

Bound morphology in common: copy or cognate?  
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**Interdependences between copied derivational and  
inflectional morphemes:  
A new constraint on copying bound morphemes**

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**1. Aims of this talk**

Focus on situations where

- various bound morphemes are copied from one language into another
- copied morphemes are productively used on native stems

Propose that such sets of copied morphemes tend to be internally structured by paradigmatic and syntagmatic relations (section 2), which constrains their copiability

Illustrate this with data from Amazonia, The Philippines, and Australia (sections 3-5)

Point out relevance for contact linguistics (sections 1 and 6)

**2. Constraints on morpheme copying**

*2.1. Types of constraints on copiability*

(i) based on universally defined morpheme types:

free > bound

lexical morphemes > grammatical morphemes

derivation > inflection

<b>morpheme property</b>	<b>prediction</b>
formal properties	syllabic forms > subsyllabic elements clear formal boundaries > fusional affixes structural and syntagmatic unintegratedness > integratedness
semantic properties	simple, clear meaning > complex, opaque meaning non-portmanteau morphemes > portmanteau morphemes affective meaning > non-affective meaning

TABLE 1: PROPERTIES OF INDIVIDUAL MORPHEMES THAT PREDICT COPYABILITY (WEINREICH 1953; HEATH 1978A:105; WILKINS 1996:111; FIELD 2002:34-38; MYERS-SCOTTON 2002; MATRAS 2009:153-165; THOMASON AND KAUFMAN 1988; THOMASON 2001; GARDANI 2008)

(ii) based on individual categories:

nominal morphology > verbal morphology

within nominal morphology (Matras 2009:218):

derivation > classifiers > plural > definiteness > case

(iii) based on the relation between donor and recipient language

gap in recipient language > no gap in recipient language

structural compatibility > no structural compatibility

*2.2. The morphosyntactic-subsystem-integrity constraint (MSIC)*

Based on how sets of copied morphemes are internally structured within the receiving language

- (1) The morphosyntactic-subsystem-integrity constraint (MSIC):  
If various grammatical morphemes are borrowed from one language into another, the borrowed morphemes are more likely to be related by paradigmatic and syntagmatic relations than not.

Copied morphemes come in “chunks”

Preserves integrity of morphosyntactic subsystems (defined by paradigmatic and syntagmatic relations) by predicting that

- (i) as few morphosyntactic subsystems as possible are affected by borrowed morphemes
- (ii) affected subsystems may be affected to a high degree, possibly made up of only or mostly copied morphemes

Predicts a statistical tendency, which allows for exceptions, within and across languages

Complements other factors, helps to explain data that has not been explained so far

### **3. Bora (Witotoan) morphemes in Resígaro (Arawakan) - North West Amazon**

#### *3.1. Contact situation and overall contact-induced changes*

Close cultural contact and intermarriage as part of the multilingual cultural complex 'People of the Centre' (Echeverri 1997)

Resígaro is now moribund, but there is evidence that contact-induced changes go back to at least a number of generations (Seifart 2010)

Less than 5% of stems in the Resígaro lexicon are copied from Bora (Allin 1976:382-456; Seifart 2010; but see Aikhenvald 2001:182). Borrowed affixes are productively used on native stems (Steinkrüger and Seifart 2009)

Direction of copying is evident from reconstruction in Proto-Bora-Muinane and absence in Arawakan

Data from Seifart (2009; see also Seifart 2010)

3.2. The set of 36 copied morphemes and their paradigmatic relations

(i) 19 out of 19 inanimate class markers; 1 out of 2 gender markers  
(copied forms **underlined**, **bold**, and **shaded**):

Gloss	Bora	Proto Bora-Muinane	Resígaro	Resígaro example
CL.TREE	-ʔε	*-ʔε	<u>-ʔε</u>	<i>koóna-ʔε</i> ‘almond tree’
CL.HOLE	-ʔεhu	*-ʔεhu	<u>-ʔεhu</u>	<i>té-ʔεhu</i> ‘this hole’
CL.RIVER	-ʔi	*-ʔi	<u>-ʔi</u>	<i>té-ʔi hiβíi</i> ‘water-star’ (proper name)
CL.OBLONG	-ʔo	(*-ʔo)	<u>-ʔo</u>	<i>níitsi-ʔo</i> ‘cigarette’
CL.PILLAR	-ʔahku	*ʔahku	<u>-aaku</u>	<i>té-aaku</i> ‘this pillar’
CL.3DIM	-ba	*-ba	<u>-ba</u>	<i>síʔí-bá</i> ‘another (box, log, etc.)’
CL.BUSH	-bahwu	*-bahwu	<u>-bahwu</u>	<i>té-bahwu</i> ‘bush’
CL.ROOT	-baʔhke	*-baikke	<u>-báké</u>	<i>pipíigi-ʔε-báké</i> ‘root of palm tree’
CL.BRANCH	-g <sup>w</sup> áhka	*-gákka	<u>-gáka</u>	<i>koóna-ʔε-gáka</i> ‘almond tree branch’
CL.PLANK	-g <sup>w</sup> a	*-gai	<u>-ga</u>	<i>βáʔa-gú</i> ‘machete’
CL.HOUSE	-ha	*-ha	<u>-ha</u>	<i>dʒídʒáá-há-koba</i> ‘big house’
CL.DISC	-hi	*-hi	<u>-hi</u>	<i>daʔmóótsi-hí</i> ‘hat’
CL.TUBE	-hu	*-hu	<u>-hu</u>	<i>kaané-hú</i> ‘doing this (story)’
CL.STICK	-i	*-i	<u>-i</u>	<i>goʔkoótsi-í</i> ‘mortar’
CL.POINTED	-ko	*-ko	<u>-ko</u>	<i>teé-ko</i> ‘this (stick)’
CL.DAY	-ko:hi	*-ko:hi	<u>-koohi</u>	<i>sá-kóóhi</i> ‘one day’
CL.LEG	-kuuba	*-kuuba	<u>-kuʔba</u>	<i>hí-kuʔba</i> ‘this leg’
CL.RIVER	<i>mo:a</i>	*moáai	<u>-moóa</u>	<i>té-moóa</i> ‘this river’
CL.ROUND	-u	(*-u)	<u>-u</u>	<i>sí-u</i> ‘another (pebble, etc.)’
feminine SG	-(pi)dʒε	*-ge	<u>-(pi)dʒε</u>	<i>p<sup>h</sup>ai-pídʒé</i> ‘old woman’
non-fem. SG	/	/	<u>-gi</u>	<i>p<sup>h</sup>ai-gí</i> ‘old man’

TABLE 2: RESÍGARO NOUN CLASS AND GENDER MARKERS

(ii) 6 out of 7 number markers:

	dual	plural
<u>inanimate</u>	<u>-:ku</u>	<u>-hi</u>
<u>feminine</u>	<u>-mupi</u>	<u>-mu, -ʔa</u>
<u>masculine</u>	<u>-musi</u>	
<u>human, body parts</u>	(no special form)	<u>-ne</u>

TABLE 3: RESÍGARO NUMBER MARKERS

(iii) 8 out of 8 bound grammatical roots forming pronominal expressions:

meaning	Bora	Proto Bora-Muinane	Resígaro	Resígaro example
numeral one	<i>tsa-</i>	* <i>tsa-</i>	<u><i>sa-</i></u>	<u><i>sá-ʔεhu</i></u> ‘one (hole)’
numeral two	<i>mi-</i>	* <i>mi-</i>	<u><i>mi-</i></u>	<u><i>mí-huúw-ku</i></u> ‘two (paths, songs, etc.)’
‘complete, all’	<i>pa-</i>	* <i>pa-</i>	<u><i>pa-</i></u>	<u><i>pá-pásí</i></u> ‘a complete (ring)’
‘other’	<i>tsi-</i>	* <i>tsi-</i>	<u><i>si-</i></u>	<u><i>sí-ʔíba</i></u> ‘another (box, log, etc.)’
possessive	<i>-ʔne</i>	* <i>-ne</i>	<u><i>-ʔne</i></u>	<u><i>gí-ʔné</i></u> ‘his’, <u><i>gí-ʔné-gá</i></u> ‘his (plank, etc.)’
proximate	<i>i-</i>	* <i>hi-</i>	<u><i>hi-</i></u>	<u><i>hi-ko</i></u> ‘this (spear, rod, etc.)’
distal	<i>ε-</i>	* <i>he(ʔε)-</i>	<u><i>heʔε-</i></u>	<u><i>heʔε-hi</i></u> ‘that (coin, disc, etc.)’
third person	<i>te:-</i>	* <i>te-</i>	<u><i>te-</i></u>	<u><i>té-ʔi</i></u> ‘it (river, string, etc.)’

TABLE 4: RESÍGARO BOUND GRAMMATICAL ROOTS

(iv) 2 suffixes which are not interrelated with other copied morphemes

meaning	Resígaro form
dative	<u><i>-kε</i></u>
accusative	<i>-∅</i>
addressee of verba dicendi	<i>-no ~ -ho</i>
ablative	<i>-k<sup>h</sup>o</i>
adlative	<i>-kóo</i>
benefactive	<i>-pokáʔ</i>
instrumental	<i>-gí</i>
locative ‘above’	<i>-híí</i>
locative ‘in’	<i>-gikó</i>
sociative, concomitant	<i>-néé</i>

TABLE 5: RESÍGARO CASE MARKERS

meaning	Resígaro form
augmentative	<u><i>-kobá</i></u>
diminutive	<i>-dzá</i>

TABLE 6: RESÍGARO AUGMENTATIVE/DIMINUTIVE MARKERS

### 3.3. Syntagmatic relations between copied morphemes

Bound grammatical roots require classifiers

- (2) a. **\*sa-**  
Intended meaning: ‘one’
- b. **sa-ʔε**  
one-CL.tree  
‘one tree’
- c. **sa-ga**  
one-CL.plank  
‘one plank-shaped’

Inanimate number markers require individuated count nouns, i.e. previous individuation by classifiers

- (3) a. *ókóniigí*  
‘burning’
- b. \**ókóniigi-kuu* / *-hi*  
burning-DL / -PL
- c. *ókóniigi-húú-kuú*  
burning-CL.TUBE-DL  
‘two rifles’
- d. *ókóniigi-húú-hí*  
burning-CL.TUBE-PL  
‘rifles’
- e. *tεε-huu-kuú*  
3-CL.TUBE-DL  
‘these two (rifles, etc.)’
- f. *tεε-huu-hí*  
3-CL.TUBE-PL  
‘these (rifles, etc.)’

In over 50% of words that include copied morphology, more than one copied element occurs (in certain text types, such as procedural texts):

- (4) a. *híga-buí*      *pi-k<sup>h</sup>á*      *anepuí*      *apótsí*  
 higa-CL.3DIM      2SG-do      many      at\_once  
*sá-ʔosí*      *téʔé-baá-hí*  
 one-CL.HAND      PN-CL.3DIM-PL  
 ‘Of the *hígabuí*-trap, you do many at once, five (lit. one hand) traps’  
 (Seifart 2009:res\_tramp\_7 47)
- b. *tók<sup>h</sup>o-huíʔó-hí-gí-ŋa = píi*      *oβéetsí*      *βa-k<sup>h</sup>á-á-gí = píi*  
 tree-CL.STRING-PL-INST-REST=TAM      trap      1PL-do-SUB-INST=TAM  
*té-paasí-hí*      *φé-ʔnó*  
 PN-CL.RING-PL      1PL-put  
 ‘We make the *oβéetsí*-trap with strings from the *tók<sup>h</sup>o*-tree, we put the rings’  
 (Seifart 2009:res\_tramp\_1 10)

### 3.4. Summary

The majority of copied morphemes falls into three groups of paradigmatically related forms

These three groups are syntagmatically related

There are two non-interrelated morphemes (dative case marker, augmentative marker)

There are no copied morphemes in any other morphosyntactic subsystem

The affected subsystems are almost completely made up of copied morphemes, i.e. a neat compartmentalization into native and borrowed subsystems.

## 4. Visayan morphemes in Chabacano (Spanish-based creole) - Philippines

### 4.1. Contact history and overall contact-induced changes

Formation as a Spanish-based creole in the 16th century

During the 19th century heavy influence from languages of the Visayan subgroup of Austronesian, especially Hiligaynon (Ilonggo) and Cebuano (Lipski 1992:221; Steinkrüger 2009:220-222)

About 85% of vocabulary is native (Spanish-based), the rest from Tagalog, Hiligaynon, and Cebuano (Riego de Dios 1989:188). Borrowed affixes are productively used on native stems (Steinkrüger and Seifart 2009)

### 4.2. The set of 8-9 borrowed morphemes and their paradigmatic relations

(i) 6-7 out of 8 derivational prefixes:

(the following tables from Steinkrüger (2003: 257-259) give “all productive affixes in Chabacano”; Hil - the Visayan language Hiligaynon ~ Ilonggo)

meaning	Chabacano form	source form	Chabacano examples
Ordinal number formation	<b>ika-</b>	< Hil <i>ika-</i>	<i>dos</i> ‘two’ → <b>ika-</b> <i>dos</i> ‘second’ <i>síngko</i> ‘five’ → <b>ika-</b> <i>síngko</i> ‘fifth’, etc.
Adjectivizer	<b>ma-</b>	< Hil <i>ma-</i>	<i>pyédra</i> ‘stone’ → <b>ma-</b> <i>pyédra</i> ‘full of stones’
Verbalizer, Causativizer	<b>maka-</b>	< Hil <i>maka-</i> (?)	<i>bungúl</i> ‘deaf’ → <b>maka-</b> <i>bungúl</i> ‘deafening’
Verbalizer, Transitive	<b>man-</b>	< Hil <i>mang-</i>	<i>amígo</i> ‘friend’ → <b>man-</b> <i>amígo</i> ‘to be(come) a friend’
Verbalizer (reciprocal verbs from adjectives); Causativizer (from verbs); Directional nouns (from nouns)	<b>pa-</b>	< Hil <i>-pa-</i> , <i>-pag</i>	<b>pa-</b> <i>alísto</i> ‘test each other’s skill’; <b>man-pa-</b> <i>balábak</i> ‘get set askew’
Nominalizer	<b>paka-</b>	< Hil <i>pagka-</i>	<i>alísto</i> ‘alert; active’ → <b>paka-</b> <i>alísto</i> ‘talent’
Collective	<b>mag-</b>	not clear	<i>ermáno</i> , brother’ <b>mag-</b> <i>ermáno</i> → ‘referring to or among brothers’
Verbalizer, imperfective aspect marker	<i>ta-</i>	< Span <i>está</i>	<i>hóven</i> ‘young’ → <i>tampahóven</i> ‘act youthfully’ ( <i>ta-man-pa-</i> → <i>tampa-</i> )

TABLE 7: CHABACANO DERIVATIONAL PREFIXES (Steinkrüger 2003:257-258)

(ii) 2 out of 12 derivational suffixes:

meaning	Chabacano form	source form	examples
Verbalizer	-(y)á, -i, -é	< Span -ar, -ir, -er	<i>bíbo</i> ‘alive’ → <i>bibí</i> ‘to live’
Gender	-a, -o	< Span -a, -o	<i>nyéta</i> ‘niece’, <i>nyéto</i> ‘nephew’
Nominalization	-da	< Span -da	<i>esnseyáda</i> ‘teachings’, <i>abláda</i> ‘manner of talking’, <i>entendída</i> ‘manner of understanding’
Adjectivizer	-do. -w	< Span -do	<i>kurtá</i> ‘to cut’ → <i>kurtáw</i> ‘cut’, <i>mantáka</i> ‘lard, cooking fat’ → <i>mantekádo</i> ‘with ample lard’
Nominalizer	-dor, -dora	< Span -dor, -dora	<i>nadá</i> ‘to swim’ → <i>nadador</i> ‘sailor’
Nominalizer	-esa	< Span -esa	<i>riko</i> ‘rich’ → <i>rikésa</i> ‘wealth’; <i>póbre</i> ‘poor’ → <i>pobrésa</i> ‘poverty’
1. Reciprocal	<b>-han,</b>	< Hil	1. <i>kwénto</i> ‘story’ → <b><i>man-kwénto-han</i></b> ‘to tell each other’
2. Locative	<b>-an</b>	-(h)an	2. <i>tubú</i> ‘sugar cane’ → <b><i>tubu-han</i></b> ‘sugar cane field’
Adjectivizer	<b>-hin, -in</b>	< Hil -gin (?)	<i>myédo</i> ‘fear’ → <b><i>myedú-hin</i></b> ‘easily frightened’; <i>ásma</i> ‘asthma’ → <b><i>asmá-hin</i></b> ‘asthmatic’
Nominalizer	-ísta	< Span -ísta	<i>čabakanísta</i> ‘Chabacano expert’
Nominalizer	-syón	< Span -ción	<i>dibidí</i> ‘divide’ → <i>dibisyón</i> ‘division’
Adjectivizer	-tipo	< Span -tivo	<i>pensá</i> ‘think’ → <i>pensatíbo</i> ‘pensive’
Nominalizer	-ero, -era	< Span -ero, -era	<i>kaskás</i> → <i>kaskaséro</i> ‘fast driver’

TABLE 8: CHABACANO DERIVATIONAL SUFFIXES (Steinkrüger 2003:258-259)

#### 4.3. Syntagmatic relations between copied morphemes

One of the two copied suffixes (**-han** ‘reciprocal’) is used - in one of its meanings - only in combination with a copied prefix (**man-** ‘verbalizer’).

- (5) a. *kwénto*  
‘story’
- b. ***man-kwénto-han***  
VBZ-story-RECP  
‘to tell each other’

The two copied prefixes **man-** ‘verbalizer’ and **pa-** ‘verbalizer’ frequently co-occur to form verbs from adjectives:

- (6) a. **man-pa-gwápa**  
VBZ-VBZ-pretty  
‘beautiful, act pretty’
- b. **ta-m(an)-pa-ríko**  
IPFV-VBZ-VBZ-rich  
‘pretend to be rich’
- c. **ta-m-pa-kyeto-kyéto**  
IPFV-VBZ-VBZ-quiet-RDPL  
‘pretend to be quiet’
- d. **ta-m-pa-durmi-durmi**  
IPFV-VBZ-VBZ-sleep-RDPL  
‘pretend to be sleeping’

#### 4.4. Summary

The set of prefixes is almost entirely copied

There are only two copied suffix, one of which is structurally related to a borrowed prefix

## 5. Copied morphemes in three languages of Arnhem Land - Australia

### 5.1. Contact situation and overall contact-induced changes

*Ritharngu* is a Yuulngu language (Pama-Nyungan); *Ngandi*, *Nunggubuyu*, and *Warndarang* are distantly related “Prefixing” languages (Heath 1978a:2-10), all spoken in Northeastern Arnhem land, Northern Australia.

Close cultural contact and intermarriage between these four groups, deducible from synchronic (1970s) data, no historical documents (Heath 1978a:12-21).

Multilateral diffusion of phonological features (Heath 1978a:25-67), morphological markers (Heath 1978a:68-118; see below), and morphosyntactic structures (Heath 1978a:119-138).

Directionality of borrowing is established through phonological reconstruction (Heath 1978a:68-118).

### 5.2. Nunggubuyu morphemes in Warndarang

(i) 3 out of 8 noun class prefixes (Heath 1980a:22-25); nouns can occur without prefixes, but usually take one out of the following set:

meaning	Warndarang form
masc. sg/placename nouns	<i>ŋa-</i>
feminine singular/some faunal nouns	<i>ŋi-</i>
dual	<i>yiri-</i>
paucal	<i>yili-</i>
plural	<i>wulu-</i>
indefinite/non-human class I	<b><i>(r)a-</i></b>
non-human class II	<b><i>wu-</i></b>
non-human class III	<b><i>ma-</i></b>

TABLE 9: WARNDARANG NOUN CLASS MARKERS

(ii) 2 out of 5 case markers (Heath 1980a:26-28):

meaning	Warndarang form
nominative	<i>-Ø</i>
ablative	<b><i>-wala</i></b>
instrumental	<b><i>-miri</i></b>
allative	<i>-ñiyi</i>
purposive	<i>-ni</i>
locative (follows absolutive)	<i>-yaŋa</i>

TABLE 10: WARNDARANG CASE MARKERS

There are many other morphological subsystems in the language (especially verbal), which are apparently not influenced by Nunggubuyu.

### 5.3. Ritharngu morphemes in Ngandi

(i) 2 out of 3 derivational adverbializers (called “compounding” elements by Heath) (Heath 1978b:121) (directionality of copying unclear):

meaning	Ngandi form
‘times’	<u><i>malk-</i></u>
‘side’	<u><i>bala-</i></u>
‘season, time’	<i>mala?</i> -

TABLE 11: NGANDI DERIVATIONAL ADVERBIALIZERS

(ii) 2 out of 2 verbal derivation markers (called “comitative” by Heath) (Heath 1978b:83) (directionality of copying unclear):

meaning	Ngandi form
applicative marker, forming (semantically) transitive verbs with comitative object from intransitive verbs	<u><i>-bata-</i></u>
applicative marker, forming transitive verbs with an object that denotes something transported from intransitive verbs of motion	<u><i>-ri-</i></u>

TABLE 12: NGANDI VERBAL DERIVATION MARKERS

(iii) 2 out of 7 case markers (Heath 1978b:41-50):

meaning	Ngandi form
nominative	- $\emptyset$
ergative/instrumental	<u><i>-tu</i></u>
locative	<i>-gi</i>
allative	<i>-gič</i>
genitive, dative, purposive	<u><i>-ku</i></u>
originative	<i>-kuñuŋ</i>
ablative	<i>-wala</i>
pergressive	<i>-pič</i>

TABLE 13: NGANDI CASE MARKERS

(iv) 2 suffixes which are not interrelated with other copied morphemes:

*-ti-* “inchoative” verbalizer: forms inchoative verbs from noun stems of the adjectival type (Heath 1978b:87)

*-du-* “thematizing augment”: creates inflectable stems from roots from “class 1” verbs, more than half of the verbs in Ngandi, for class 2 there is *-da-* (Heath 1978b:89)

#### 5.4. Ngandi morphemes in Ritharngu

(i) 2 out of 2 derivational adverbializers (called “compounding” elements by Heath) (Heath 1980b:81) (directionality of copying unclear):

meaning	Ritharngu form
‘times’	<i>malk-</i>
‘side’	<i>bala-</i>

TABLE 14: RITHARNGU VERBAL DERIVATION MARKERS

(ii) 2 out of 3 verbal derivation markers (called “comitative” by Heath) (Heath 1980b:79, 82-83) (directionality of copying unclear):

meaning	Ritharngu form
applicative marker, forming (semantically) transitive verbs with comitative object from intransitive verbs	<i>bata-</i>
applicative marker, forming transitive verbs with an object that denotes something transported from intransitive verbs of motion	<i>ray-/yay-</i>
derivational marker, marking non-distributivity, e.g. ‘fly’ → ‘fly together’ (can also be used with nouns)	<i>mala-</i>

TABLE 15: RITHARNGU VERBAL DERIVATION MARKERS

(iii) 4 suffixes which are not interrelated with other copied morphemes

*-ka?* ‘kin-term dyadic dual’ (Heath 1980b:25-26)

*-?may?* ‘negative’ suffixed to verbs or other constituents (Heath 1980b:101)

*-buki?* postposition ‘only’ (rarely used) (Heath 1980b:93)

*-?wañji?* ‘semblative case’ (Heath 1980b:42)

#### 5.5. Summary

Warndarang: out of 5, 2 + 3 interrelated among each other: well accounted for by MSIC

Ngandi: out of 8, 6 (2 + 2 + 2) are paradigmatically interrelated, 2 are unrelated: MSIC accounts for some of the data

Ritharngu: out of 8, 4 (2+2) are paradigmatically interrelated, 4 are unrelated: MSIC accounts for some of the data

## **6. Conclusions and outlook**

The morphosyntactic-subsystem-integrity constraint (MSIC) predicts that sets of borrowed morphemes tend to be interrelated.

The MSIC accounts for some data that is left unaccounted for by predictions about copiability that are based on universally-defined morpheme types.

The MSIC does not contradict but complements these constraints.

Testing of predictive power of the MSIC with other cases of massive morphological borrowing is in progress (see Pakendorf 2009; and her presentation at this workshop for an interesting case)

The MSIC is motivated by the avoidance - or “inconvenience” (Matras 2009:216) - to restructure tightly integrated morphosyntactic subsystems, such as morphological paradigms, even in situations of extreme pressure by minimizing such restructuring to as few subsystems as possible, i.e. by the same principle that predicts overall rarity of morphological borrowing.

The MSIC applies to all systematically related elements, bound or free, e.g. pronominal paradigms, systems of adpositions, etc.

The MSIC may help to bridge the perceived gap between “normal” borrowing” and those mixed languages, in which the sets of etymologically distinct morphological material are divided along the lines of tightly integrated morphosyntactic subsystems, e.g. Copper Island Aleut (Golovko 1996; Thomason 1997) and Michif (Bakker 1997).

A working hypothesis for the reconstruction of undocumented proto languages based on the MSIC: A reconstructed scenario with interrelated borrowed grammatical morphemes is more likely than a reconstructed scenario with non-interrelated borrowed grammatical morphemes.

### **Abbreviations**

1 - first person; 2 - second person; 3 - third person; 3DIM - three-dimensional; CL - classifier; DL - dual; fem - feminine; INST - instrumental; IPFV - imperfective; PL - plural; RDPL - reduplication; RECP - reciprocal; RES - restrictive; SG, sg - singular; SUB - subordination; TAM - tense-aspect-mood; VBZ - verbalization

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## References

- Aikhenvald, Alexandra Y. 2001. Areal Diffusion, Genetic Inheritance, and Problems of Subgrouping: A North Arawak Case Study. *Areal Diffusion and Genetic Inheritance. Problems in Comparative Linguistics*, ed. by Alexandra Y. Aikhenvald and R. M. W. Dixon, 167-194. Oxford: Oxford University Press.
- Allin, Trevor R. 1976. *A Grammar of Resígaro*. Horseleys Green: Summer Institute of Linguistics.
- Bakker, Peter. 1997. *A Language of Our Own. The genesis of Michif, the mixed Cree-French language of the Canadian Métis*. Oxford: Oxford University Press.
- Echeverri, Juan A. 1997. The people of the center of the world. A study in culture, history and orality in the Colombian Amazon. New York: New School for Social Research, Faculty of Political and Social Science Ph.D. dissertation.
- Field, Fredric W. 2002. *Linguistic borrowing in bilingual contexts*. Amsterdam, Philadelphia: John Benjamins.
- Gardani, Francesco. 2008. *Borrowing of Inflectional Morphemes in Language Contact*. European University Studies, Series XXI Linguistics 320. Frankfurt/Main: Peter Lang.
- Golovko, Evgenij V. 1996. A case of nongenetic development in the Arctic area: The contribution of Aleut and Russian to the formation of Copper Island Aleut. *Language Contact in the Arctic. Northern Pidgins and Contact Languages*, ed. by Ernst H. Jahr and Ingrid Broch, 63-77. Berlin, New York: Mouton de Gruyter.
- Heath, Jeffrey. 1978a. *Linguistic Diffusion in Arnhem Land*. Canberra: Australian Institute of Aboriginal Studies.
- 1978b. *Ngandi grammar, texts, and dictionary*. Canberra: Australian Institute of Aboriginal Studies.
- 1980a. *Basic materials in Warndarang : grammar, texts and dictionary*. Pacific Linguistics : Series B, Monographs 72. Canberra: Australian Natl. Univ.
- 1980b. *Basic materials in Ritharngu : grammar, texts, and dictionary*. Pacific Linguistics : Series B, Monographs 59. Canberra: Dept. of Linguistics.
- Lipski, John M. 1992. New Thoughts on the Origins of Zamboangueno (Philippine Creole Spanish). *Language Sciences* 14.197-231.
- Matras, Yaron. 2009. *Language contact*. Cambridge: Cambridge University Press.
- Myers-Scotton, Carol. 2002. *Contact Linguistics. Bilingual Encounters and Grammatical Outcomes*. Oxford: Oxford University Press.
- Pakendorf, Brigitte. 2009. Intensive contact and the copying of paradigms. An Even dialect in contact with Sakha (Yakut). *Journal of Language Contact – VARIA* 2.85-110.
- Riego de Dios, Maria Isabelita O. 1989. A composite dictionary of Philippine Creole Spanish (PCS). *Studies in Philippine Linguistics* 7.1-210.
- Seifart, Frank. 2009. Resígaro documentation. *A multimedia documentation of the languages of the People of the Center. Online publication of transcribed and translated Bora, Ocaina, Nonuya, Resígaro, and Witoto audio and video recordings with linguistic and ethnographic annotations and descriptions*, ed. by Frank Seifart, Doris Fagua, Jürg Gasché, and Juan Alvaro Echeverri. Nijmegen: DOBES-MPI. [http://corpus1.mpi.nl/qfs1/media-archive/dobes\\_data/Center/Info/WelcomeToCenterPeople.html](http://corpus1.mpi.nl/qfs1/media-archive/dobes_data/Center/Info/WelcomeToCenterPeople.html).

- Seifart, Frank. 2010. The morphosyntactic-subsystem-integrity constraint in morphological borrowing: Evidence from Resígaro (Arawakan). Max Planck Institute for Evolutionary Anthropology, Leipzig. Manuscript.
- Steinkrüger, Patrick. 2003. Morphological processes of word formation in Chabacano (Philippine Spanish Creole). *Phonology and Morphology of Creole Languages*, ed. by Ingo Plag, 253-268. *Linguistische Arbeiten* 478. Tübingen: Niemeyer.
- Steinkrüger, Patrick O. 2009. Inflection in a Creole: A report on Chabacano (Philippine Spanish Creole). *On Inflection*, ed. by Patrick O. Steinkrüger and Manfred Krifka, 219-236. *Trends in Linguistics. Studies and Monographs* 184. Berlin, New York: Mouton de Gruyter.
- Steinkrüger, Patrick O., and Frank Seifart. 2009. Transfer of derivational morphology without borrowing of stems: Resígaro (Arawakan, Peru) and Chabacano (Creole, Philippines). Paper presented at Morphologies in Contact, University of Bremen, October 1-3, 2009.
- Thomason, Sarah G. 1997. Mednyj Aleut. *Contact Languages. A wider perspective*, ed. by Sarah G. Thomason, 449-468. Amsterdam, Philadelphia: John Benjamins.
- 2001. *Language contact. An introduction*. Washington, D.C.: Georgetown University Press.
- Thomason, Sarah G., and Terrence Kaufman. 1988. *Language Contact, Creolization, and Genetic Linguistics*. Berkeley, CA: University of California Press.
- Weinreich, Uriel. 1953. *Languages in Contact*. New York: Linguistic Circle of New York.
- Wilkins, David P. 1996. Morphology. *Contact Linguistics. An International Handbook of Contemporary Research*, ed. by Hans Goebel, Peter H. Nelde, Zdenek Starý, and Wolfgang Wölck, 1:109-117. Berlin, New York: Mouton de Gruyter.