Elements

Non-Vocalic Elements in Consonants, II

- Resonance elements (3):
 - |I|: *dlp*
 - |U|: *rUmp*
 - |A|: *mAss*

- Non-resonance elements (3):
 - |?|: Energy drop
 - |H|: High-frequency energy
 - |L|: Low-frequency energy

- Non-resonance elements:
 - |L| ~ [N]
 - Autonomous Interpretation
 - No resonance properties

- |L|
- Phonetic properties
 - Energy concentration in low frequencies

- |L|
- Phonological classes
 - Nasals
 - Voicing

- |L|
 - Voicing is low-frequency: F0
 - Inhibiting high-frequency energy increases relelative prominence of low-frequency energy: nasals

- Properties of elements: |L|
 - Autonomous interpretation
 - Head/non-head
 - Vocalic/non-vocalic interpretation

- Autonomous interpretation of |L|
 - "placeless" nasal
 - N in Japanese

- Head/non-head versions of |L|
 - Non-headed |L|: nasality
 - Headed |<u>L</u>|: voicing

- Head/non-head versions of |L|
 - Obstruent voicing is Head
 - It requires counteracting voicing-suppressing nonresonance elements

- Vocalic/non-vocalic interpretation of |L|
 - Non-vocalic: Nasals and Voiced Obstruents
 - Vocalic: Nasal Vowels, Low tone

- Vocalic/non-vocalic interpretation of |L|
 - Nasal Vowels often interact with nasal consonants
 - Nasal harmony: Kpelle, Siona, Wanano, ...
 - Nasal Vowels often derive from nasal consonants
 - French, Frisian, Portuguese,

- "Voicing" occurs in different natural classes:
 - Voiced Obstruents
 - Vowels
 - Nasals
 - Liquids
 - Glides

- |L| is only present in two classes:
 - Voiced Obstruents: L
 - Vowels
 - Nasals: |L|
 - Liquids
 - Glides

- (Non-)contrastive voicing in Feature Theory
 - Only obstruents have [Voice]
 - Sonorants and vowels have...
 - …"Spontaneous Voicing"
 - … "Default Voicing"
 - … "Phonetic Voicing"

(Non-)contrastive voicing in Feature Theory

[Voice]	Ø
Voiced Obstruents	Nasals
	Liquids
	Glides
	Vowels

- (Non-)contrastive voicing in Feature Theory
 - FT makes no connection between voiced obstruents and nasals
 - But:
 - Tukuya
 - Kpelle
 - Japanese
 - Zoque
 - Wembawemba

(Non-)contrastive voicing in Element Theory

<u> </u> L	Ø
Voiced Obstruents	Liquids
Nasals	Glides
	Vowels

- (Non-)contrastive voicing in Element Theory
 - Voiced obstruents and Nasals are related
 - What about the other three classes?

- |L| is only present in two classes:
 - Voiced Obstruents: L
 - Vowels
 - Nasals: |L|
 - Liquids
 - Glides

- (Non-)contrastive voicing in Element Theory
 - Voicing in vowels, liquids and glides:
 - "Carrier Signal"
 - ALL segments are sustained by voicing
 - EXCEPT when voicing is inhibited
 - By |H| or |?|

- Laryngeal Realism
 - "Not all languages use [±voice]"
 - Typological distinction:
 - "Voicing" languages (Romance)
 - "Aspiration" languages (Germanic)

- Laryngeal Realism
 - Voice Onset Time
 - Relative timing of voicing and release
 - Pre-voiced
 - Voiced
 - Aspirated

- Laryngeal Realism
 - "Not all languages use [±voice]"
 - Feature theory:
 - "Voicing" languages: [±Voice]
 - "Aspiration" languages [±Spread Glottis]

- Laryngeal Realism
 - "Not all languages use [±voice]"
 - Element theory:
 - "Voicing" languages: |L|
 - "Aspiration" languages: |H|

- Laryngeal Realism
 - In |H|-languages, voicelessness/aspiration spreads
 - [pṛaid]
 - [khæts] vs. [dpgz]
 - (English)

- Laryngeal Realism
 - In |L|-languages, voicing spreads
 - prośba 'request'
 - ['prɔzba]
 - *['procba]
 - (Polish)

- Next week
 - Liquids, antagonistic elements
 - Syllables & Licensing