

Variation, Tree and Wave Models

1. Variation

- Language variation is universal
- Occurs along two dimensions: geographic and social

Geographical

- Historically, gradual variation was the norm
- E.g. in rural speech from Galicia to Catalunya, there is a dialect continuum
- From Southern France to Alicante, there is another
- Hence, geographic variation can be two-dimensional
- Can ignore political boundaries
- However, it can be disrupted, and is sensitive to social factors

Social:

- Operates along any combination of many social variables: age, gender, social class, education, income, ...
- Example: *-ado* participles: [áðo], [á^ðo], [áo], [áw]
 - [áw] more common in working class speech
 - Women resist [ð] deletion
- Social variation is multi-dimensional
- It also varies in the speech of a single speaker (e.g. register)

Diachronic view:

- All languages change over time
- Change is usually fairly rapid
- Often viewed as new forms replacing old ones:

- [lá:tus] > [ládo] > [láðo] > [lá^ðo] > [láo] > [láw]

Variationist view:

- Different ranges of variation at different points in time:

Stage 1:	[lá:tus]	[ládo]							
Stage 2:	[lá:tus]	[ládo]	[láðo]						
Stage 3:			[ládo]	[láðo]	[lá ^ð o]				
Stage 4:					[láðo]	[lá ^ð o]	[láo]		
Stage 5:					[láðo]	[lá ^ð o]	[láo]	[láw]	
Stage 6:							[lá ^ð o]	[láo]	[láw]

- Diachronic variation can differ word to word
- A process seen in one word, may be reversed in another:

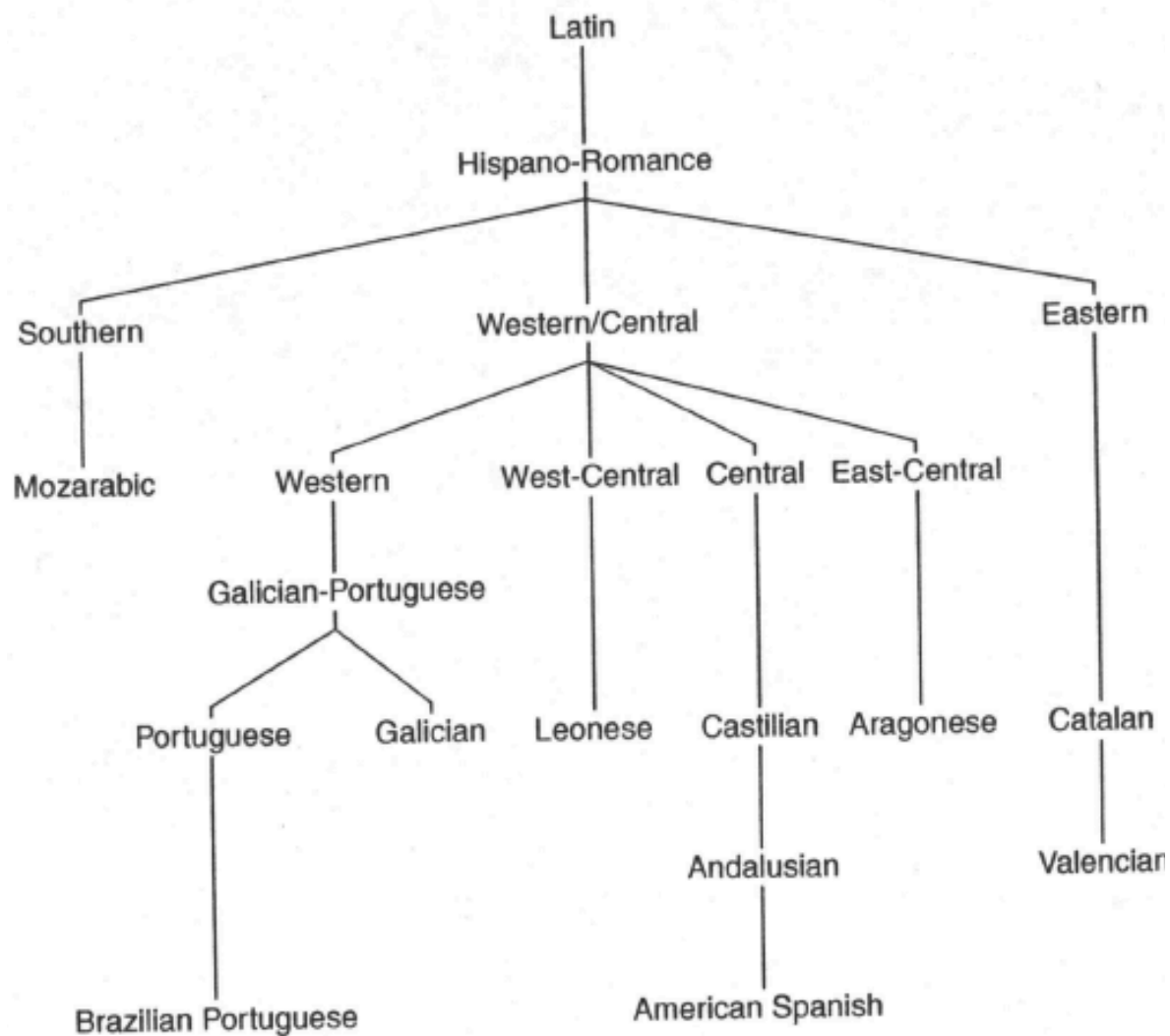
Stage 1:	[nído]	[níðo]			
Stage 2:	[nído]	[níðo]	[ní ^ð o]		
Stage 3:			[níðo]	[ní ^ð o]	[nío]
Stage 4:			[níðo]	[ní ^ð o]	
Stage 5:			[níðo]		

Neogrammarians: Sound laws suffer no exceptions.

Variationists: Each word has its own history.

2. Tree Model

- Developed in historical linguistics to represent shared features between varieties
- Only used for differences along the geographic parameter
- The tree model has an false analogy in the classification of species
- Less successful varieties often survive as non-standard varieties



Tree model of Hispano-Romance varieties

- Problematic because of shared features - assumes that once varieties 'split', there will be no more shared features (e.g. Aragonese versus Catalan/Castilian)
- Sometimes explained as borrowing
- The tree model ignores variation in the trunk

Western Romance: Spanish, French, Portuguese

Eastern Romance: Italian, Romanian

- Based primarily on voicing of stops V__V ([lá:tus] [ládo]) – but:

- Pomeiian graffiti shows *g* where you would expect *c*
- Tuscan varieties showed intervocalic voicing
- Central Pyrenean varieties often lack voicing
- Mozarabe lacked voicing
- Perhaps based on social variation

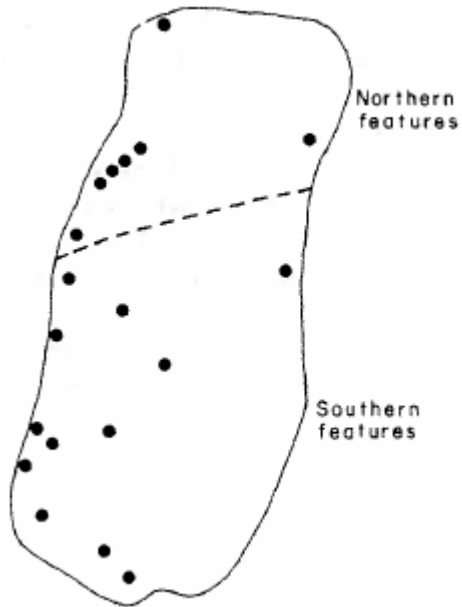
3. Wave Model

- Isoglosses spread out in a wave-like manner from a prestige source
- Yields the nuanced variation often found
- Nevertheless, difficult to represent social variation and non-categorical variation

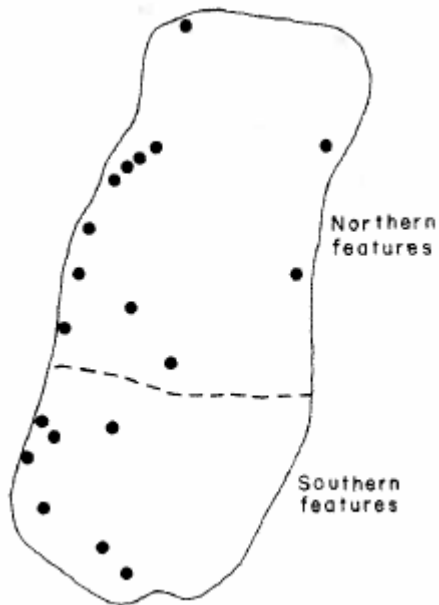
Paamese Dialects (Paama, Vanuatu)

	North	:	South	
(1)	ei	:	ai	
a.	eim		aim	'house'
b.	keil		kail	'they'
(2)	i/∅	:	l	
a.	amai		amal	'reef'
b.	a:i		a:l	'stinging tree'
c.	tahe		tahel	'wave'
d.	mea		mela	'get up'
(3)	k	:	g (#__)	
a.	kea		gela	'he crawled'
b.	keih		gaih	'he is strong'
(4)	a ... a	:	e ... a	
a.	atau		letau	'woman'
b.	namatil		nematil	'I slept'
(5)	m ^w	:	m	
a.	m ^w ail		mail	'left'
b.	m ^w eatin		meatin	'man'

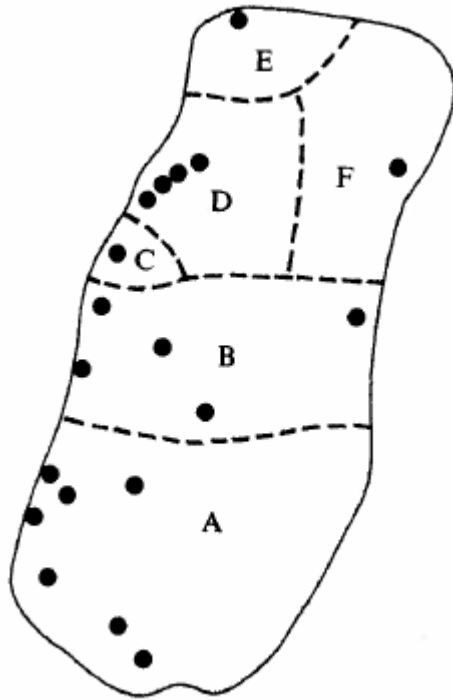
- Isoglosses do not match - isoglosses associated with features (1), (3), and (5) separate the northern third of island:



- Isoglosses for features (2) and (4) separate the southern third:



- The $m^w : m$ isogloss further divides island into six sections, depending on how many words exhibit labiovelars (A – none, B through E each increasing, F – most):



If the varieties in these six regions were treated as six dialects, reconstruction becomes problematic:

(4) A	B	C	D	E	F	
a. meatin :	m^w eiatin :	m^w eiatin :	m^w eiatin :	m^w eiatin :	m^w eiatin :	‘man’
b. ame :	ame :	am^w e :	am^w e :	am^w e :	am^w e :	‘married man’
c. meas :	maes :	meas :	m^w eas :	m^w eas :	m^w eas :	‘dust’
d. mail :	mail :	mail :	mail :	m^w ail :	m^w ail :	‘left’
e. mai :	mai :	mai :	mai :	mai :	m^w ai :	‘straightened’