> <u>no-βíkoʔ</u> <u>ginómomí-ké</u> CON=REM 1S-sell white_people-DAT 'I sold (it) to the white people'
b.	<u>no-ké</u> <u>na-ʔ</u> 1S-DAT 3PL-give 'They gave me'

2.3. Distribution of borrowed derivational morphemes (classifiers) in corpus

Function of classifiers in donor (Bora) and recipient (Resígaro) language: derivation of nouns (example 5) and formation of modifiers (example 6) and pro-forms (example 7).

(5)	<u>Bora</u>	<u>Resígaro</u>
a.	<u>apúí-hu</u> burn.NMZ-CL.TUBE 'rifle'	<u>ókóniigi-hu</u> burn.NMZ-CL.TUBE 'rifle'
b.	<u>apúí-u</u> burn.NMZ-CL.ROUND 'bullet'	<u>ókóniigi-ú</u> burn.NMZ-CL.ROUND 'bullet'
(6)	<u>Bora</u>	<u>Resígaro</u>
	<u>míta-u</u> big-CL.ROUND 'big (bullet, stone, etc.)'	<u>dzídzá-u</u> big-CL.ROUND 'big (bullet, stone, etc.)'
(7)	<u>Bora</u>	<u>Resígaro</u>
	<u>te:-u</u> PN-CL.ROUND 'that (bullet, stone, etc.)'	<u>tee-u</u> PN-CL.ROUND 'that (bullet, stone, etc.)'

<u>example of token</u>	<u>stem</u>	<u>item's POS</u>	<u>stem's origin</u>	<u># of tokens</u>
<i>hígabágikó</i> 'inside the <i>hígaba</i> -trap'	<i>híga-</i> 'trap'	N	Arawakan	10
<i>máágíbaʔé</i> 'tree sp.'	<i>maagí-</i> 'tree, sp.'	N	Arawakan	9
<i>díñééneba</i> 'trap'	<i>díñééne-</i> 'trap'	N	Arawakan	7
<i>βoʔtsómaadebaá<h>ina</h>ʔoó</i> 'trunk with edible larva'	<i>βoʔtsómaade-</i> 'edible larva'	N	Arawakan	2
<i>aβáánaba</i> 'wooden log'	<i>aβáána-</i> 'wood'	N	Arawakan	1
<i>hídʒluʔubakobuí</i> 'a large one'	<i>hídʒluʔu-</i> 'size'	N	Arawakan	1
<i>nanaánaba</i> 'pineapple fruit'	<i>nanaána-</i> 'pineapple'	N	Arawakan	1
<i>βadakaádzebaáhi</i> 'manioc drinks'	<i>βadakaádze-</i> 'manioc drink'	N	Arawakan	1
<i>gáámuhébagí</i> 'with herb sp.'	<i>gáámuhé-</i> 'herb sp.'	N	Bora	2
<i>dóódʒabaáne</i> 'cocona fruits'	<i>dóódʒa-</i> 'cocona'	N	Bora	1
<i>godóómuba</i> '(one) mushroom'	<i>godóómu-</i> 'mushroom'	N	Bora	1
<i>taʔdáagiba</i> 'hard log'	<i>taʔdági-</i> 'hard'	ADJ	Arawakan	3
<i>dʒídʒaabakobaβá</i> 'a big, huge (log)'	<i>dʒídʒaa-</i> 'big'	ADJ	Arawakan	1
<i>éʔébagí</i> 'on that (log)'	<i>éʔé-</i> 'that'	DEM	Bora	1
<i>híʔíbagípe</i> 'on this (log)'	<i>híʔí-</i> 'this'	DEM	Bora	1
<i>téʔébaáhi</i> 'those (logs)'	<i>téʔé-</i> 'that'	PRON	Bora	7
<i>sáʔábaʔoó</i> 'one (log)'	<i>sáʔá-</i> 'one'	NUM	Bora	3
<i>mibaákuʔaba</i> 'two (logs)'	<i>mi-</i> 'two'	NUM	Bora	1
<i>síʔíba</i> 'another (log)'	<i>síʔí-</i> 'other'	QUANT	Bora	2
<i>páʔábauí</i> 'the entire (package)'	<i>páʔá-</i> 'all'	QUANT	Bora	1

Table 2: Distribution of borrowed classifier *-ba* 'fruits, logs, drinks, etc.'

Distribution of borrowed classifiers (based on counts of eight most frequent classifiers in approx. 50.000-word Resígaro corpus: *-ba* ‘CL for fruits, logs, drinks, etc.’, *-hi* ‘CL for flat and round objects’, *-ga* ‘CL for plank-shaped objects’, and five others):

<u>stem's origin</u>	<u>examples</u>	<u>types</u>	<u>tokens</u>	<u>Hapax legomena</u>
Arawakan (native) nouns	<i>hípo-hí</i> earth-CL ‘earth’ <i>aβáána-ba</i> wood-CL ‘plank’ <i>βáʔa-ga</i> cut-CL ‘machete’	59 (92.2%)	178 (90.4%)	26
Bora (borrowed) nouns	<i>dóódza-ba</i> cocona-CL ‘cocona fruit’ <i>núúhi-ga</i> shelter-CL ‘shelter’ <i>goodómu-ba</i> mushroom-CL ‘mushroom’	5 (7.8%)	19 (9.6%)	2
Total		64	197	

Table 3: Borrowed classifiers with native Arawakan noun stems vs. noun stems borrowed from Bora

<u>stem's origin</u>	<u>example</u>	<u>types</u>	<u>tokens</u>
Arawakan adjectives	<i>tsení-gá</i> high-CL ‘the high one (plank, etc.)’ <i>dzídzaá-bá</i> big-CL ‘the big one (fruit, log, etc.)’	7	12
Bora adjectives	/	0	0

Table 4: Borrowed classifiers with native Arawakan adjectival stems vs. adjectival stems borrowed from Bora

<u>stem type</u>	<u>example</u>	<u>types</u>	<u>tokens</u>
Bora demonstratives, 3 rd person pronouns	<u>é?é-ba</u> that-CL 'that one (fruit, log, etc.)'	8	27
Bora numerals (‘one’, ‘two’)	<u>sá-hí</u> one-CL 'one (fiber, etc.)' <u>mi-baá-ku</u> two-CL-DL 'two (fruits, logs, etc.)'	9	22
Bora quantifier (‘all’, ‘other’)	<u>pá-hi</u> all-CL 'the whole (seed, etc.)' <u>sí-hi</u> other-CL 'another (fiber, etc.)'	6	14

Table 5: Borrowed classifiers with demonstratives, 3rd person pronouns, numerals, quantifiers (all borrowed from Bora)

2.4. Syntagmatic interdependence of borrowed morphology

Number marking requires previous unitization (individuation) by classifiers (examples 8a-d); borrowed nominal roots (demonstratives, 3rd person pronouns, numerals, quantifiers) are bound and require classifier (examples 8e-g);

- (8)
- | | | |
|----|--|---|
| | <u>Bora</u> | <u>Resígaro</u> |
| a. | <u>úhi</u>
'banana (many or stuff)' | <u>ʃákoo?gí</u>
'banana (one, many or stuff)' |
| b. | * <u>apú:-ku / -:ne</u>
burn.NMZ-DL / -PL | * <u>ókóniigi-ku / -hi</u>
fire-DL / -PL |
| c. | <u>apú-hu:-ku</u>
burn.NMZ-CL.TUBE-DL
'two rifles' | <u>ókóniigi-húú-ku</u>
fire-CL.TUBE-DL
'two rifles' |
| d. | <u>apú-hu:-ne</u>
burn.NMZ-CL.TUBE-PL
'rifles' | <u>ókóniigi-húú-hi</u>
fire-CL.TUBE-PL
'rifles' |
| e. | * <u>té:-</u>
PN- | * <u>tee-</u>
PN- |

- | | | |
|----|---|--|
| f. | <u>té:-huu-ku</u>
<u>PN-CL.TUBE-DL</u>
'these two (rifles, etc.)' | <u>tee-huuu-ku</u>
<u>PN-CL.TUBE-DL</u>
'these two (rifles, etc.)' |
| g. | <u>té:-huu-?hi</u>
<u>PN-CL.TUBE-PL</u>
'these (rifles, etc.) ' | <u>tee-huuu-hi</u>
<u>PN-CL.TUBE-PL</u>
'these (rifles, etc.) |

Syntagmatic interdependence of morphosyntactic subsystems underlies borrowing of interdependent derivational morphology (classifiers) and associated inflectional morphology (number markers)

3. Bisayan morphology in Chabacano de Zamboanga (Mindanao, Philippines)

3.1. *The languages and their contact history*

Chabacano of Zamboanga (Zamboangueno): a Spanish-based creole spoken in the city of Zamboanga and the surrounding area in the extreme western part of Mindanao, Southern Philippines; layers also spoken in Cotabato and in Borneo (approximately 400,000 speakers). Following Valles-Akil (2000:28) quoting the census data of 1995, 44,5% of the population in Zamboanga has Chabacano as a first language. Ranking of the languages spoken in Zamboanga City: 1. Chabacano 2. Cebuano 3. Tausug 4. Samal; others: Subanon, Hiligaynon, (Hokkien-)Chinese, Spanish. Chabacano is also used as a lingua franca in the region and expanding as a second language.

Originating in the 16th or 17th century, it was until around 1800 a creole with mostly Spanish material (cf. Chabacano in Ternate, Bay of Manila; cf. Steinkrüger 2007).

Starting in the 19th century: heavy influence of the Bisayan languages Hiligaynon and later Cebuano (until today) on Chabacano spoken in Zamboanga; both languages originate in the Central Philippines. Influence on the lexicon, the morphology, syntax and the discourse system.

19th century: “Re-hispanicization” by native-speakers from Europe and Mexico (cf. Chabacano in Ternate, Bay of Manila; Lipski 1987).

Starting in the 20th century: English influence (only lexicon), (nearly) no native speakers. After Second World War: Loans from Tagalog, the national language of the Philippines.

Note: Inflectional morphology is 100% Spanish (TMA-markers on the verb, gender marking on nouns and adjectives). The only exception is the plural marker *mga* of Philippine, probably Bisayan, origin (cf. Steinkrüger 2009).

Focus in the following paragraph: Bisayan derivational morphology (all affixes) in Chabacano.

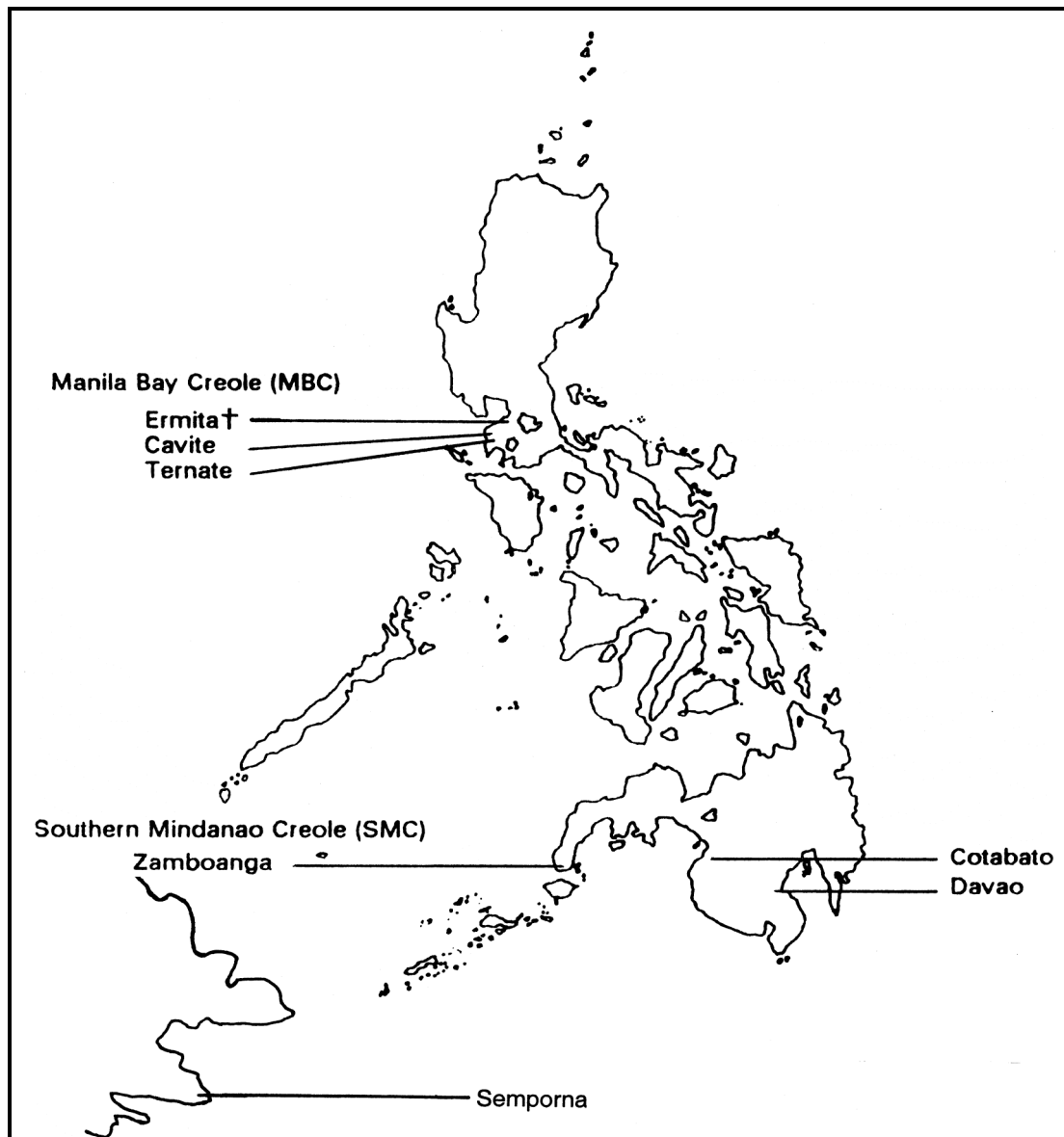


Figure 3: Geographic distribution of Chabacano (after Riego de Dios 1989:10)

3.2. Overview of borrowed morphology

In her analysis of a basic vocabulary of more than 6000 entries, Riego de Dios (1989:188) states that 83 % of the items are of Spanish, ca. 15% of Philippine, mostly Bisayan, and 2,5% of English origin.

Spanish: morphology of Spanish origin mostly productive with Spanish stems (an exception is e.g. *-ero / -era* for nomina agentis which is also a productive loan affix in Philippine languages); lots of Spanish stems with Austronesian (Bisayan) morphology

Bisayan: most derivational morphology, pronouns (with mixed morphology), discourse particles, plural marker *mga*

English: no morphology, no Spanish morphology with English stems. Very few Bisayan affixes on English stems; most frequent and productive is the verbalizer *man*: *man*- integrates English loans (verbs and nouns) as verbs; it shows the superficial character of the contact with English, there are nearly no native speakers but culturally English is a dominant language (monitored L2 learned by children and adults in certain contexts of (higher) education).

<u>morpheme</u>	<u>origin</u>	<u>function/meaning in Chabacano</u>	<u>examples</u>	<u>notes</u>
<i>ika-</i>	< Hil <i>ika-</i>	prefix for ordinal numbers	<i>dos</i> ‘two’ → <i>ika-dos</i> ‘second’, <i>singko</i> ‘five’ → <i>ika-singko</i> ‘fifth’, etc.	there are no numerals of Bisayan origin in Chab
<i>ma-</i>	< Hil <i>ma-</i> (same function)	prefix forming adjectives generally from nouns	<i>pyédra</i> ‘stone’ → <i>ma-pyédra</i> ‘stony, full of stones’	very productive
<i>maka-</i>	< Ceb or Hil <i>maka-</i>	causative prefix for nouns, verbs and adjectives	<i>bungúl</i> ‘deaf’ → <i>maka-bungúl</i> ‘deafening’	restricted to human feelings, sates etc.
<i>man-</i>	< Hil <i>mang-</i> , a noun verbalizer	prefix for transitive verbs: + N or Adj → V	<i>amígo</i> ‘friend’ → <i>man-amígo</i> ‘to be(come) friend’	goes also with English words
<i>mag-</i>	not clear	prefix for collectives	<i>ermáno</i> ‘brother’ <i>mag-ermáno</i> → ‘referring to or among brothers’	not very frequent
<i>pa-</i>	< Hil <i>pa-</i> and (?) <i>pag-</i> verbal noun formative affix for many roots	prefix forming causative verbs or directional nouns +Adj → reciprocal V +V → causativity +N: directionality	<i>pa-alisto</i> ‘test each other’s skill’ <i>man-pa-balábak</i> ‘get set askew’	Some authors like Forman claim a Spanish origin (< Span <i>para</i>)
<i>paka-</i>	< Hil <i>pagka-</i>	noun-forming prefix for descriptives	<i>alisto</i> ‘alert; active’ → <i>paka-alisto</i> ‘talent’	

Table 6: Synopsis of derivational prefixes in Chabacano of Bisayan origin (Hil = Hiligaynon, Ceb = Cebuano; Chab = Chabacano)

(9) Borrowed plural marker *mga*

el mga hénte
ART PL person
‘the people’

(10) Borrowed pronouns of the plural – possessive forms

di-ínyo kása se
POSS[<Spanish]-yours(pl)[<Hiligaynon] house this
‘this is your house’

- (11) Verbalizer and English loans
Asta un díya ya-man-hold-up konel dimíyo nána.
 until a day PRF-VBLZ-hold-up OBJ.ART my mother
 ‘Until a day they held up my mother.’

3.3. Distribution of Bisayan morphemes in Chabacano corpus

Data resources: own field work data (2004, 2007) and a corpus consisting of ca. 5,000,000 words (by the friendly permission of McNeil Technologies, Inc. Maryland, USA), compiled at the beginning of this century, edited 2005.

Two borrowed affixes will be examined in the following:

Case #1: ika-

With this prefix, ordinal numbers are formed in Chabacano. Same function-form-distribution as in the source language. A clear case of borrowing without stems, since there are no numerals of Bisayan origin in Chabacano!

<u>stem's origin</u>	<u>examples</u>	<u>types</u>	<u>tokens</u>
native (Chabacano, Spanish)	<i>ika-uno</i> ‘first’, <i>ika-dos</i> ‘second’, <i>ika-</i> <i>tres</i> ‘third’, <i>ika-</i> <i>kwátro</i> ‘fourth’ etc.	100 (%)	100 (%)
borrowed (Bisayan)	---	0 (0%)	0 (0%)
borrowed (English)	---	0 (0%)	0 (0%)

Table 7: Frequency of the prefix *ika-* (< Bisayan) forming ordinal numbers

Case #2: maka-

In Chabacano, this prefix forms adjectives (non-verbal predications) from predominantly nouns but also verbs and adjectives expressing “causing human feeling/state/activity X” (see also Riego de Dios 1989: 39-40 and Forman 1972: 137-138):

- (12) a. *maka-* + *myédo* ‘fear’ → *maka-myédo* ‘dreadful, scary’
 b. *maka-* + *dwéle* ‘pain’ → *maka-dwéle* ‘causing pain’ etc. etc.
- (13) *Byen maka-rísa ta-mirá yo konéle.*
 very CAUS-laughter IPFV-look 1S OBJ.3S
 ‘It makes me laughing a lot looking at him.’

A more complex case than *ika-*, since there is not a one-to-one equivalence in the source and the target language. Anyway, there are identic patterns, forming adjectives in Cebuano the same way as in Chabacano; examples:

- (14) a. *maka-* + *hadluk* ‘fear’ → *makahadluk* ‘dreadful, diabolic, frightening’ etc.
 b. *maka-* + *gahum* ‘power’ → *makagagahum* ‘powerful, almighty’ etc. etc.

A definition of *maka-* in a dictionary of Cebuano shows, how differently the prefix works generally in the source language:

mahan, Her mother whipped her so hard she nearly wet her pants. *Makamgun kag nmdut ug makakità ka*, Once you see it, you won't be able to help exclaiming at how beautiful it is.

*maka-*₂ *short form: ka-*₄ *n* affix added to numbers to form words which mean [do so-and-so] many times. *Makapila (kapila) ku na ikaw ingna?* How many times did I tell you? *Makaduba na ku maligù didtu*, I have gone swimming there twice. *Makadaghan na ku mabiktma*, I have been victimized many times.

Figure 4: Parts of Wolff 's (1972) definition of *maka-*

Type- and token- frequency of *maka-* in the corpus:

A. type-frequency in a random set of ca. 100 tokens with *maka-*:

With Austronesian stems:

- (1) *makahuya* (< Hiligaynon *huya* ‘shame’)
- (2) *makalas* (< ?)
- (3) *makalawang* (< ? Cebuano *lawang* ‘wide’)
- (4) *makadala* (< ?)
- (5) *makatamad* (< Tagalog *tamad* ‘lazy’)
- (6) *makasakit* (< Tagalog *sakit* ‘pain’)
- (7) *makasumut* (< *sumut* ‘to grow tired or bored of the same food or activity’, unclassified Philippine origin, Riego de Dios 1989, Forman 1972:138)

With Chabacano/Spanish stems:

- (1) *myédo* ‘fear’
- (2) *triste* ‘sad’
- (3) *dwéle* ‘pain’
- (4) *lástima* ‘pitty’
- (5) *rísa(s)* ‘laughing’
- (6) *rábya* ‘fury, anger’
- (7) *dolór* ‘pain’
- (8) *lyurá / yurá* ‘wipe’
- (9) *murí* ‘die’
- (10) *lástima* ‘pity’

- (11) *sintí* ‘feel’
- (12) *pensar* ‘think(ing)’
- (13) *kre(r)* ‘believe’
- (14) [*senti*]*miento* ‘feeling’
- (15) *espantar* ‘frighten, scar’
- (16) *kunsumir* ‘consumate’
- (17) *péste* ‘pest, nuisance’
- (18) *imbidia* ‘envy’
- (19) *entretene* ‘entertain’

B. token-frequency in a random set of 120 tokens of the corpus (underlined stems are of Austronesian origin):

<i>myédo</i>	50
<u><i>húya</i></u>	21
<i>rísa(s)</i>	10
<i>lástima</i>	8
<i>tríste</i>	4
<i>las</i>	3
<i>péste</i>	3

2 tokens: *dwéle*, *sintimiento*, [*senti*]*miento/miento/niento*, *espanta(r)*,

1 token: *sintí*, *rábya*, *espanta(r)*, *lawang*, *llurar*, *kunsumir*, *imbidia*, *pensa*,
dolor, *suhmut*, *entende*, *muri*, *dala*

<u>stem's origin</u>	<u>example</u>	<u>types</u>	<u>tokens</u>
native (Chabacano / Spanish)	<i>maka-myédo</i> ‘scary’, <i>maka- tríste</i> ‘making sad’, <i>maka- rísas</i> ‘funny’	19 (73%)	93 (78%)
borrowed (Austronesian)	<i>maka-húya</i> ‘ashaming’	7 (27%)	27 (22,5%)
borrowed (English)	---	0 (0%)	0 (0%)

Table 8: Summary of frequency of the causative prefix *maka-* (< Bisayan)

☞ It seems to be unlikely that the only frequent construction with a Bisayan stem (*maka-huya* ‘ashaming’) was responsible and at the same time the starting point of the productivity of *maka-* with Chabacano (Spanish) stems.

Note: The original lexeme for ‘shame’, namely *bergwénsa* (< Span. *vergüenza*) has been substituted by the Hiligaynon word *huya*. This is not the case in the varieties of Chabacano in the Bay of Manila.

4. Conclusions

Bora and Chabacano illustrate that systematic, direct borrowing of bound, derivational morphology that is used productively on native stems is possible

Under what conditions is derivational morphology borrowed directly?

Linguistic conditions on borrowability of derivational morphology:

- relative borrowability of morpheme types (Weinreich 1953: 29ff.; Wilkins 1996: 111; Thomason 2001: 70ff.):
 - lexical > grammatical; free > bound; open class > closed class: not borne out in our data
 - derivation > inflection: confirmed by our data
 - Myers-Scotton's (2002, 2007) 4-M model, based on access during language production: content morphemes (verbs, nouns) > early system morphemes (e.g. derivation, **plural markers**) > "bridge" morphemes (e.g. complementizers) > "outsider" late system morphemes (e.g. case markers assigned by verb): borrowability of plural markers confirmed by our data
- typological fit between donor and recipient languages (Thomason 2001: 63), here morphological typology: agglutinating > agglutinating (of similar type) (Resígaro); agglutinating > isolating (Chabacano)

Extralinguistic factors favoring direct borrowing:

- inhibition of lexical borrowing because of language as identity marker
- high level of bilingualism (analysis of complex words in donor language)

Further observations:

- borrowed elements cluster around semantic domains, and possibly morphosyntactic subsystems: Chabacano: feelings, etc.; Resígaro: expression of inanimate objects, shapes, units, and quantities
- specific set of morphology borrowed into Resígaro belongs to tightly integrated morphosyntactic subsystems.
- the borrowed morpheme can get a specialized function in the target language, just reflecting a part of the function in the donor language (Chabacano)

Abbreviations

1 – 1st person; ART – article; CAUS – causative; CL – classifier; CON – sentence connector; DAT – dative case; DL - dual; INST – instrumental case; IPFV – imperfective; MASC – masculine; NMZ – nominalization; OBJ - object; PL – plural; POS – part of speech; POSS - possessive; PRF – perfect; REM – remote past; S - singular; TAM – tense-aspect-mood; VBLZR – verbalizer

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