The case for contact-induced grammatical restructuring in Quechuan

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1. Introduction

(1) Languages involved (cf. also Muysken 1980)
   a. Quechuan: Central (Q-I) and Peripheral (Q-II)
      > Peripheral (Q-II): Southern (IIc), Northern Peruvian (∼IIa), Northern (IIb)
      > Northern: Lamas, Cachapoyas, Ecuadorian
      > Ecuadorian: Imbabura, Chimborazo, Pastaza, Standard, …
   b. Barbacoan languages: Guambiano, … (Colombia); Awa Pit, Caranqui†, Tsafiki, … (Ecuador)
   c. Jivaroan languages: Aguaruna, Wambisa (Peru); Shuar, Shiwiar (=Achuar) (Ecuador)
   d. Spanish > American > Andean > Ecuadorian

(2) Musyken’s distinction (2009: 84)
   b. CREOLIZATION: Contact-induced change with substrate influence
   c. KOINEIZATION: Contact-induced change without substrate influence

(3) Muysken’s proposals
   a. “We are dealing with the gradual transformation of an expansion language, Incaic imperial Quechua, into a morphologically more simple variety as it spread northward into Ecuador” (Muysken 2009: 77).
   b. “The Barbacoan family, spoken in coastal southern Colombia and northern Ecuador, and the Jivaroan family, spoken in the Andean foothills of southern Ecuador and northern Peru, would be the most likely candidates [where we could identify a major dominant substrate language that may have influenced EQ]. A detailed comparison of the structural features of these languages and the specific traits of [EQ] still needs to be made” (Muysken 2009: 85).
   c. “Possible simplification of [EQ] morphology in the lowland varieties. Some Shuar and Barbacoan loans in flora/fauna. Possible influence in local [EQ] grammar features.” (as a result of “Quechua in contact with Shuar and Barbacoan”) (Muysken 2012: 239)
   d. “[The fact that radical restructuring in EQ led to the loss of morphology in specific grammatical contexts and regularization rather than a total loss] may be due to the agglutinative character of Quechua; in that case we would predict that in general agglutinative languages undergo different processes of restructuring than inflectional languages” (Muysken 2009: 97).

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1 See Muysken (2011) for interesting variation within EQ regarding attributive clause marking. Roughly, the -k vs. -shka opposition found in attributive verb forms is based on a subject vs. nonsubject distinction in the south (Salasaca and Arajuno, older) but a PST vs. PRES distinction in the north (Imbabura and Calderón, innovative), with a transition area in between (Salcedo and Tigua).
2. The morphology of EQ in areal and genealogical perspective

Selected morphological phenomena (cf. also Muysken 2009: 80)

<table>
<thead>
<tr>
<th>I. Person/number</th>
<th>EQ</th>
<th>Other Quechuan</th>
<th>Jivaroan</th>
<th>Barbacoan</th>
</tr>
</thead>
<tbody>
<tr>
<td>- verbal.1</td>
<td>no clusivity</td>
<td>clusivity</td>
<td>no clusivity</td>
<td>no clusivity</td>
</tr>
<tr>
<td>- verbal.2</td>
<td>no portmanteaus</td>
<td>some portmanteaus</td>
<td>no clusivity</td>
<td>no portmanteaus</td>
</tr>
<tr>
<td>- nominal</td>
<td>none (e/Pastaza)</td>
<td>suffixal PSR</td>
<td>suffixal PSR</td>
<td>none</td>
</tr>
</tbody>
</table>

| II. Voice | valency-neutral | valency-relevant | (valency-relevant) | (none) |
| - BEN applicative | loss of -pu | | | |

| III. Subordination | SR (no person) | SR (DS w/person) | SR (w/person) | SR (no person) |
| - Adverbial clauses | | NMLZ+ACC | | |
| - Purpose clauses | SR (w/person) | SR (w/person) | SR (no person) | SR (no person) |

| IV. TAME | dyn/direct | dur | mpass | Inch | (AP IPFV -(m)tu) |
| - PQ *-yku | (lost) | | | | |
| - PQ *-yka | (lost) | | | | |
| - PQ *-ku | dur | | | | |
| - PQ *-ri | refl | | | | |

I. Person/number

(4) Ancash Quechua present verb forms (Parker 1976: 105f)²

<table>
<thead>
<tr>
<th>P \ A</th>
<th>1SG</th>
<th>1PL.EXCL</th>
<th>2SG</th>
<th>2PL</th>
<th>3SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td></td>
<td></td>
<td>-ma-nki</td>
<td>-ya-ma-nki</td>
<td>-ma-n</td>
</tr>
<tr>
<td>1PL.EXCL</td>
<td></td>
<td></td>
<td>-ya-ma-nki</td>
<td>-ya-ma-nki</td>
<td></td>
</tr>
<tr>
<td>1PL.INCL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2SG</td>
<td>-q</td>
<td>-ya-q</td>
<td></td>
<td></td>
<td>-shu-nki</td>
</tr>
<tr>
<td>2PL</td>
<td>-ya-q</td>
<td>-ya-q</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>-:</td>
<td>-ya:-</td>
<td>-nki</td>
<td>-ya-nki</td>
<td>-n</td>
</tr>
</tbody>
</table>

| -ntsik INCL | |

(5) Ayacucho Quechua present verb forms (Soto Ruiz 1976: 93f)

<table>
<thead>
<tr>
<th>P \ A</th>
<th>1SG</th>
<th>1PL.EXCL</th>
<th>2SG</th>
<th>2PL</th>
<th>3SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td></td>
<td>-wa-nki</td>
<td>-wa-nki</td>
<td>-wa-nki-chik</td>
<td>-wa-n</td>
</tr>
<tr>
<td>1PL.EXCL</td>
<td></td>
<td>-wa-nki-ku</td>
<td>-wa-nki-ku-</td>
<td>-wa-nkuk</td>
<td>-wa-nkuk</td>
</tr>
<tr>
<td>1PL.INCL</td>
<td></td>
<td></td>
<td>-wa-nki-ku-</td>
<td>-wa-nki-ku-</td>
<td>-wa-nkuk</td>
</tr>
<tr>
<td>2SG</td>
<td>-yki</td>
<td>-yki-ku</td>
<td></td>
<td></td>
<td>-su-nki</td>
</tr>
<tr>
<td>2PL</td>
<td>-yki-ku</td>
<td></td>
<td></td>
<td></td>
<td>-su-nki-ku</td>
</tr>
<tr>
<td>S</td>
<td>-ni</td>
<td>-ni-ku</td>
<td>-nki</td>
<td>-nki-chik</td>
<td>-n</td>
</tr>
</tbody>
</table>

| -nchik INCL | |

² The plural suffix -ya becomes -yaa in open syllables.
(6) Imbabura EQ present verb forms (Cole 1982: 103-104, 159-160)

<table>
<thead>
<tr>
<th>P \ A</th>
<th>1SG</th>
<th>1PL</th>
<th>2SG</th>
<th>2PL</th>
<th>3(SG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td></td>
<td></td>
<td>(-wa)-ngui</td>
<td>(-wa)-ngui-chi</td>
<td>(-wa)-n</td>
</tr>
<tr>
<td>1PL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2SG</td>
<td>-ni</td>
<td>-n-chi</td>
<td>-ngui</td>
<td>-ngui-chi</td>
<td></td>
</tr>
<tr>
<td>2PL</td>
<td>-ni</td>
<td>-n-chi</td>
<td></td>
<td></td>
<td>-n</td>
</tr>
<tr>
<td>S</td>
<td>-ni</td>
<td>-n-chi</td>
<td>-ngui</td>
<td>-ngui-chi</td>
<td>-n</td>
</tr>
</tbody>
</table>

(7) Awa Pit argument marking: Assertor + GRs (Curnow 1997: 193f)

e.g. PST: -w ‘ASSERT.SBJ’ vs. -s ‘ASSERT.OBJ’ vs. -zi ‘NASSERT’

(8) Tsafiki argument marking: Assertor (Dickinson 2002; also Moore 1979, Turner 1992)

e.g. DECL -yo ‘ASSERT’ (vs. Ø), INTER -yu ‘ASSERT’ (vs. Ø), etc.

(9) Aguaruna SAP↔SAP verbal suffixes (Overall 2007: 317)

-hami ‘1SG→2SG’ vs. -himi ‘1PL→2SG’/2PL→1

(10) Shuar SAP↔SAP verbal suffixes (Gnerre 1999: 68f)

a. Tu-rám-tat-j-i.
   say-3→1PL/2-FUT-1PL-DECL
   ‘S/he will tell us.’

b. Su-kárta-r-me.
   give-2→1PL-PL-2
   ‘You (SG) give [things] to us.’

c. Tu-ru-t-yá.
   say-2/3→1SG-IMPER-2
   ‘Tell me!’

II. Benefactives

(11) Ancash Quechua (Parker 1976: 84, 119)

a. Wawqi-:-paq apa-pu-shaq.
   brother-1SG.PSR-for bring-BEN.QAPPL-1SG.FUT
   ‘I will carry (it) for my brother.’

   dance-NMLZ-2SG.PSR-for play-1SG.FUT
   ‘I will play for you (SG) to dance.’

c. Rura-pa-ma-rqa-n.
   make-BEN.QAPPL-1SG.OBJ-REC.PST-3SG
   ‘S/he made (it) for me.’

(12) Imbabura EQ (Cole 1982: 113, 185)

   house-ACC make-PST-1SG 1SG son-for
   ‘I made a house for my son.’

b. Miku-na-ta mun-a-pa-ngui=chu?
   eat-NMLZ-ACC want-HON-2=IRR
   ‘Do you (SG HON) want to eat?’
III.1 Adverbial clauses

(13) Ancash Quechua (Cole 1983: 2-3): Switch-reference (SS -r ~ -shpa vs. DS -pti{-PSR})

L.-ACC arrive-after-SS1 see-1SG.FUT friend-1SG.PSR-ACC
‘After arriving in Lima, I will see my friend.’

b.  Chakra-chaw urya-shpa, pallamu-rqu-u wayta-kuna-ta.
field-LOC work-SS2 pick-REC.PST-1SG flower-PL-ACC
‘While I worked in the field, I picked flowers.’

c.  Chakra-chaw urya-pti-y, Maria pallamu-rqu-n wayta-kuna-ta.
field-LOC work-DS-1SG.PSR M. pick-REC.PST-3SG flower-PL-ACC
‘While I worked in the field, Maria picked flowers.’

(14) Ayacucho Quechua (Hartmann 1994): Switch-reference (SS -stin ~ -spa vs. DS -pti{-PSR})

a.  Tuma-stin puriku-chka-nki.
drink-SS.SIM walk.around-DUR-2SG
‘You (SG) are walking around drinking.’

b.  Miku-spa(-n) lluqsi-rqa.
eat-SS.SEQ-3.PSR leave-PST
‘Having eaten, s/he left.’

c.  Ñuqa ni-pti-y=mi ri-rqa.
1SG say-DS-1SG.PSR=EVID go-PST
‘S/he went because I said it.’

(15) Imbabura EQ (Cole 1983: 5): SR

O.-ALL arrive-SS 1SG mother-ACC see-PST-1SG
‘When I arrived in Otavalo, I saw my mother.’

J. O.-ALL arrive-DS 3SG-GEN house-ALL go-PST-1SG
‘When Jose arrived in Otavalo, I went to his house.’

III.2 Purpose and desiderative clauses

(16) Ancash Quechua (Cole 1983: 3-4): Nominalized form [-na ‘NMLZ’ + {PSR} + -paq ‘for’]

H.-ACC come-REC.PST-1SG mother-1SG.PSR-ACC see-NMLZ-1SG.PSR-for
‘I came to Huaraz to see my mother.’

b.  Fuan-ta Huaraz-ta kacha-rqu-u mamaa-nin-ta rikaa-na-n-paq.
J.-ACC H.-ACC send-REC.PST-1SG mother-3SG.PSR-ACC see-NMLZ-3SG.PSR-for
‘I sent Juan to Huaraz to see his mother.’

(17) Ayacucho Quechua (Soto Ruiz 1976: 156): idem

a.  Tarpuku-na-nku-paq=ña=m allichaku-chka-nku.
sow-NMLZ-3PL.PSR-for=already=EVID get.ready-DUR-3PL
‘They are already getting ready to sow.’

cook-NMLZ-3PL.PSR-for=EVID food-PL-ACC bring-DUR-1SG
‘I am bringing food for them to cook.’

3 Simple reflex of PQ *-špa (Cerrón Palomino 1987: 196).
4 Either from PQ *-pti or innovative from *-q-pi (-AGT-LOC) (Cerrón Palomino 1987: 195).
Imbabura EQ (Cole 1983: 6-7): SR

a. Utavalu-man shamu-rka-ni ñuka mama-ta visita-ngapaj.⁵
   O.-ALL come-PST-1SG 1SG mother-ACC visit-SS
   ‘I came to Otavalo to see my mother.’

   J.-ACC O.-ALL send-PST-1SG 3SG-GEN mother-ACC visit-DS
   ‘I sent Jose to Otavalo to see his mother.’


Ayacucho Quechua

a. Piñaku-pit-ki=m mana yayku-mu-y-ta muna-n=chu.
   get.angry-DS-2SG.PSR=EVID NEG enter-DIRCT-INF-ACC want-3SG=IRR
   ‘S/he doesn’t want to get in because you (SG) get angry.’

Imbabura EQ

b. Ñuka muna-ni miku-ngapaj.
   1SG want-1SG eat-SS
   ‘I want to eat.’

c. Ñuka muna-ni kan miku-chun.
   1SG want-1SG 2SG eat-DS
   ‘I want you (SG) to eat.’

   c. Ayacucho Quechua -chun (Hartmann 1994: 48)
   Hawai-pi ka-chun chay allqo!
   outside-LOC be-3SG.IMPER that dog
   ‘Let the dog be outside!’
   d. ‘want’ + V-{SR} is an EQ innovation (Bruil 2008: 122)

(21) a. Hypothesis: loss of argument marking in subordination from Barbacoan (Bruil 2008: 123f)
   c. Hypothesis: extension to ‘want’-constructions from Spanish (Bruil 2008: 126)

(22) Awa Pit purpose clauses (Curnow 1997: 268-269)

   C. corn mill-SER drop-NASSERT chicken DIM give-INF
   ‘Carmen ground corn to give to the baby chickens.’

b. Na=na si pyan-ni-ma-ti-mtu-s, Carmen ayna-t kwa-npa.
   1SG=TOP firewood chop-ASP-ASP-ASP-ASP-ASSERT C. cook-SER eat-DS
   ‘I’m going to chop firewood so that Carmen can cook and eat.’

(23) Tsafiki purpose clauses (Moore 1979: 48)

a. Fi-chun ka-yo-e.
   eat-SS take-ASSERT-DECL
   ‘I bought (lit. took) (it) to eat (it).’

b. Sona mera-sa ta-yo-e.
   woman hear-DS have-ASSERT-DECL
   ‘I have (it) so that my wife can hear (it).’

⁵ Similar forms in other EQ varieties (Orr’s 1978 “ecuatoriano de la selva” as opposed to “ecuatoriano de la sierra” like Imbabura EQ): -ngawa in Pastaza, -ngaj in Tena, -ngapa in Napo (Cerrón-Palomino 1987: 240).
(24) Aguaraná purpose clauses (Overall 2007: 504)

\[
\text{Hiina-aha-maia-hi-1 ii-na batsama-taĩ-ka mini-ika-ku.}
\]

exit.PFV-INTM.PST-1PL-DECL 1PL-ACC live-1PL/3-FOC arrive-IPFV.PL-SS.1PL

‘We set off to go back to our homes.’

(25) Shuar adverbial clauses (Gnerre 1999: 74,76)

a. \text{Wi chichá-ku-n paánta-n chichá-ja-i.}

1SG speak-SS-1SG clear-OBJ speak-1SG-DECL

‘When I speak, I do so (lit. speak) clearly.’

b. \text{Chichá-i nin-kia tå-y-i.}

speak-DS.1SG/3 3-TOP arrive-3-DECL

‘While I / s/he was speaking, s/he arrived.’

3. Conclusions

Timing of selected changes in EQ (from Muysken 2009: 98)

<table>
<thead>
<tr>
<th>All known sources</th>
<th>Ca. 1700</th>
<th>Ca. 1900</th>
<th>Ongoing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of clusivity</td>
<td>loss of -pu ‘BEN’</td>
<td>loss of -yki ‘1→2’</td>
<td>loss of -wa ‘1.OBJ’</td>
</tr>
<tr>
<td>Loss of NMLZ-{PERS}</td>
<td>loss of PSR suffixes</td>
<td>-ku &gt; -ri ‘REFL’</td>
<td></td>
</tr>
<tr>
<td>Loss of -sun-ki ‘3→2SG’</td>
<td>V-Ku &gt; V-Kuna in PL</td>
<td>-yki &gt; -ku ‘DUR’</td>
<td></td>
</tr>
<tr>
<td>V-Ku &gt; V-Kuna in PL</td>
<td>V-Ku &gt; V-Kuna in PL</td>
<td>-pa ‘BEN’</td>
<td></td>
</tr>
</tbody>
</table>

(26) Muysken’s final comment (2009: 98)

“The earliest changes […] may possibly be viewed as cases of morphological simplification independent of individual substrates, while later changes, such as the shift in meaning of the verbal suffixes -ku- and -ri-, must have a different explanation, and could be due to substratal influence. This would suggest a gradual restructuring towards the possible substrate languages (which have now disappeared). Nonetheless, at least some of the morphological simplification must have been gradual in nature as well.”

Selected morphological phenomena in EQ

<table>
<thead>
<tr>
<th></th>
<th>EQ</th>
<th>Possible substrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Person/number</td>
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</tr>
<tr>
<td>- verbal.1</td>
<td>no clusivity</td>
<td>Barbacoan, Jivaroan</td>
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<tr>
<td>- verbal.2</td>
<td>no portmanteaus</td>
<td>Barbacoan</td>
</tr>
<tr>
<td>- nominal</td>
<td>none (e/Pastaza)</td>
<td>Barbacoan (+Jivaroan)</td>
</tr>
<tr>
<td>II. Voice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- BEN applicative</td>
<td>valency-neutral</td>
<td>(Barbacoan)</td>
</tr>
<tr>
<td>- loss of -pu</td>
<td></td>
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<tr>
<td>III. Subordination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Adverbial clauses</td>
<td>SR (no person)</td>
<td>Barbacoan</td>
</tr>
<tr>
<td>- Purpose clauses</td>
<td>SR (no person)</td>
<td>Barbacoan</td>
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<tr>
<td>IV. TAME</td>
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</tr>
<tr>
<td>- PQ *-yku</td>
<td>(lost)</td>
<td>*!</td>
</tr>
<tr>
<td>- PQ *-yka</td>
<td>(lost)</td>
<td>*!</td>
</tr>
<tr>
<td>- PQ *-ku</td>
<td>DUR</td>
<td>*!</td>
</tr>
<tr>
<td>- PQ *-ri</td>
<td>REFL</td>
<td>*!</td>
</tr>
</tbody>
</table>
(27) Somewhat open questions

a. “Can we identify a single major dominant substrate language that may have influenced EQ?” (Muysken 2009: 85)
   ➢ Based on the present-day descriptions, Barbacoan, rather than Jivaroan—with emphasis on may. The “new” SR morphology in EQ seems to be the best evidence.

b. “What features can be readily explained through autonomous simplification processes and what features would require a different, possibly substratist, explanation?” (ibid.)
   ➢ Why is the earlier loss of morphology autonomous, rather than the later loss?
   ➢ Why is the shift of some TAME markers rather contact-induced? There does not seem to be a direct motivating/driving force in either Barbacoan or Jivaroan, let alone in Spanish.

c. Morphological change is reasonably documented in Germanic, Romance, Celtic, Slavic, and Indo-Aryan.
   ➢ But radical restructuring does not necessarily lead to total loss of morphology.

d. Are there parallels from Turkic, Tungusic, Eskaleut, Uralic, Bantu, and Dravidian that support Muysken’s proposal regarding the resistance of agglutination to total morphology loss?

Abbreviations
A agentive argument of bivalent predicates, ACC accusative, AGT agentive, ALL allative, AP Awa Pit, ASP aspect(ual), ASSERT assertor, BEN benefactive, DECL declarative, DIM diminutive, DIR direct, DIRCT directional, DS different subject, DUR durative, DYN dynamic, EQ Ecuadorian Quechua, EVID evidential, EXCL exclusive, FOC focus, FUT future, GEN genitive, GRs grammatical relations, HON honorific, IMPER imperative, INCH inchoative, INCL inclusive, INF infinitive, INTER interrogative, INTM intermediate, INV inverse, IPFV imperfective, IRR irrealis, LOC locative, MPASS mediopassive, NASSERT non-assertor, NEG negative, NMLZ nominalization, OBJ object(ive), P patientive argument of bivalent predicates, PERS person, PFV perfective, PL plural, PQ Proto-Quechua, PSR possessor, PST past, QAPPL quasi-applicative, REC recent, REFL reflexive, S single argument of monovalent predicates, SAP speech act participant, SBJ subject, SEQ sequential, SER serial, SG singular, SIM simultaneous, SR switch-reference, SS same subject, TAME tense-aspect-modality-evidentiality, TOP topic

\( x \rightarrow y \) ‘\( x \) acting on \( y \)’
References


Moore, Bruce (1979) *Méthodo para aprender el idioma colorado. Gramática pedagógica, tomo 1, lecciones 1-6*. Quito: Instituto Lingüístico de Verano.


