

# Chain Shift in Vietnamese

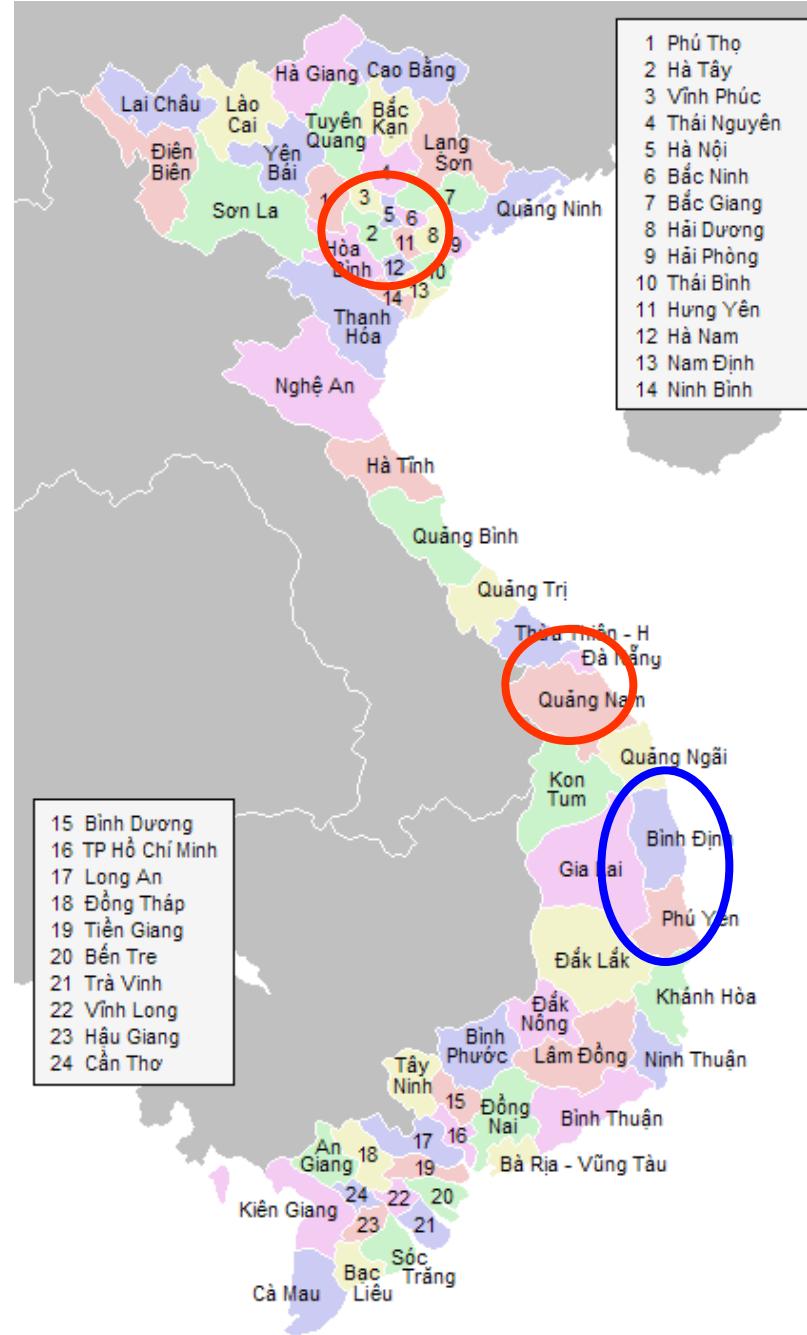
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SEALS XXIII, 2013

- Comparison of two Vietnamese speech communities, Hà Nội (northern dialects) and Quảng Nam province: the ‘vowel shifts’ in closed syllables.

# Where is Quảng nam?



- Peculiar features in the rhyme that are maintained by members of the QN community. How different from northern dialects?
- Characteristics of the vowel shift.  
Why only in (C)VC the vowel changes in quality? Are these changes context-sensitive or random?
- Are there any internal factors that affect the ‘changes’?

# Champa Kingdom 192-1832

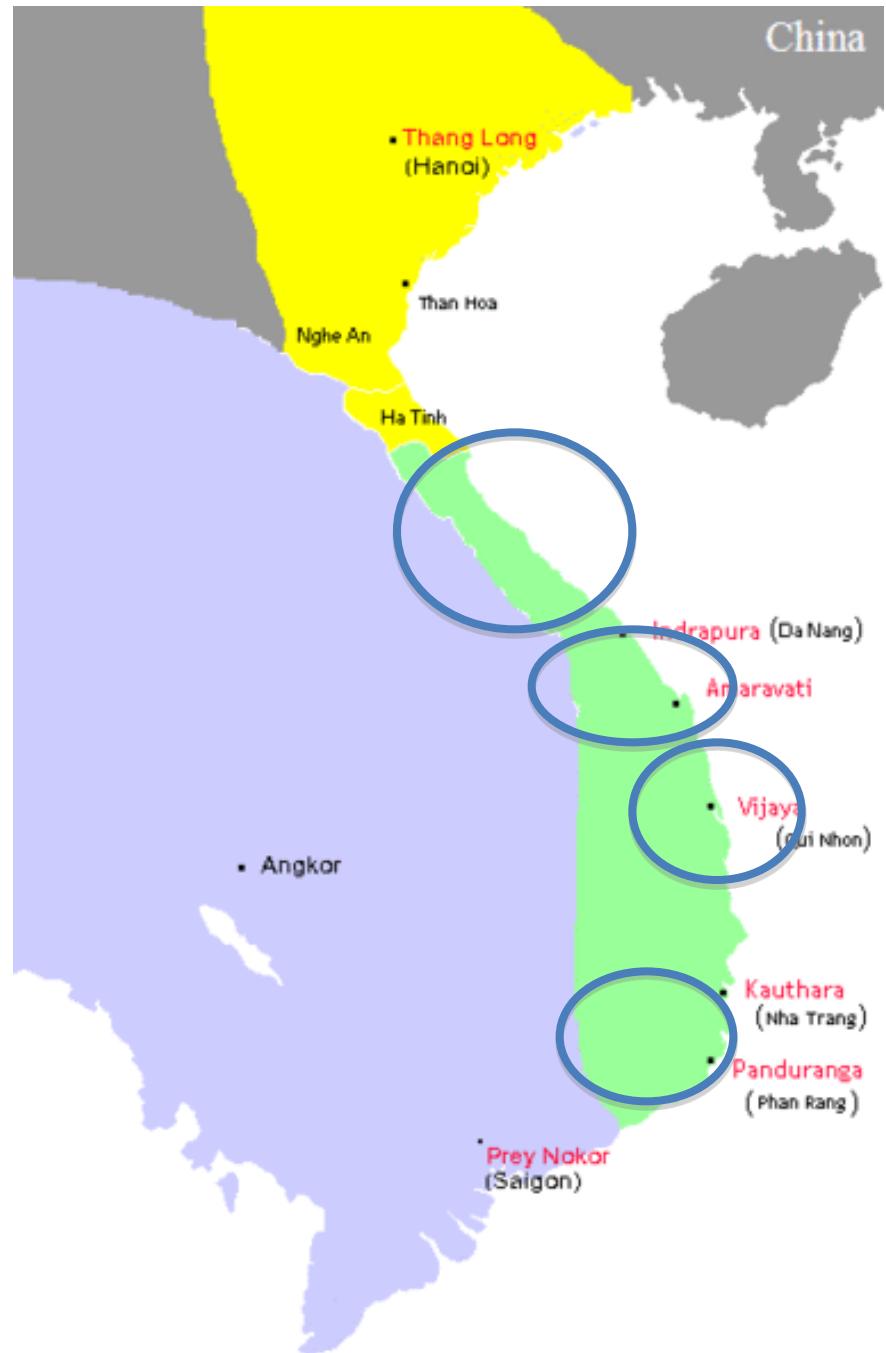
-1306 King *Jaya Sinhavarman III* offered Vietnam two northern provinces (roughly corresponded to Quảng Bình, Quảng Trị, Thừa Thiên), as a gift to marry Princess Huyền Trân.

-1402 lost Indrapura (Quảng Nam and Quảng Ngãi).

-1446 lost Vijaya (Qui Nhơn)

-1697 lost Panduranga (Phan Rang).

-1832 the remaining Cham territories were annexed to Vietnam.



# Cham ruins in Mỹ Sơn, Quảng Nam (Its peak the 7<sup>th</sup> century)



# Nhận tower, Tuy Hòa, Phú Yên (south central VN)

-Cham:

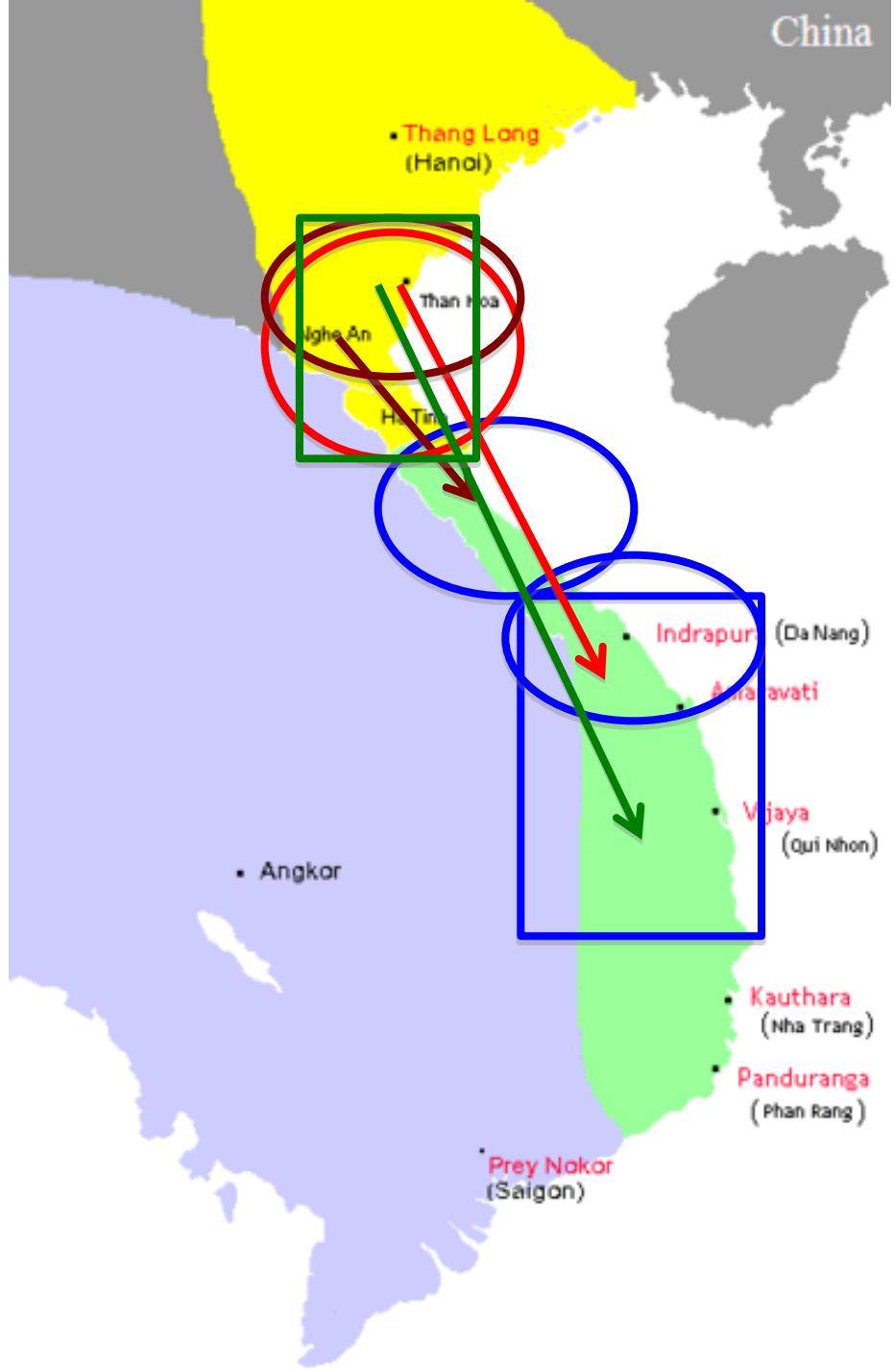
Malayo-Polynesian  
language in the  
Austronesian family.

- About 162,000 Cham  
people living in  
Vietnam (2009  
census).



# Southward expansion-migration

- 1306 Vietnam took over Thuận Hoá, sending people from Thanh Hoá and Nghệ An there to live.
- 1402 took Quảng Nam and Quảng Ngãi: 1<sup>st</sup> big wave of immigrants from Thanh Hoá, Nghệ An, Hà Tĩnh.
- 1545 expanded to Tuy Hoà: 2<sup>nd</sup> big wave of immigrants from Ninh Bình, Thanh-Nghệ-Tĩnh.

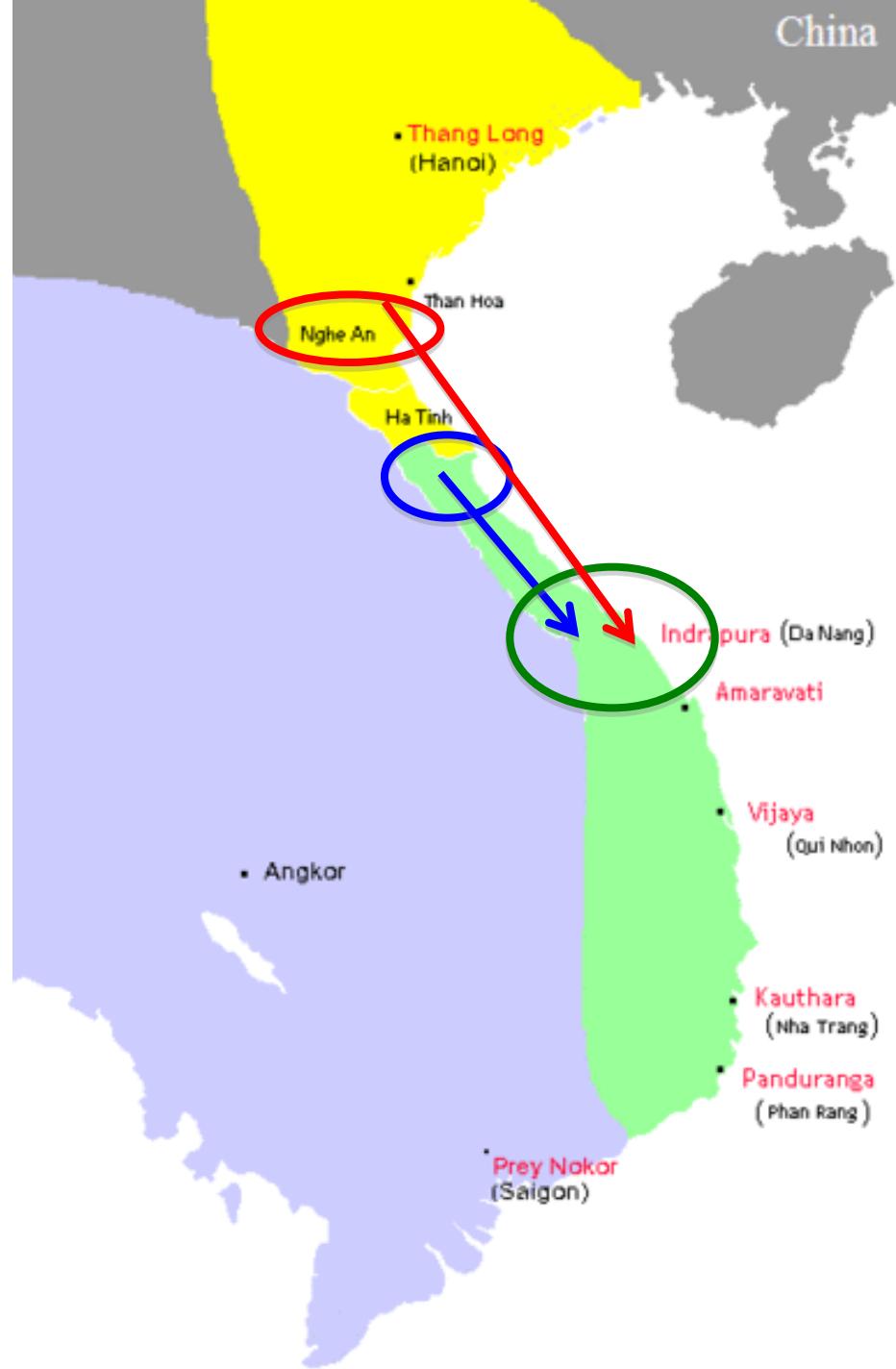


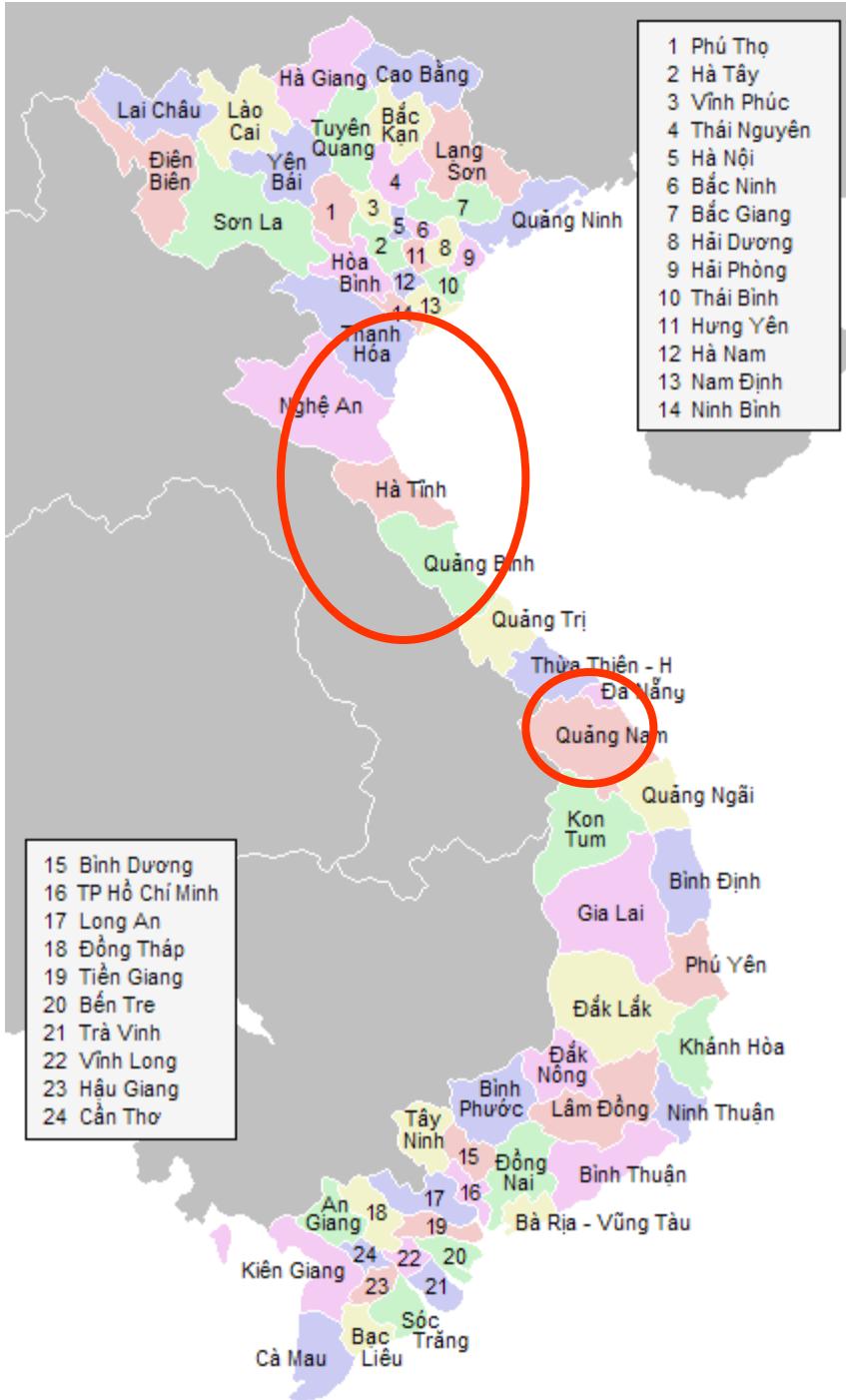
# Forced mass migration to Quảng Nam

-1648: Nguyễn Lord captured 30,000 Quảng Bình soldiers and sent to Quảng Nam.

-1657: Nguyễn Lord brought to **Quảng Nam** people from 7 districts in Nghệ An.

(Nguyễn 2007)





# Locations of field work



# Vowel shifts in Quang Nam dialect

1. Vowels (rhyme) have shifted only in closed syllables.
2. The shifts are often context-sensitive.
3. Evidence from other dialects shows that not only in Quảng Nam, but also in certain Southern dialects, glides are the most vulnerable segment in the coda, especially when they follow /a/, which seems to be the least stable vowel.

# Vowel chart in the Hanoi dialect

	Front	Central	Back
High	i iə	ɨ ɨə	u uə
H. mid	e	ɤ: ɤ	ɔ
L. mid	ɛ: ɛ		ɔ
Low		a: a	

# Quảng Nam vowels

i: ɪ	i i	ɨ: ɨ	ɨ ɨ	u: ʊ	u u
e		ɤ		o	
ɛ: ɛ				ɔ	
		a: a	a a		a

# Quảng Nam vowels in open syllables

- Except for /a/, the vowels are similar to those in northern dialects although slightly diphthongized.

	HN	QN
<i>li</i> ‘glass’	/li/	[li]
<i>khé</i> ‘star fruit’	/xe/	[xe]
<i>xe</i> ‘vehicle’	/sɛ/	[sɛ]
<i>tù</i> ‘prison’	/tu/	[tu]
<i>to</i> ‘big’	/tɔ/	[tɔ]
<i>sư</i> ‘monk’	/sɨ/	[sɨ]
<i>tơ</i> ‘silk’	/tɤ/	[tɤ]

# The ‘peculiar a’ in CV and CVC

	Hanoi	QN
• <i>cá</i> ‘fish’	/ka/	[k <sup>a</sup> ] (QS)
• <i>Tạ</i> ‘100 kg’	/ta/	[t <sup>a</sup> ] (HV)
• <i>La</i> ‘to yell’	/la/	[l <sup>a</sup> ] (HV)
• <i>Cà</i> ‘eggplant’	/ka/	[k <sup>a</sup> ] (QS)
• <i>Lan</i> ‘orchid’	/la:n/	[l <sup>a</sup> n] (QS)
• ( <i>cây</i> ) <i>đàn</i> ‘guitar’	/da:n/	[d <sup>a</sup> n] (QS)
• <i>Tang</i> ‘funeral’	/ta:n/	[t <sup>a</sup> n] (QS)

# Quảng Nam rhyme: (C)VC/ (C)VG

## HÀNỘI

## QUẢNG NAM

1/ a:m, a:n, a:ŋ

am, aŋ

- *Làm* /la:m/ [lam] ‘to do’
- *Bạn* /ba:n/ [baŋ] ‘friend’

2/ a:w

o

- *táo* /ta:w/ [to] ‘apple’
- *(ngôi) sao* /sa:w/ [so] ‘star’
- *đào* [da:w/ [do] ‘cherry flower’

3/ a:j

iə

- *cải* /ka:j/ [kɪə] ‘veggies’
- *Hai* /ha:j/ [hɪə] ‘two’
- *Bài* /ba:j/ [bɪə] ‘card’

## HÀNỘI

### 4/ aj, aw

- *Bảy /baj/*
- *Chày /caj/*
- *Sáu /saw/*
- *Cau /kaw/*

### 5/ am

- *bắp /bap/*
- *(nước) mắm [mam/*

### 6/ an, aŋ

- *mắt /mat/*
- *trắng /can/*
- *rắn /ran/*

## QUẢNG NAM

a: drop final glides

[ba:] ‘seven’

[ca:] ‘motar’

[sa:] ‘six’

[ka:] ‘areca nut’

a:m lengthen, labial final only

[ba:p] ‘corn’

[ma:m] ‘fish sauce’

ɛ:ŋ fronted, labial deletion

[mɛ:k] ‘eye’

[tɛ:ŋ] ‘white’

[rɛ:ŋ] ‘snake’

### 7/ ɤm, ɤŋ

- *ấm /?ɤm/*
- *nhẫn /nɤŋ/*

am, aŋ > lowering

[?am] ‘warm’

[nan] ‘ring’

## HÀNỘI

## QUẢNG NAM

8/ ɣj, ɣw

a:j, a:w

- (đèn) cầy /kɣj/
- trâu /cɣw/

[ka:j] ‘candle’

[ta:w] ‘water buffalo’

9/ ɔŋm, ɔkp

a:ŋ a:k

- (tổ) ong [?ɔŋm]
- tóc [tɔkp]

[?a:ŋ] ‘bee (nest)’

[ta:k] ‘hair’

10/ ɔm

om

- gom /ɣɔm/
- (phòng) họp /hɔp/

[ɣom] ‘to collect’

[hop] ‘meeting (room)’

11/ ɔj

uə

- còi /kɔj/
- voi /vɔj/

[kuə] ‘to watch’

[vuə] ‘elephant’

## HÀNỘI

12/ **oŋm, okp,**

- *Không* [xoŋm]
- *mốc* [mokp]

## QUẢNG NAM

**ɔŋm, ɔkp,**

- [xɔŋm] ‘no’
- [mɔkp] ‘mildew’

13/ **iň**

- *lính* [liň]

**iň** (look only at vowel)

- [lĩn] ‘soldier’

14/ **um**

- *túm* /tu:m/

**ĩm**

- [tĩn] ‘to catch’

15/ **om**

- *tôm* /tom/

**ɤ:m**

- [tɤ:m] ‘shrimp’

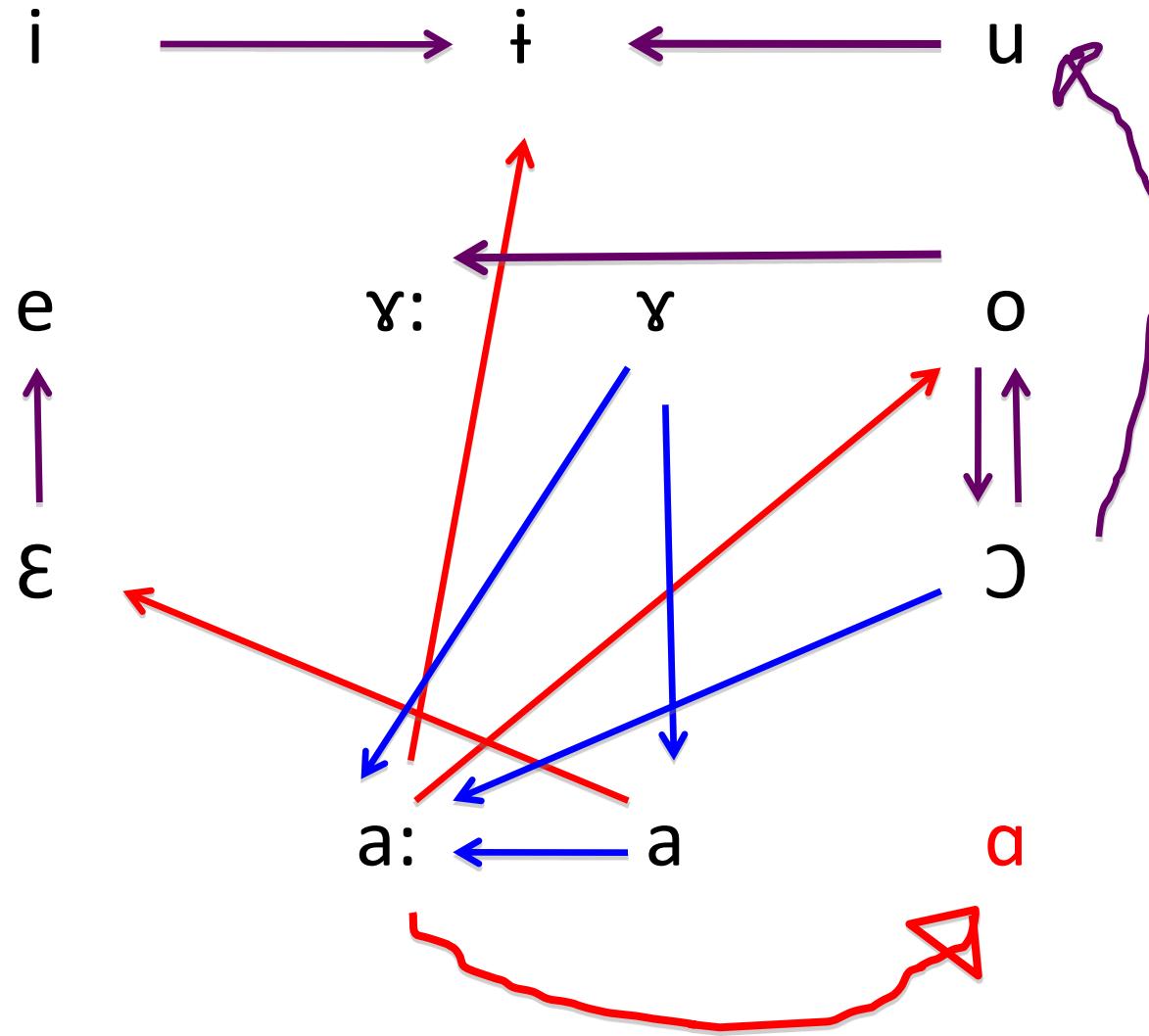
16/ **ɛm, ɛp, ɛw**

- *heo* /hɛw/
- *Mèo* /mɛw/
- *thép* /tʰɛp/

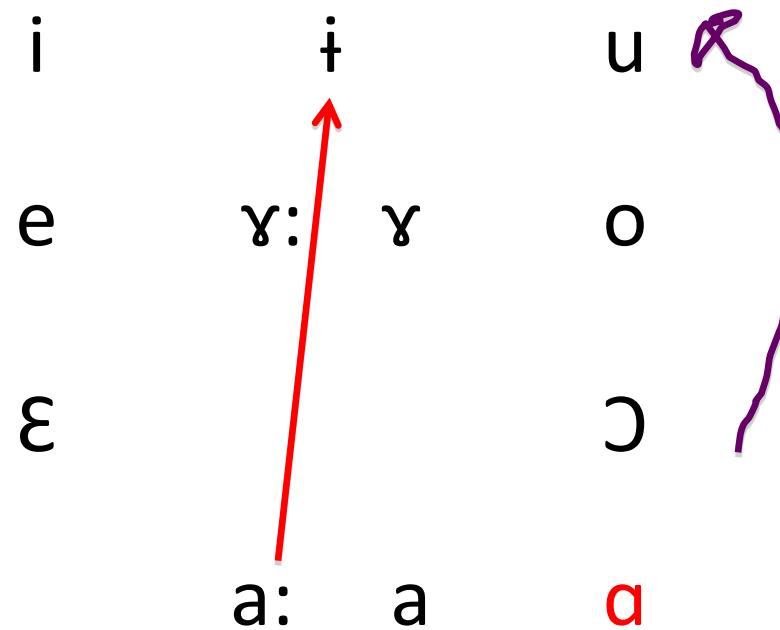
**em, ep, ew**

- [hew] ‘pig’
- [mew] ‘cat’
- [tʰep] ‘steel’

## 16 ‘vowel shifts’ in the Quang Nam rhymes, compared to Hanoi’s.



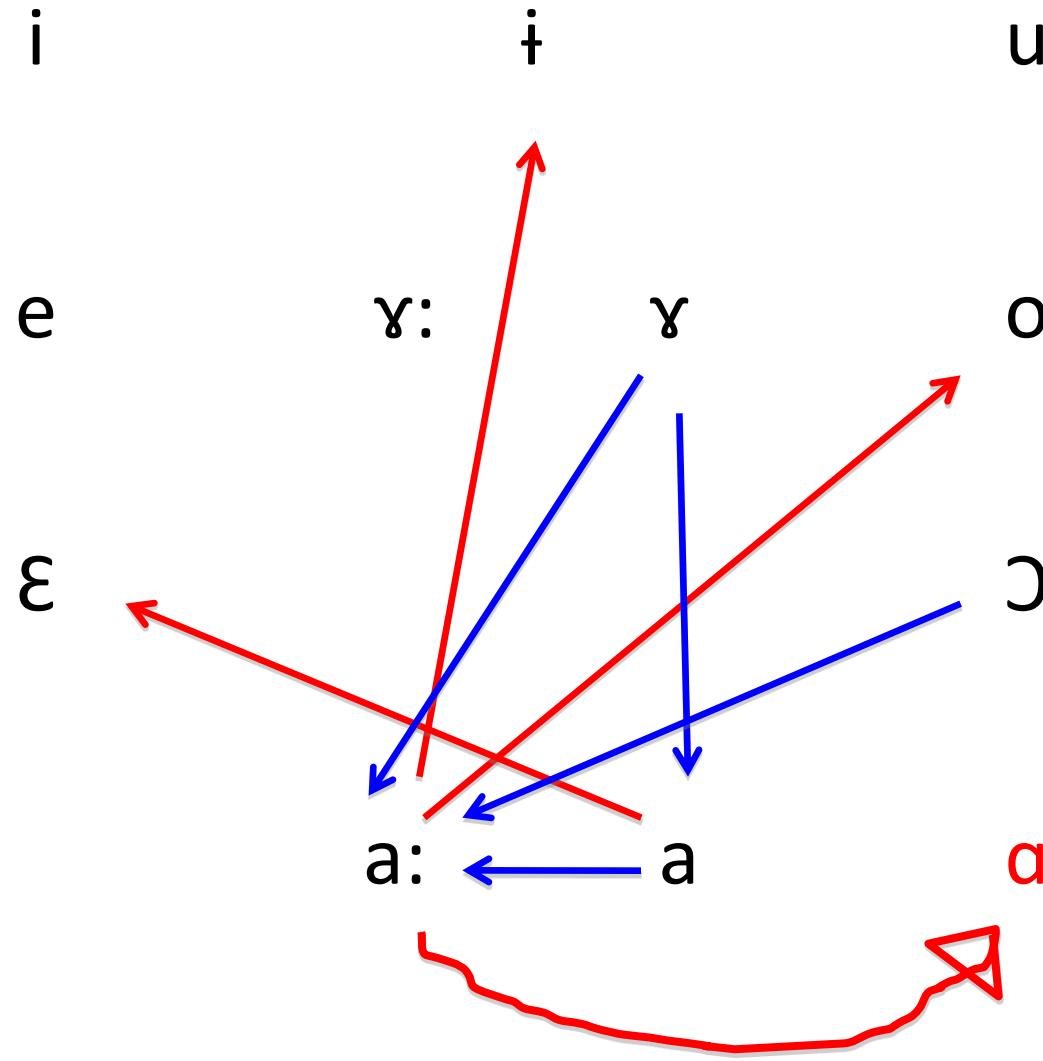
# Big ‘jumps’



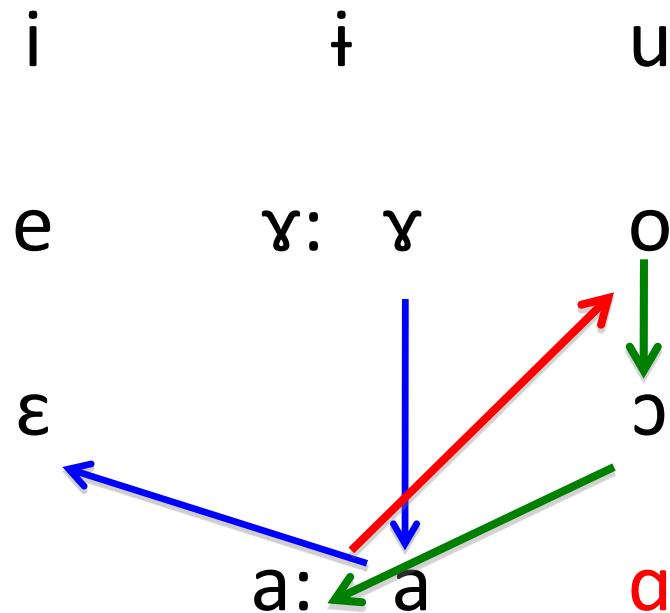
[ha:j] ‘two’ >  
[kɔj ‘whistle’ >

[hɪə]  
[kuə]

8 movements are from or towards [a], both long and short



# “chains”



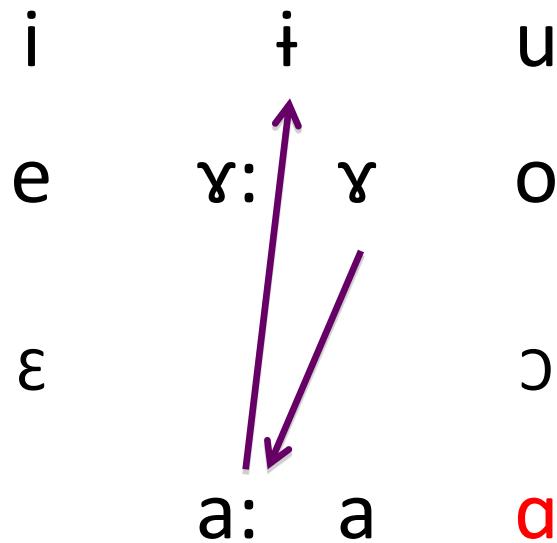
1. χ > a > ε before velars

  - *bâc* 'step' HN [bχk] > QN [bak]
  - *băc* 'north' HN [bak] > QN [bε:k]

2. o > ɔ > a: before labio-velars [kp] or [w]

  - *xōng* 'steam' HN [soŋm] > QN [sɔŋm]
  - *xong* 'done' HN [sɔŋm] > QN [xa:ŋ]
  - *áo* 'blouse' HN [?a:w] > QN [?o]

# Chain with glide -j



3. ɣj > a:j > ɨə before glide -j

- *tây* 'west' HN [tɣj] > QN [ta:j]
- *tai* 'ear' HN [ta:j] > QN [tɨə]

# Random or context-sensitive?

Not motivated: rising, lowering, lengthening...

- Lowering of /χ/

cầy	HN [kχj]	QN [ka:j]	'candle'
ấm	HN [?χm]	QN [?am]	'warm'

- /ɔ/ raised before labials, /o/ lowered before velars

hợp	HN [hɔp]	QN [hop]	'meeting (room)'
mốc	HN [mokp]	QN [mɔkp]	'mildew'

- Short /a/ is lengthened before labials.

bắp	HN [bap]	QN [ba:p]	'corn'
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# Ordered and ‘natural’ in chaos

- Although ‘strange’ and seem ‘chaotic’, the vowel shifts in QN dialect are not unusual. Raising, lowering, fronting, backing....are seen in many languages, and other dialects of Vietnamese.
- Even in the most ‘unnatural’ cases, the change is driven by the same phonetic principles and tendencies, such as co-articulatory effects, or the simplification process of a consonant cluster.
- Some shifts also reveal certain connection between variations found in different dialects.

# Simplification in Quảng Nam: final glide deletion

- Simplification of Cw- in **South Vietnamese**

*thuế* HN /t<sup>h</sup>we/ 'tax' SVN [te]

- Glide deletion after short /a/ in **Quảng Nam**: /aj/, /aw/ > [a:]

*tay* /taj/ 'hand' [ta:]

*máu* /maw/ 'blood' [ma:]

- Glide deletion after short /a/, /a/ fronted in **Bình Định**: /a/ > [ɛ]

*bảy* /baj/ 'seven' [bɛ] 

*rau* /zaw/ 'veggies' [rɛ] 

- Glide deletion after /i/, /ɨ/ **Phú Yên** and **Bình Định** dialects

*mười* /mɪəj/ 'ten' [mɪ] 

*Trời* /cɨ:j/ 'sky' [tɨ:]

# Context-sensitive, even in most peculiar shifts, e.g., Centralization

Hà Nội's centralization of /ɛ/

/ɛŋ/ > [aŋ]

Quảng Nam centralizes /i, u, o/

- *lính* HN [liŋ] > [lɪn] ‘soldier’
- *túm* HN [tu:m] > [tɪm] ‘to catch’
- *tôm* HN [tom] > [tɤ:m] ‘shrimp’

This centralization is seen in many other dialects from Hue southwards.

Sài Gòn dialect also centralizes /e/:

- *hết* HN [het] > [hɤ:t] ‘finish’

# Dissimilation/centralization in Quảng Nam

Quảng Nam:     $\textcircled{o} > \text{a}/\_ [kp]$

*xong*   HN [sɔŋm]                      QN [sa:ŋ]                      'done'

*tóc*      HN [tɔkp]                      QN [ta:k]                      'hair'

[tɔkp]                              => [ta:k]

[lab] [lab]

In Phú Yên dialects, centralization occurs even in **open syllables**:

- *ghế* HN      [ɣe]                      >    [ɣɤ]      'chair'

# /a/ fronting

- Fronting of Quảng Nam /a/    a              >              ε

nắng HN [naŋ]              >              [nɛ:ŋ]              'sunny'

The fronting of /a/ is also seen in other dialects:

- In **Bình Định**              a              >              ε

sáu HN [saw]              >              BD [sɛw]              'six'

saو HN [sa:w]              >              BD [sɛw]              'star'

tóc HN [tɔkp]              >              BD [tɛɔkp]              'hair'

ong HN [ɔŋ]              >              BD [ɛɔŋ]              'bee'

cau HN [kaw]              >              BD [kɛ]              'areca nut'

even in CV

ba HN [ba]              >              [bɛ]              'three/Dad'

# Immediate stage in a chain

The shift of certain vowel would not seem too abrupt if the immediate stage is present somewhere...

1. Fronting of a back vowel, and labial deletion

tóc 'hair'

HN [tɔkp] - Bình Định [tɛɔkp] - QN [ta:k]

2. Fronting of short [a] before velars

nắng 'sunny'

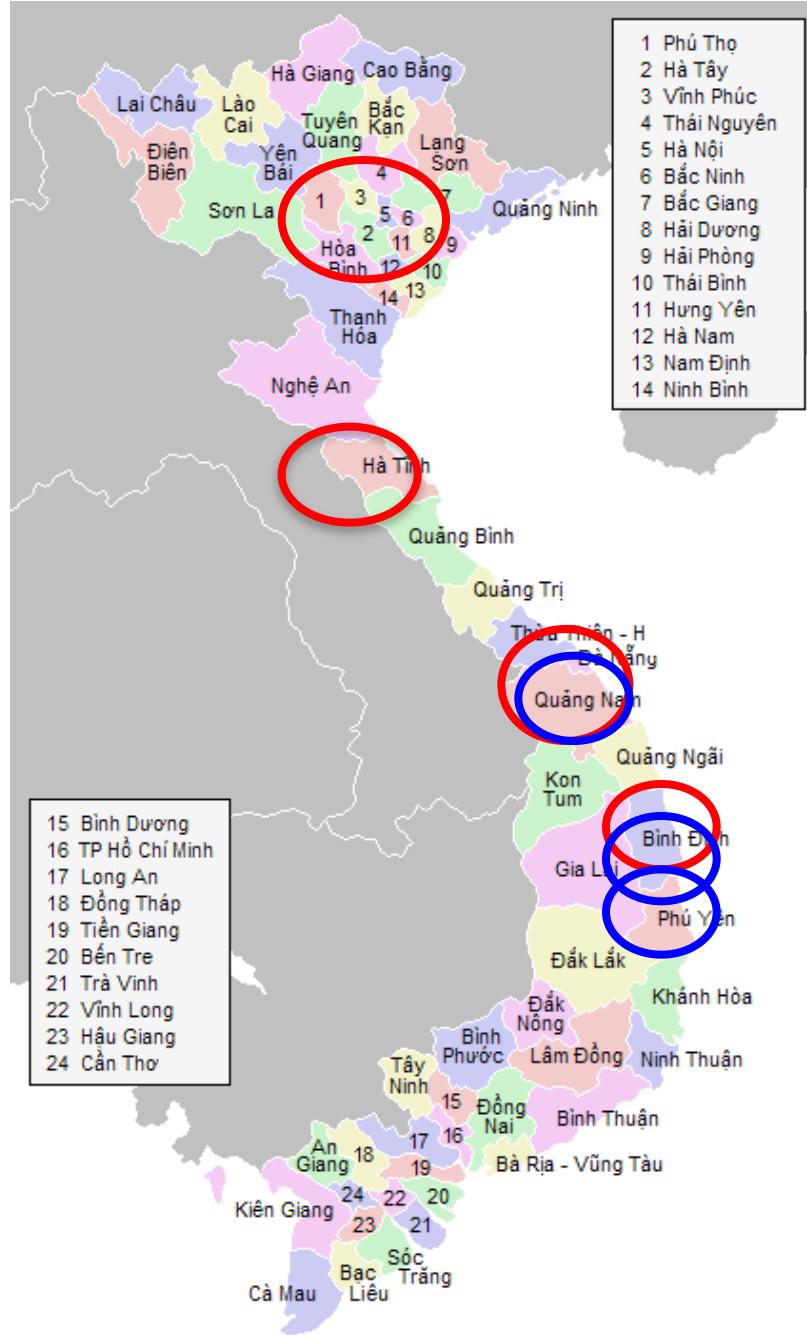
HN [naŋ] - Bình Định [nɛŋ] - QN [nɛ:n]

# Old elements in new dialects

Old/Middle Vietnamese had palatals after all front vowels. In modern Vietnamese among front vowels:

- Quảng Nam and Hà nội retain palatals after /i/ and /e/.
- Hà Tĩnh and Phú Yên retain palatals after /ɛ/.

- Final palatals after front vowels (red).
- Simplification of VG, fronting of /a/ (blue)



# Conclusions

- The Quang Nam dialect appears to be in the ‘peripheral’ area in which old elements are found among innovations. Simplification of the rhyme is one of the important and most seen processes.
- In most cases, the shift is driven by internal factors that are common in languages.
- Vowel shifts in Quảng Nam dialect are not unique to this dialect. Similar changes are found in other dialects of Vietnamese, although less abundant and at a less intense degree.
- Some of the shifts in Quảng Nam also connect with similar phenomena in neighboring dialects, forming chain shifts with various stages of what looks like the same processes.

- This phenomenon of vowel chains suggests that the rhyme in dialects of Central and south central Vietnam is not stable, especially when a final glide follows /a/.
- That the ‘chain shifts’ do not happen in CV, but only in CVC, adds to the body of evidence for a paradox in sound change: “the basic unit of sound change is the ‘phoneme’ AND the word” (Wang 1977, Labov 1994). Quang Nam data might be a case of sound change in which the ‘rhyme’ is the ‘unit’.
- Patterns of migration and language contact might offer some explanation of the chain shifts discussed here.

# References

- Blodgett, Alison, Matt Winn, Alina Twist. 2009. Vietnamese vowels – the central focus. University of Maryland.
- Cao Xuan Hao. 1998. *Tiếng Việt - Mấy vấn đề ngữ âm, ngữ pháp, ngữ nghĩa (Some issues on phonetics, syntax and semantics in Vietnamese)*. Hanoi: Giáo dục.
- Nguyen Dang Vu. 2007. Quang Ngai - Mot so van de lich su van hoa (Quang Ngai – some issues on cultural history). Hanoi: Nha xuat ban Khoa hoc xa hoi.
- Nguyễn Tài Cẩn 1997. *Giáo trình lịch sử ngữ âm tiếng Việt (Lectures on Vietnamese Historical Phonology)*. Hanoi: Giáo Dục.
- *Tổng cục thống kê (General Statistics Office) the 2009 Vietnam Population and Housing Census: Completed Results [2009 Census](#)*, Hà Nội, 6-2010. Table 5, page 134.

- Trần Thị Thìn. 2003. Ngữ âm tiếng Tam Kì - Quảng Nam (Tam Ki-Quang Nam phonetics), in *Ngôn Ngữ và Đời sống (Language and Life)*, Vol 7, 2003. 11-15. Hanoi: Linguistics society of Vietnam.
- Nguyễn Ngọc San. 2003. Tìm hiểu tiếng Việt lịch sử (A study of Vietnamese historical linguistics).
- Vương Hữu Lễ & Hoàng Dũng. 1994. *Ngữ âm tiếng Việt (Vietnamese phonology)*. Hanoi: Đại học Sư Phạm.
- Wang, William S.-Y. 1977. *The Lexicon in Phonological Change* (ed.). The Hague: Mouton.
- Southern Expansion:

<http://www.youtube.com/watch?v=gyIX5kwxjkE>