
Phonological Variation in Multi-Dialectal Italy: distinguishing e from ε

**Christopher Cieri
University of Pennsylvania
Linguistic Data Consortium**

ccieri@ldc.upenn.edu

www.ldc.upenn.edu/Papers

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Approaches to Variation

- **Approaches to Variation**
 - postulate an ideal, non-varying speaker-hearer
 - search for yet unknown factors conditioning invariant forms
 - acknowledge as free variation
 - acknowledge as result of dialect mixing or creolization
 - acknowledge that variation is inherent, modeling it directly
- **In Italy**
 - Standard Italian is commonest model but native language or few or none depending upon definition
 - Dialects continue in vigorous, if waning, use.
 - Regional Italians are the varieties in common use.
 - Italian studies of variation in Italian tend toward dialect-mixing models (Trumper 1993).
- **The presence of multiple dialects in many Italian speech communities complicates the analysis of variation within any one.**
 - Investigate variation in one variety in one speech community, Regional Italian in L'Aquila, Abruzzo. So far, focus on the vowel system, especially mid vowels. Here, I'll discuss e versus E

L'Aquila

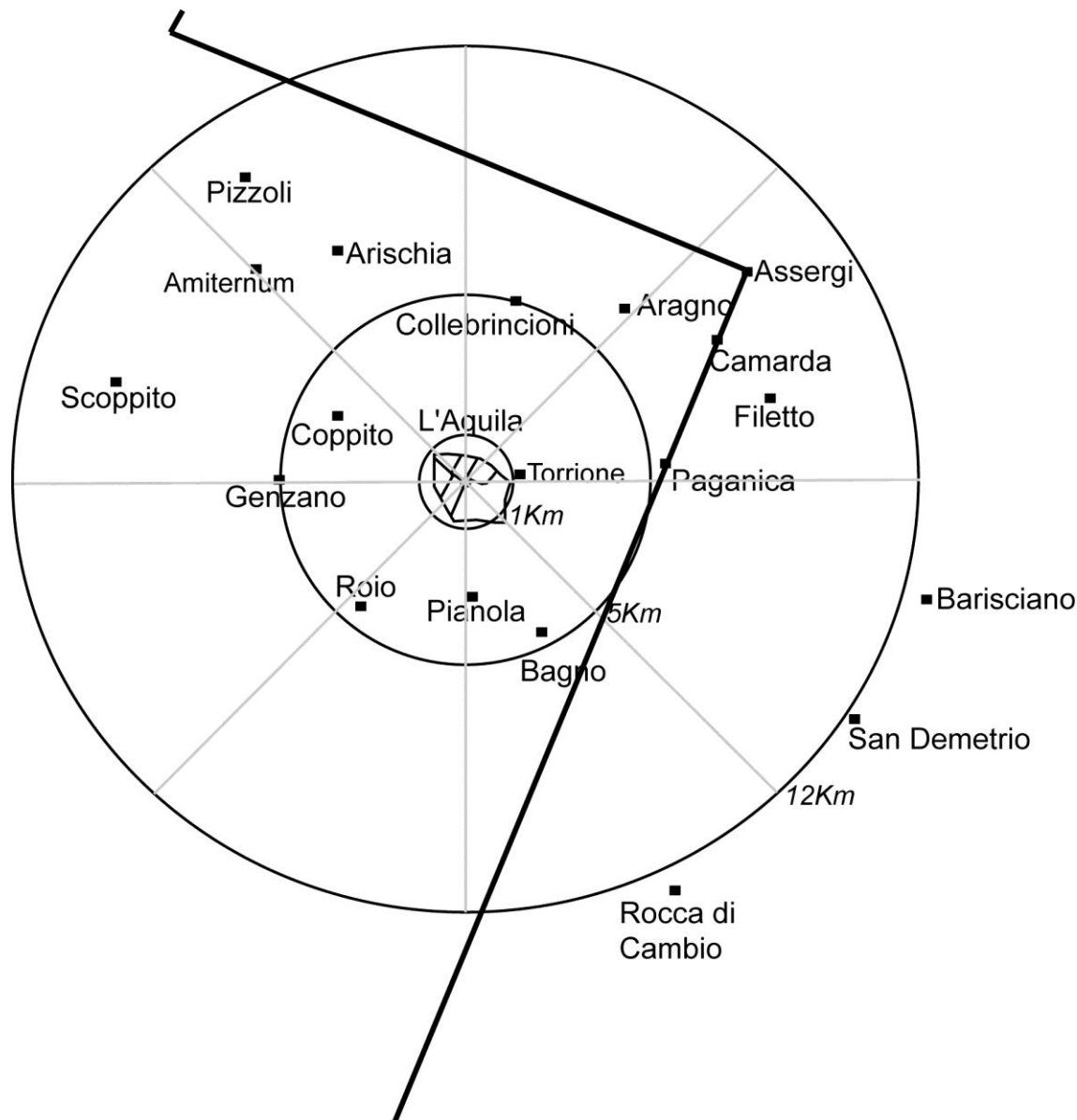


- **Geography**
 - Central Italy, Abruzzo
 - In Apennines
 - 1hr east of Rome
- **Provincial, regional capital**
- **67,000 inhabitants**
- **Incorporated ~1254 for mutual protection of “99” area landowners.**

L'Aquila as Speech Community

- **Pre-History: proximity to *transumanza* routes, Rome and frontier town increase contact and lead to long periods of affluence.**
- **Incorporated from 67 paesi each of which claimed a section and build its own church and fountain**
 - intramural rivalry
- **Rivalry with surrounding towns and city of Pescara.**
- **Education and printing within L'Aquila after emergence of vernacular but before standardization of Italian**
 - regional variation establishing in written text.
- **Does any of this affect today's Regional Italian of L'Aquila?**

Giammarco Aquilano/Abruzzian Dialects



Abruzzian Vowel Systems

Classical Latin	Vulgar Latin	Standard Italian	Aquilano-Reatino	Western Abruzzian	Eastern Abruzzian	Teramano
Ī	ɪ	i	i	i	i	i
Ī̇	ɛ	e	e	e/_# ɛ_C#	E	a
Ē						
Ē̇						
Ā	A	a	a	a	a	
Ā̇						
Ō	ɔ	o	o	o/_# ɔ_C#	O	
Ō̇						
Ū						
Ū	U	u	u	u	u	

Aquilano retains vowel distinctions (Giammarco 1985).

neva, eta, fredda, vedova

prEta pEkera, lEbbre

Dialects to the east show progressive simplification of the vowel system.

Variation in Dialects of Abruzzo

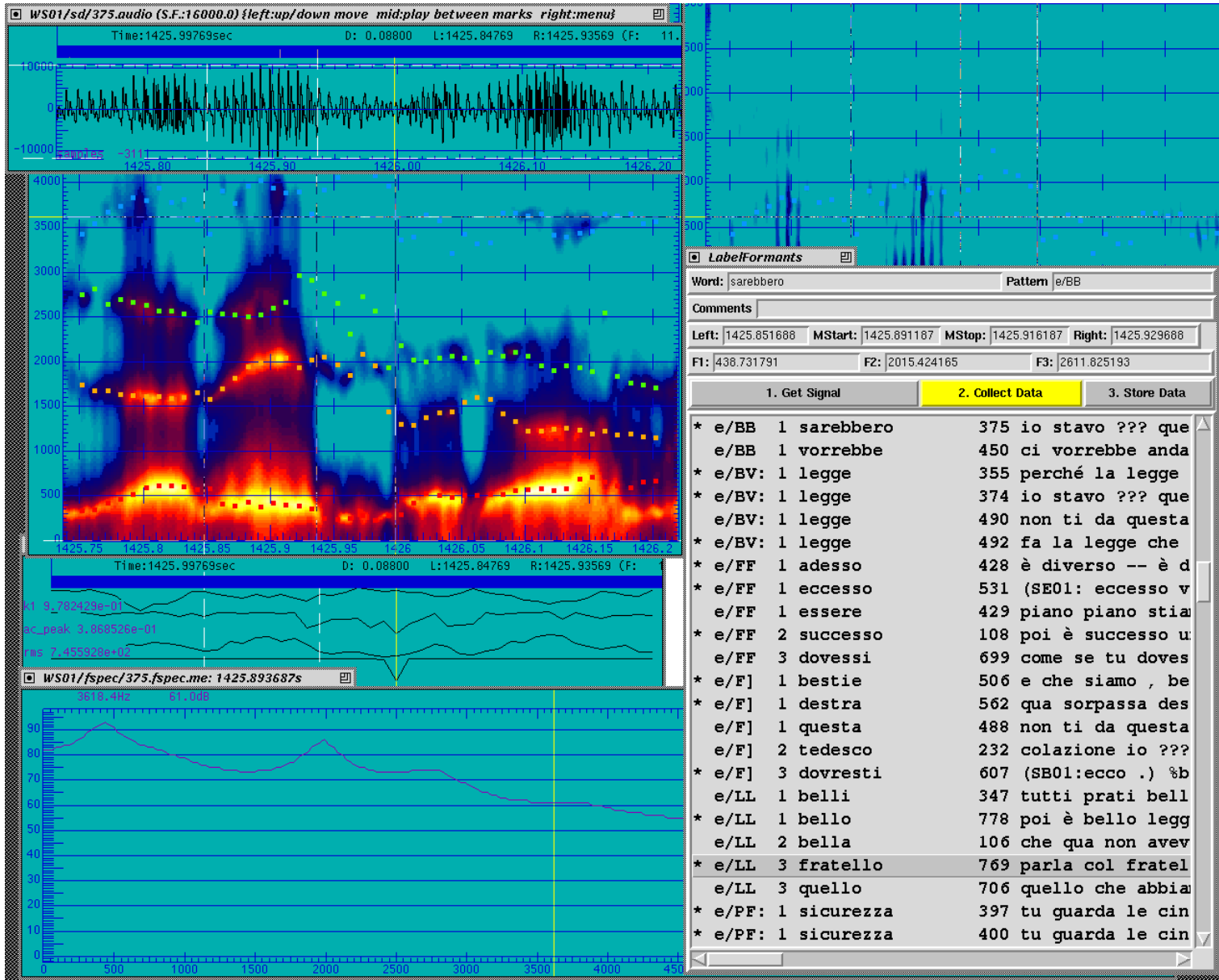
- **Avolio's Atlante Linguistico ed Etnografico Informatizzato della Conca Aquilana (ALEICA) confirms transitional band between central and southern Italian dialects passing inside the municipal territory of L'Aquila.**

- **The reinterpretation, previously unattested, of final /★/ as /e/ in Assergi and Bagno in the dialect of older women (Avolio 1995).**

Methodology

- **Rickford (1979) sets tone**
 - “An important principle of the new approaches to variation is accountability to a corpus of empirical data”
- **Data from**
 - sociolinguistic interviews plus formal elicitation from
 - 81 subjects of which 31 analyzed for this work
 - interviews completely transcribed with time-alignment
 - tokens selected and segmented at word and focus (vowel) level
 - » each vowel * each phonetic environment * each situation
 - F1-3 hand measured based on LPC, DFT, spectral slice, F0
 - additional QC for outliers, normal distribution
 - yielding 7016 tokens
 - Independent variables
 - » sex, age, SEC, domicile, distance/direction from city center, inside/outside wall, A/F axis, dialect type, dialect frequency, dialect attitude, preceding & following phonetic environment, situation, interviewer

Formant Analysis



Token Selection

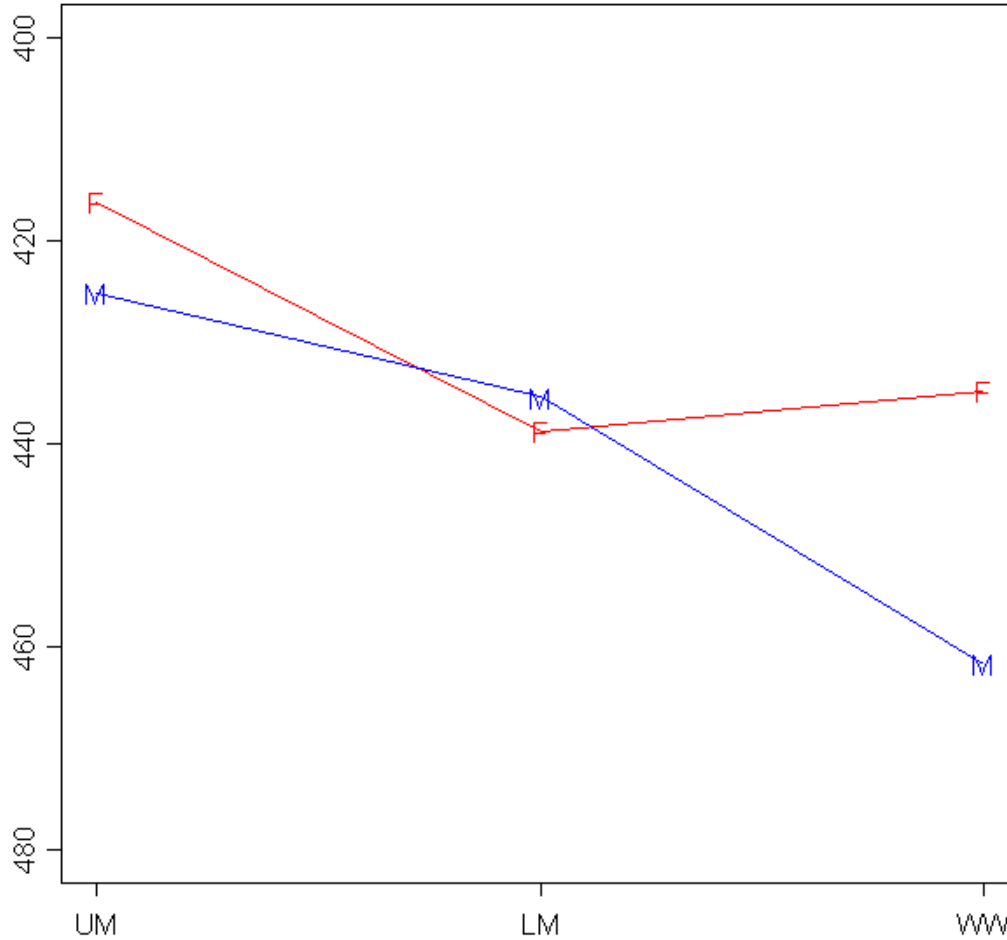
Vowel Segmentation

Identification of central tendency of word stressed vowel

Hand checking of formant tracker values for F1 and F2

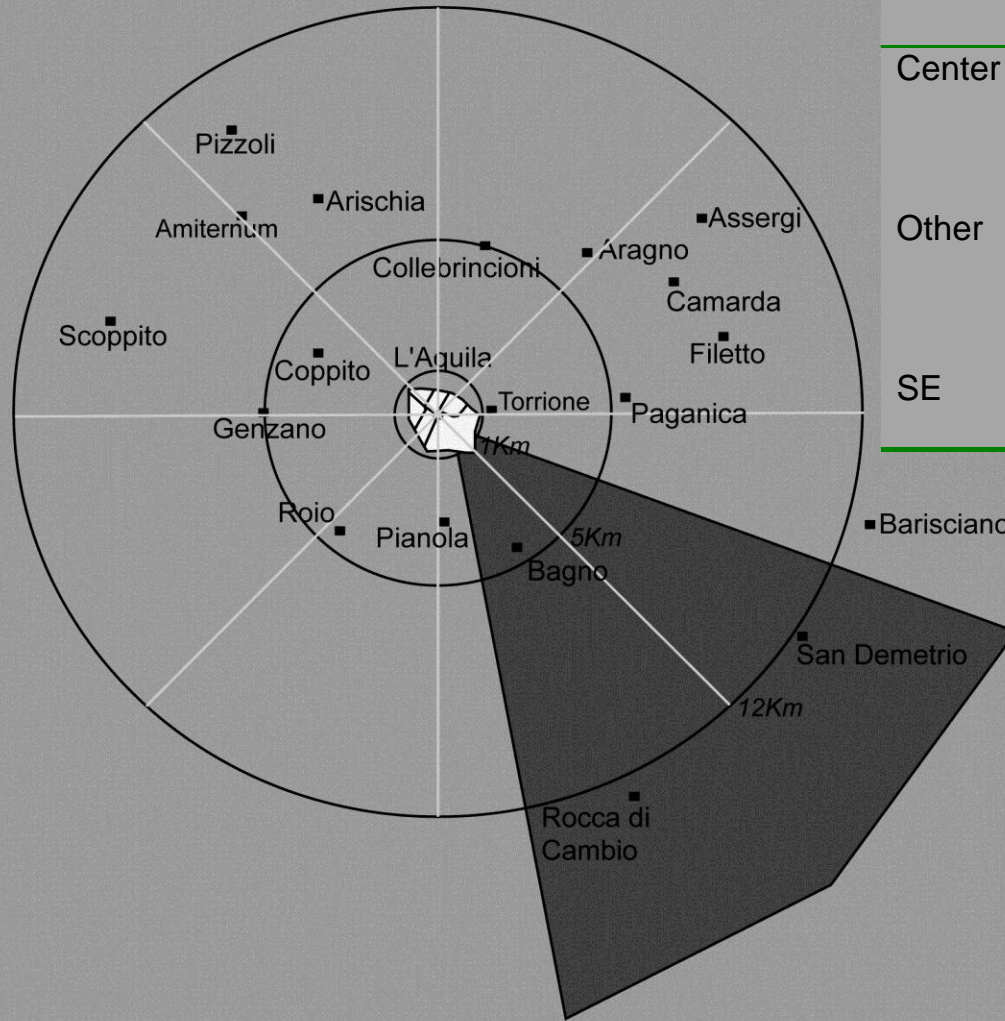
e Height by Sex, SEC

/e/ Height by Sex and SEC



	UM		LM		WW
Overall	421	↔	437	↔	449
F	416	↔	439		435
					↕
M	425		435	↔	462

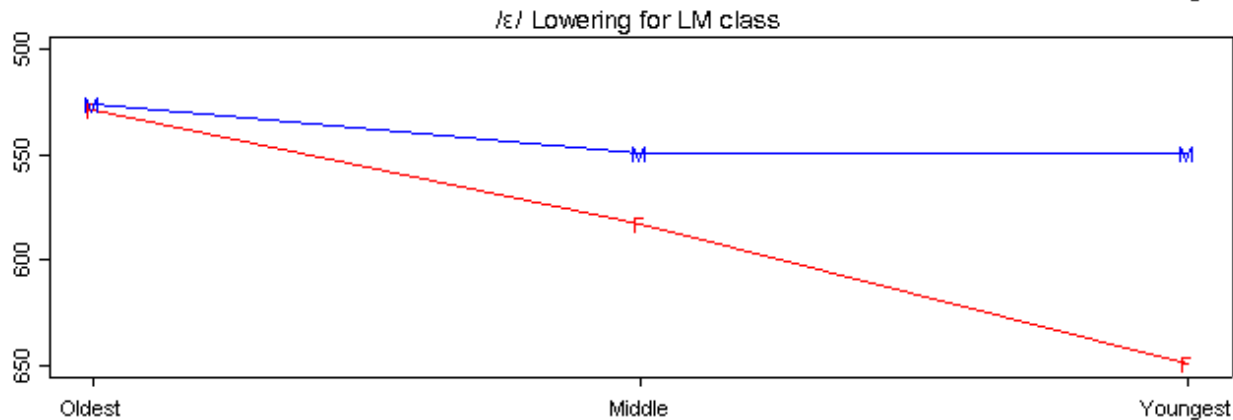
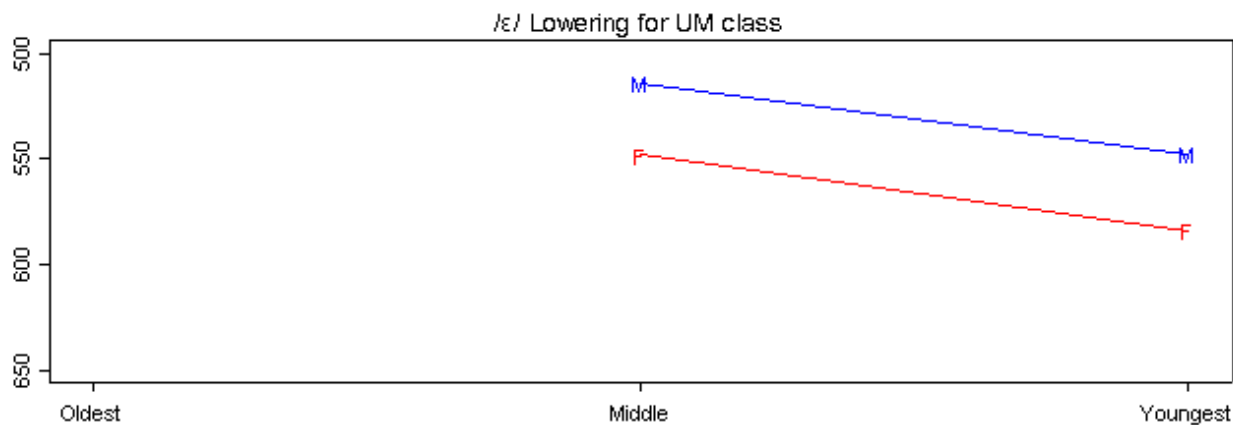
e Height by SEC, Domicile



	Overall	UM	LM	WW
Center	414	414		
	⇕	⇕		
Other	433	425	435	437
	⇕			⇕
SE	465	424	457	⇔ 468

- White area = higher than average e
- Dark gray areas = lower than average e.

E Lowering by Age, Sex, SEC, Style

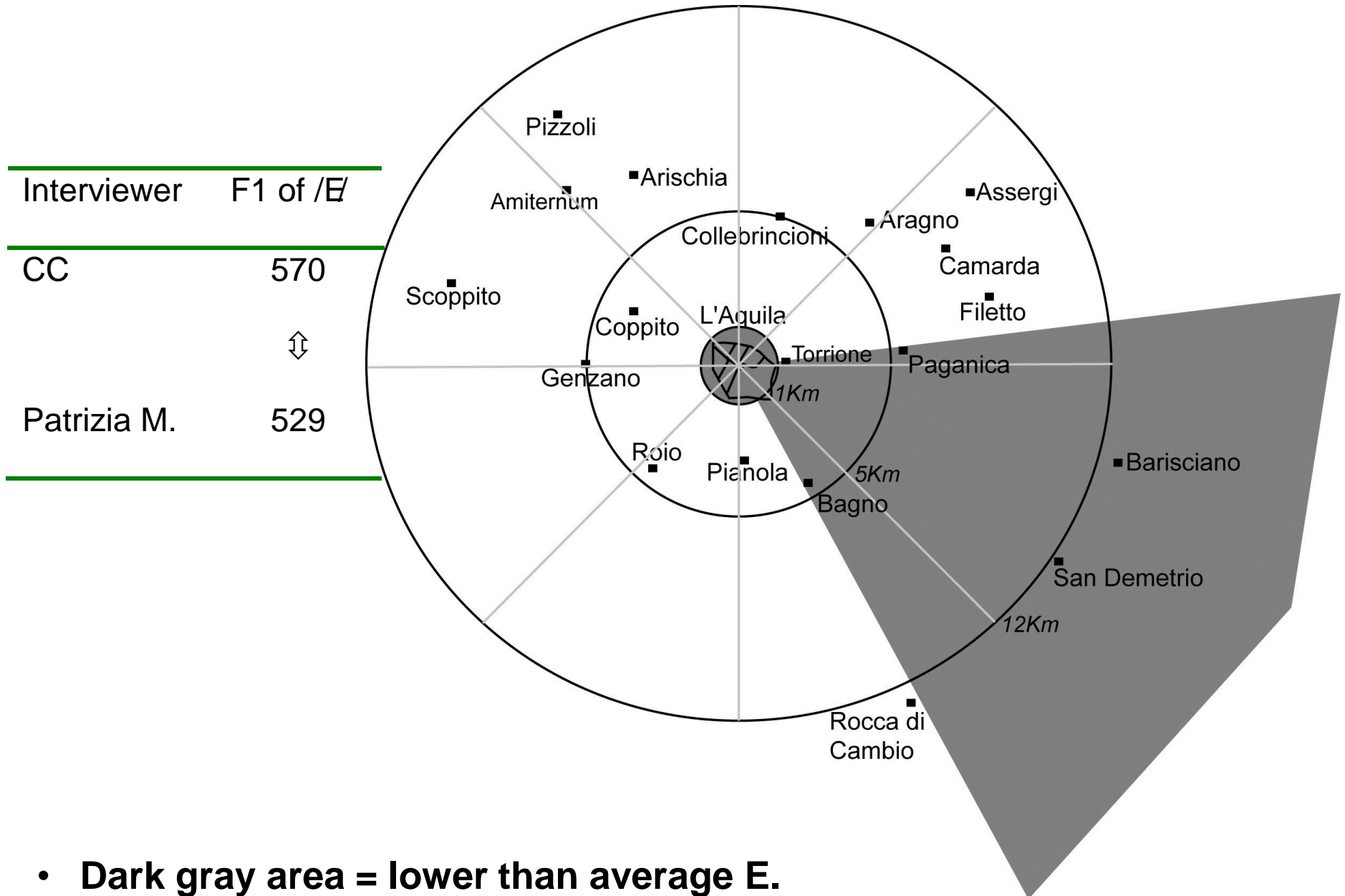


Formal 542



Informal 563

E Lowering by Local, Interlocutor



ANOVA

Response: NeareyF1 of e

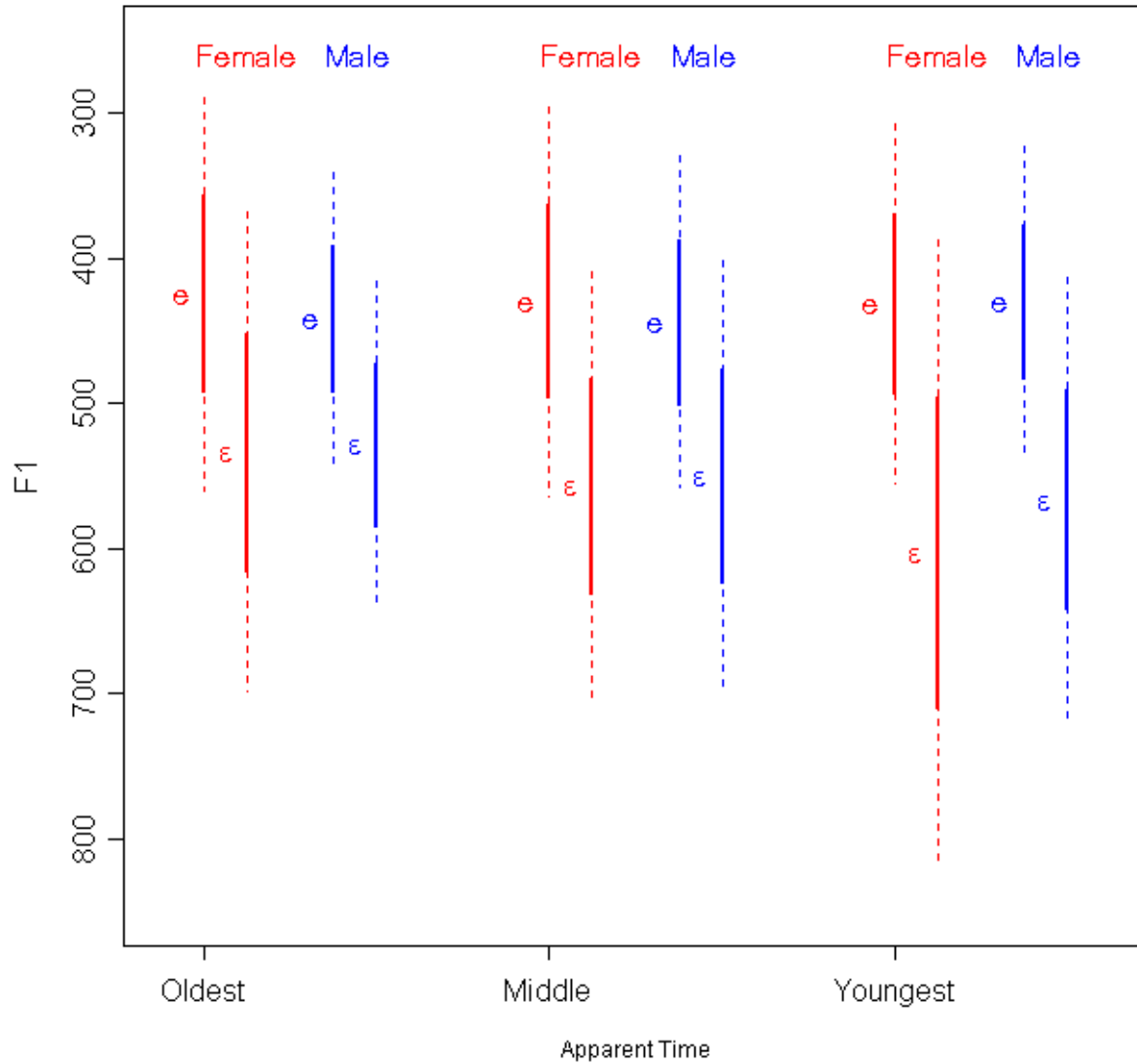
	Df	Sum Sq	Mean Sq	F value	Pr(>F)	
Sex	1	20109	20109	5.9549	0.0148649	*
SEC	2	110384	55192	16.3444	1.060e-07	***
Situation	1	31430	31430	9.3077	0.0023475	**
Geography	2	53642	26821	7.9427	0.0003802	***
Dialect Frequency	4	55179	13795	4.0851	0.0027447	**
Residuals	918	3099918	3377			

Response: NeareyF1 of E

	Df	Sum Sq	Mean Sq	F value	Pr(>F)	
Age	1	599147	599147	99.4653	< 2.2e-16	***
Sex	1	87290	87290	14.4911	0.0001498	***
SEC	2	189617	94808	15.7393	1.883e-07	***
Situation	1	79111	79111	13.1334	0.0003054	***
Geography	1	67828	67828	11.2601	0.0008231	***
Interviewer	1	55793	55793	9.2622	0.0024033	**
Residuals	955	5752614	6024			

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Overall Effect



Conclusions

- **e Height**
 - stable sociolinguistic marker, no evidence of change in progress
 - lower SECs, less formal situations produce lower variants of e
 - sex effect limited to WC women who seem to hypercorrect
 - » much higher WC males, and even higher than LMC women
 - center of L'Aquila produces higher e than outside city center whose e is higher than the South and East
 - frequent dialect speakers produce lower e
 - correlation of high e with higher SEC, formality, domicile in city center and less frequent dialect speech and hypercorrection of WC women suggest that e Height associated with urbanity and class.
- **E Lowering**
 - change in progress, younger subjects produce lower E than older
 - women, subjects living in center/SE, lower SECs also tend to produce lower E
 - » except WW class women seem to hypercorrect to a higher E
 - lower E appears in less formal situations
 - subjects interviewed by native interviewer generally produced higher E than those interviewed by the author
 - » This may be accommodation to Patrizia M. whose E is quite high relative to the subject pool.
- **Variationist method seems appropriate if applied carefully.**
 - no correlation of vowels to suggest variation results from dialect switching
 - irregularity with WW women probably due to definition of SEC
- **Reversal of Near-merger?**
 - lack historical description of e versus E in Regional Italian
 - Lack perceptual studies on e versus E among modern speakers
 - Phonological status of e/E distinction is not without controversy