

# The phonology of contact

Dissertation prospectus defence

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(1)	Typological gaps in vowel processes	L1 transmission	Creolization	Other contact
A. Loss of front rounded vowels	Unrounding • $y > i$		✓	✓
	Backing • $y > u$			✓
B. Stress-sensitive harmony	Strong-to-weak • $bóki > bóke$	✓	✓	
	Weak-to-strong • $bóki > búki$	✓		
C. Word-final repairs	Paragoge • $tæg > tægə$	rare	✓	✓
	Others • $tæg > tæk$	✓	✓	✓

## (2) Typologies and OT (Gordon 2007)

- Pathological gaps (i.e. wrong constraints)? — No  
A. \*RoFro (Kaun 2004)    B. LICENSE (Walker 2005)    C. NOCODA (Prince & Smolensky 1993/2004)
- Accidental gaps? — No
  - Small sample for creolization (case studies A, B) but large sample for L1 transmission (case study C)
- Diachronic biases — Plausible
  - Coda devoicing (Steriade 2001), NÇ sequences (Myers 2002)

## (3) My proposal

- Different circumstances → Different diachronic biases → Different typologies
  - Language contact is different because of L1 influence
  - Creolization is different because of group learning situation over extended time
- Different types of transmission → Different phonetic effects → Typological asymmetries
  - L1 transmission vs. creolization vs. other contact

## (4) Contribution to language contact studies

- Similarities between L1 transmission and SLA (Eckman 2004), SLA and creolization (Plag 2009)
- Differences: creoles said to be simpler (McWhorter 2001), but not so in phonology (Klein 2011)
- This dissertation demonstrates clear differences between these transmission types.

## A. Loss of front rounded vowels: Creolization vs. other contact

(5) Loss of front rounded vowels	Creolization	Other contact
<b>Unrounding</b> • $y > i$	(6)	(7a)
<b>Backing</b> • $y > u$		(7b)

### (6) Creolization: Unrounding /y/ > /i/ across the French creoles (Russell Webb 2008)

- French *mur* [myʁ] > Haitian [mi] 'wall'      ▸ French *juge* [ʒyʒ] > Mauritian [ziz]

### (7) a. Other contact: Unrounding /y/ > /i/ is common

- Br. Portuguese: French perception (Rochet 1995)    ▸ Indonesian: Dutch loans (Sneddon 2003: 164)
- Taiwanese: nativised Mandarin (Kubler 1981)      ▸ Serbian: L2 German (Jelena Krivokapić, p.c.)

### b. Other contact: Backing /y/ > /u/ is less common

- AmEng: French SLA (Flege & Hillenbrand 1984). AmEng [ʊ] advanced (Labov *et al.* 2006: 152ff).
  - Japanese: French loanwords (Dohlus 2005). Japanese [u] labialised, not rounded (Akamatsu 1997).
- ⇒ Backing occurs only when influenced by L1 with phonetically fronted or less rounded /u/.

### (8) a. Different outcomes: Due to different input in creoles vs. other contact? — No

- No unusual features reported for /y/ in 17<sup>th</sup> century French dialects (Ayres-Bennett 1990)
  - Lack of orthographic input does not change American English speakers' perception (Rochet 1995)
- ⇒ Creole exceptionalism cannot be explained by different input

### b. Different outcomes: Due to different L1s? — Not the whole story

- Perception of front rounded vowels is influenced by L1 (Rochet 1995).
- Similar L1 influence in francophone Africa, but different from creoles: /y/ > /i/, /u/
  - Asante Twi, Ghana (Haggis 1975: 65)    ▸ Ewe, South Togo (Lafage 1985: 165)
  - Bassa, coastal Cameroon (Wamba & Noumssi 2004: 46)

⇒ L1 influence cannot be wholly responsible for the split between creoles and other contact.

### (9) What do we know about creolization and SLA that's relevant?

#### a. Creolization: Two stages (Chaudenson 2001: 95ff)

- *Homestead stage*: Fewer slaves, more social interaction ⇒ Access to native-speaker French
- *Plantation stage*: Adult males, short life expectancy ⇒ Target shift: L2 French of previous arrivals

#### b. SLA: Early but reduced acquisition of unfamiliar contrasts

- Contrasts acquired early, e.g. *beat/bead* (one year in America: Flege 1980; Flege 1993; Flege *et al.* 2003)
- Contrasts reduced even by experienced learners: attracted to L1 category (Flege & Hillenbrand 1984)

### (10) Proposal: SLA of /y/ in creolization

#### a. /y/ is acoustically intermediate between /i/ and /u/, hence it can be attracted by both (Bunta 2005)

- */i/-like*: [y] with reduced lip rounding.      • */u/-like*: [ʊ]. Continuum attested in the *francophonie*.

#### b. Group norming favours one winner, the /i/-like pronunciation because

- Early acquisition of unfamiliar L2 contrasts in immersion (9b), possible in the homestead stage (9a).
- /u/-like pronunciations are only favoured when L1 has non-canonical /u/ (7b)

#### c. Lip rounding would be gradually lost due to reduced acquisition of L2 contrasts (9b)

- Plantation stage: successive adult SLA targeting the non-native speech of earlier arrivals (9a)

⇒ Typological gap due to perception and production effects associated with group SLA of creolization.

## B. Stress-sensitive harmony: Creolization vs. L1 transmission

(11) Harmony	Creolization	L1 transmission
Strong-to-weak • bóki > bóke	(12)	(13a)
Weak-to-strong • bóki > búki		(13b)

### (12) Creolization: Strong-to-weak (sporadic) harmony (Holm 1988: 125)

- a. French *grosséur* > Haitian [gwɔsɛ́] ‘size’ (expected gwɔsɛ́)
- b. Spanish *respónde* > Papiamentu [rɔspónde] ‘answer’

### (13) a. L1 transmission: Strong-to-weak harmony in Pasiego Montañas Spanish (Majors 1998: 1)

- Strong-to-weak harmony: Stressed triggers, unstressed targets
- i. *beb-eré* ‘I will drink’                      ii. *bib-iría* ‘I would drink’

### b. L1 transmission: Weak-to-strong harmony in Grado Italian (Walker 2005: ex. 2e)

- Unstressed triggers, stressed targets: Weak-to-strong harmony
- i. *prefónn-a* ‘profound (f. sg.)’      ii. *prefún-n-u* ‘profound (m. sg.)’

### (14) a. Weak-to-strong harmony: Articulatory naturalness? — No

- Strong-to-weak coarticulation (English, Japanese: Magen 1984; English: Majors 1998; Cho 2004)
- Anticipatory coarticulation (Catalan: Recasens 1984; French: Fagyal et al 2002; Nguyen & Fagyal 2008)
- ⇒ Weak-to-strong harmony is *not* articulatorily natural.

### b. Weak-to-strong harmony: Perceptual enhancement (Walker 2005)? — No

- Cue enhancement is a zero-sum game. Why enhance trigger cues at the cost of target cues?
- Other listener-oriented effects are attested in production (Yao 2010); this one isn’t.

### c. Weak-to-strong harmony: Morphological contrast (Lloret 2007)? — No

- Skipping intervening syllables in Lena Spanish (Hualde 1998: 104)
- i. *kándan-os* ‘dry branches’      ii. *kéndan-u* ‘dry branch’
- ⇒ Weak-to-strong harmony does *not* maximise morphological contrast.

### (15) a. Articulatory unnaturalness in Finnish palatal harmony (Ohala 1994)

- i. *Back* /a o u/ [pouta] ‘fine weather’      [pouta-lla] ‘in good weather’
  - ii. *Front* /æ ø y/ [pøytæ] ‘table’              [pøytæ-llæ] ‘on the table’
  - iii. *Neutral* /i e/ [men-ø] ‘going’              [men-køøn] ‘let him go’
- ⇒ The most ‘acoustically palatal’ vowels are the ones that *don’t* trigger palatal harmony.

### b. Differential compensation: Compensate more when you expect more coarticulation

- Compensate for expected effect (strong-to-weak), undercompensate for less expected (weak-to-strong)
- ⇒ Neutral /i e/ in palatal harmony, weak-to-strong harmony
- Undercompensate across the board (note: strong-to-weak coarticulation is greater)
- ⇒ Strong-to-weak harmony

### (16) Proposal: L2 learners are too inexperienced to carry out differential compensation

- L1 listeners are able to undercompensate for weak triggers
- L2 listeners tend to undercompensate across the board (cf. Levy & Strange 2008: 151)

## C. Paragoge: Contact vs. L1 transmission

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(17) Word-final repairs	Contact	L1 transmission
Paragoge • tæg > tægə	(18)	rare
Others • tæg > tæk	✓	✓

(18) **Contact: Paragoge (Holm 1988; Tsuchida 1995; Tarone 1980)**

- a. *Creoles* • English *laugh* > Saramaccan *láfu*
- b. *SLA* • English *blanket* > L1 Cantonese [blæŋkətə̃]
- c. *Loanwords* • English *fizz* > Japanese [fizɯ]

(19) **Previous proposals on lack of paragoge in L1 transmission — Problematic**

- Unattested repairs are harmonically bounded (laryngeal underspecification: Lombardi 1995/2001)
- Unattested repairs are those which cannot result from misperception (p-map: Steriade 2001)

(20) a. **Paragoge is possible in contact: Perception of release bursts as full vowels**

- L1 phonotactics may favour perception of release bursts as full vowels (Boersma & Silke 2009)
- L2 paragogic vowels are frequently marked short and voiceless, e.g. [blæŋkətə̃] (Tarone 1980)

b. **Paragoge is favoured in contact: Adults self-monitor more effectively (Jaeger 2005: 82)**

- Adults self-monitor more effectively than children; may militate against deletion in adult SLA
- Rates of L2 paragoge increase in more formal speech tasks (Eckman 2004: 539)

c. **Paragoge is disfavoured in L1 transmission: Child articulatory constraints**

- Children may have greater difficulty articulating onsets faithfully than codas (McAllister 2009)
- Paragoge would not be an articulatory improvement since it introduces more onsets

## Conclusion

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(21) **Summary**

- Different types of transmission → Different phonetic effects → Typological asymmetries
- Synchronic systems constrained by diachronic biases as well as UG (Steriade 2001; Blevins 2004)

(22) **Implications**

- A new way of using language contact data to test general theories of typology
- Diachronic biases must be a consideration when matching theory to data

(23) **Schedule**

	Date	Task
<i>Completed</i>	Spring 2010	Unrounding (case study) term paper
	Fall 2010	Harmony (case study) term paper
	Spring 2011	Unrounding presentation at SPCL (Pittsburgh, 8 Jan) Epenthesis (case study) detailed prospectus (27 Feb) Prospectus (25 April)

	Date	Task
To do	Summer 2011	Unrounding chapter Harmony presentation at SPCL (Accra, 2 Aug)
	Fall 2011	Harmony chapter Literature review detailed outline Confirm external readers
	Spring 2012	Epenthesis chapter draft Literature review draft
	Fall 2012	Finalise epenthesis chapter Finalise literature review
	Spring 2013	Submit dissertation

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