Anti-Romance laryngeal patterns in Italian phonology

Bálint Huszthy

Babeș-Bolyai University

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1. Romance in Laryngeal Realism
1.1 The framework

▶ ***Laryngeal Realism*** (Iverson & Salmons 1995; Honeybone 2002, 2005; Petrova et al. 2006; Cyran 2011, 2014; Beckman et al. 2013; etc.)

Two-way laryngeal contrasts

Voice languages	Aspiration languages
• Marked laryngeal feature: [voice]	• Marked laryngeal feature: [spread glottis]
• Opposition: [p t k] ~ [b d g]	• Opposition: [b̥ d̥ g̥] ~ [pʰ tʰ kʰ]
• Fortis: voiceless unaspirated	• Fortis: voiceless aspirated (marked)
• Lenis: voiced unaspirated (marked)	• Lenis: voiceless unaspirated
• Slavic and Romance languages, etc.	• Most Germanic languages, Chinese, etc.
• Regressive Voice Assimilation:	• No active voice:
*vo**dk**a → vo*[tk]*a*	*vo**dk**a → vo*[d̥kʰ]*a*
*foo**tb**all → foo*[db]*all*	*foo**tb**all → foo*[tb̥]*all*

1. Romance in Laryngeal Realism
1.2 Regressive Voice Assimilation (RVA)

▶ Romance languages are considered voice languages (Petrova et al. 2006, etc.)

▶ Due to the phonological activity of [voice] they exhibit RVA

▶ RVA: Obstruent assimilation for [voice] from the rightmost member of a cluster

▶ Devoicing: /B/ + /T/ → [PT]

▶ Voicing: /P/ + /D/ → [BD]

1. Romance in Laryngeal Realism
1.2 Regressive Voice Assimilation (RVA)

▶ Romance examples for RVA:

a) Word-internal voicing by RVA

(Port.) *Lisboa* [ʒb] 'Lisbon' (Mateus & D'Andrade 2000: 142)
(Sp.) *fútbol* [ðβ] 'football' (Colina 2006: 186)
(Rom.) *totdeauna* [dː] 'always' (Wetzels & Mascaró 2001: 221)

b) Word-internal devoicing by RVA

(Sp.) *obsoleto* [ps] 'obsolete' (Colina 2006: 188)
(Fr.) *médecin* [ts] 'physician' (Snoeren et al. 2006: 243)

1. Romance in Laryngeal Realism
1.2 Regressive Voice Assimilation (RVA)

▶ Romance examples for RVA:

c) Sandhi voicing by RVA

(Cat.) *cap dau* [bd] 'no dice' (Recasens 2014: 165)
(Cat.) *gos bo* [zβ] 'good dog' (Recasens 2014: 165)
(Rom.) *aş vrea* [ʒv] 'I would like' (Wetzels & Mascaró 2001: 220)

d) Sandhi devoicing by RVA

(Fr.) *robe sale* [ps] 'dirty dress' (Snoeren et al. 2006: 243)
(Port.) *dez patos* [ʃp] 'ten ducks' (Mateus & D'Andrade 2000: 145)

1. Romance in Laryngeal Realism
1.3 The case of Italian

▶ In Italian phonotactics /sC/ is the only obstruent cluster (Krämer 2009, etc.)

▶ /s/ undergoes a voicing process before voiced C: *preconsonantal s-voicing*

▶ The literature treats it as a form of RVA (Nespor 1993: 74–76; Bertinetto 1999: 271; Bertinetto & Loporcaro 2005: 134; Krämer 2009: 209; etc.)

a. /s/+voiceless obstr.	b. /s/+voiced obstr.	c. /s/+sonorant
[sp]*aro* 'gunshot'	[zb]*arra* 'barrier'	[zm]*ettere* 'to stop'
pa[st]*a* 'pasta'	[zd]*egno* 'disdain'	[zn]*ello* 'thin'
a[sk]*oltare* 'to listen'	[zg]*abello* 'footstool'	[zl]*itta* 'sled'
[sf]*era* 'sphere'	[zv]*eglia* 'alarm clock'	[zr]*otolare* 'to unroll'

2. RVA vs. It. preconsonantal s-voicing

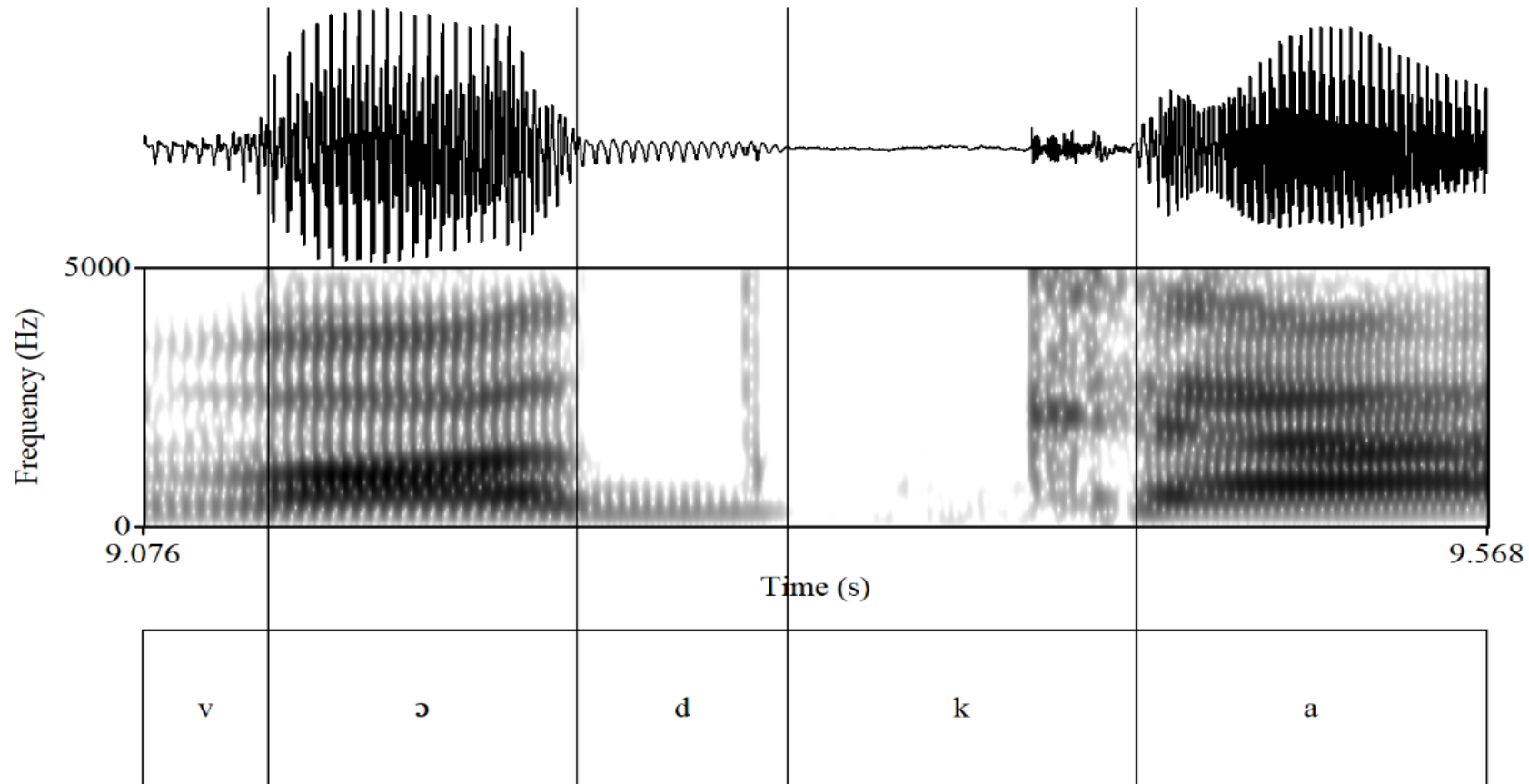|	RVA	Preconsonantal s-voicing
Input:	Any obstruent	Only sibilant fricatives
Trigger:	Segments with distinctive voice (obstruents)	Voiced consonantal segments (even sonorants and glides)
Domain:	The utterance (postlexical)	The phonological word (lexical)
Occurrence:	Obligatory	Optional (except word-initially)

2. RVA vs. It. preconsonantal s-voicing
2.1 The input

- Only sibilant fricatives may undergo voicing

- Mostly /s/ and palatalised sibilants in regional accents, e.g. (Central-Southern Italian) *sbirro* [ʒb] 'policeman', *sviluppo* [ʒv] 'development', *asma* [ʒm] 'asthma', etc. (Huszthy 2017: 197)

- Moreover, /ʃ/ in loanwords of Standard Italian, e.g. *kalashnikov* [ʒn], *krishna* [ʒn], etc. (Huszthy 2019: 104)

- In non-/sC/ obstruent clusters RVA does not take place, e.g. *afgano* 'Afghan', *substrato* 'substrate', *abside* 'apse', *feldspato* 'feldspar' and *tungsteno* 'tungsten' (Muljačić 1972: 91)

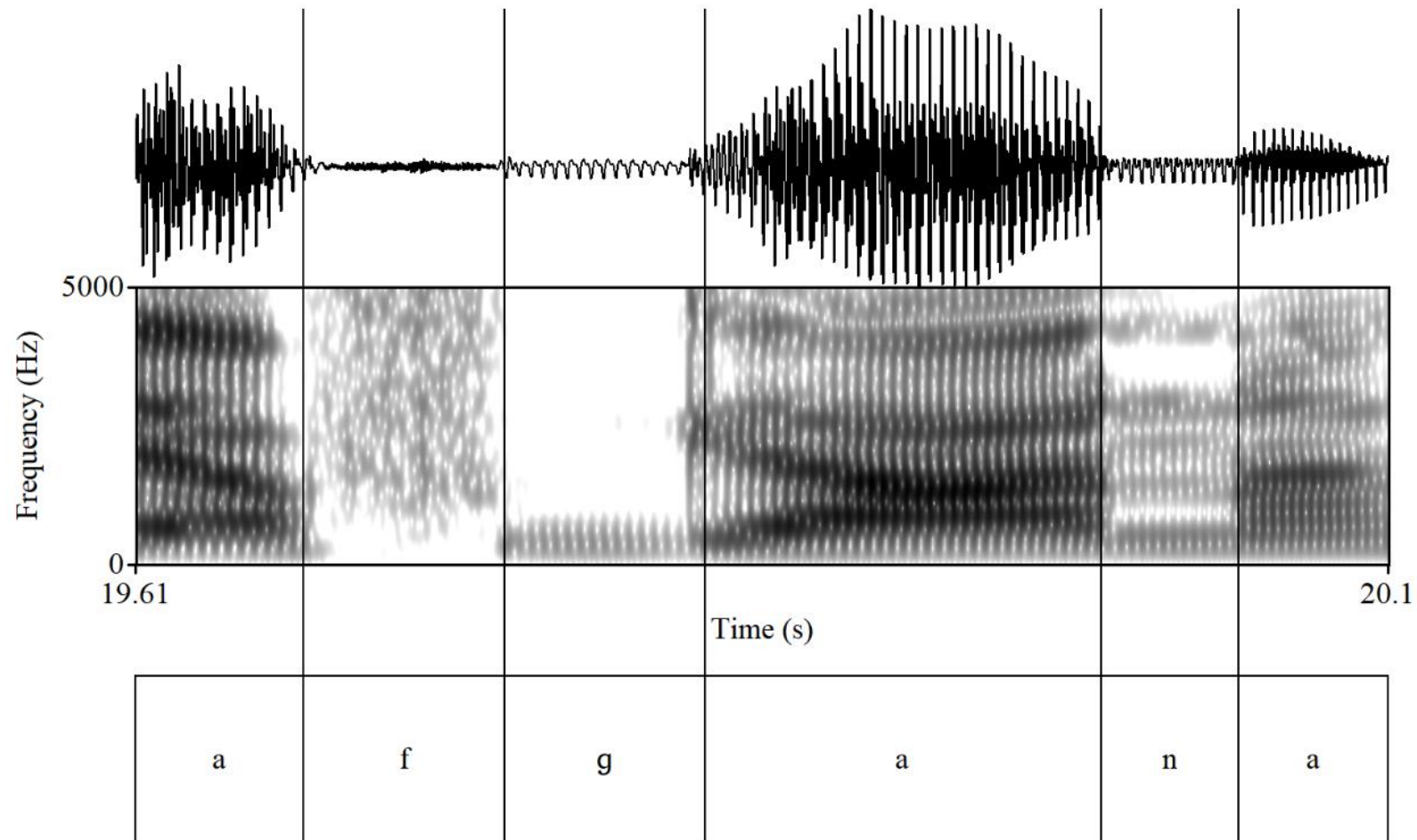- Huszthy (2019) aims to definitely point out that Italians do not apply RVA in loanwords or in their foreign accent

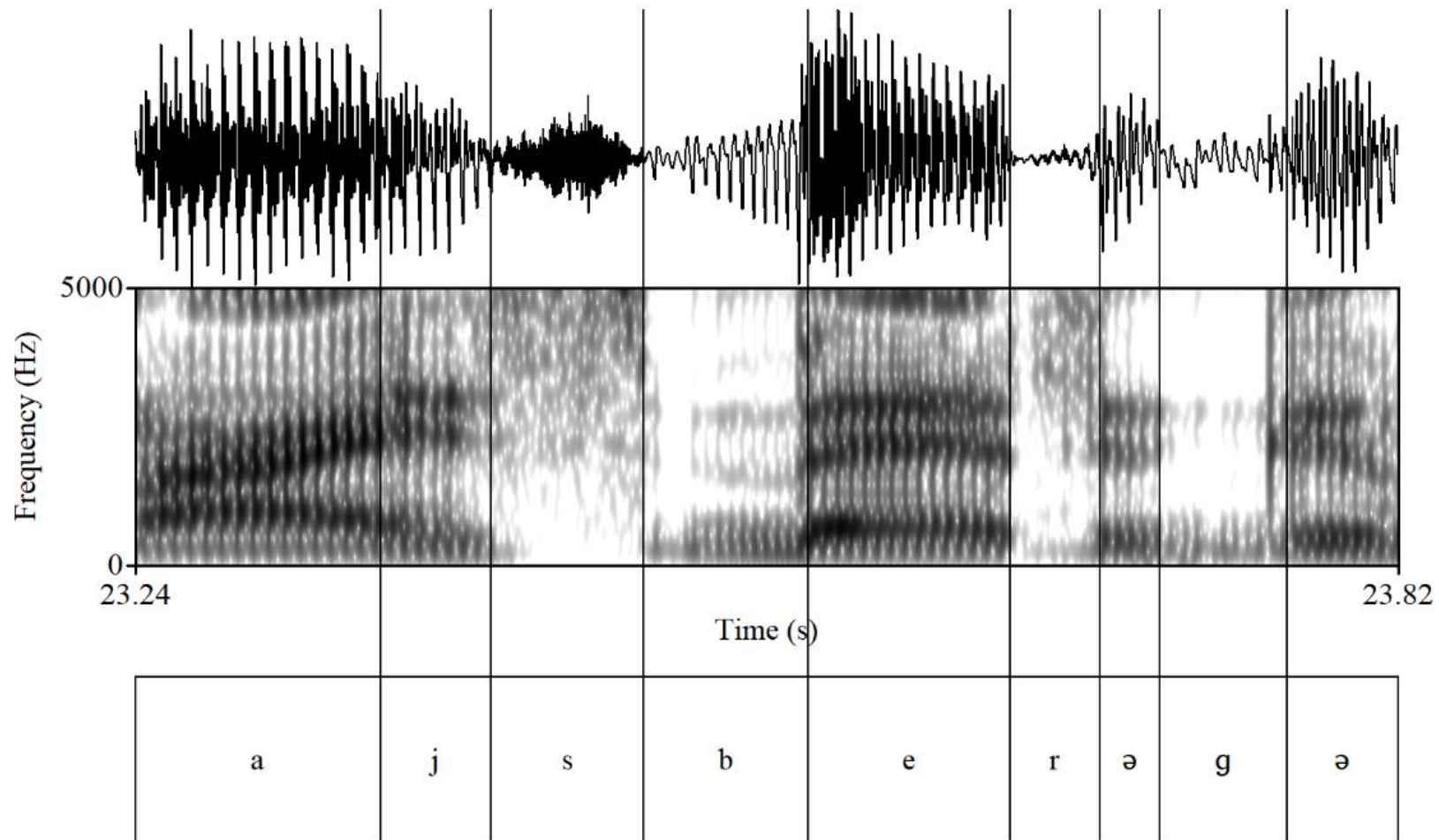# 2. RVA vs. lt. preconsonantal s-voicing
2.1 The input

2. RVA vs. It. preconsonantal s-voicing
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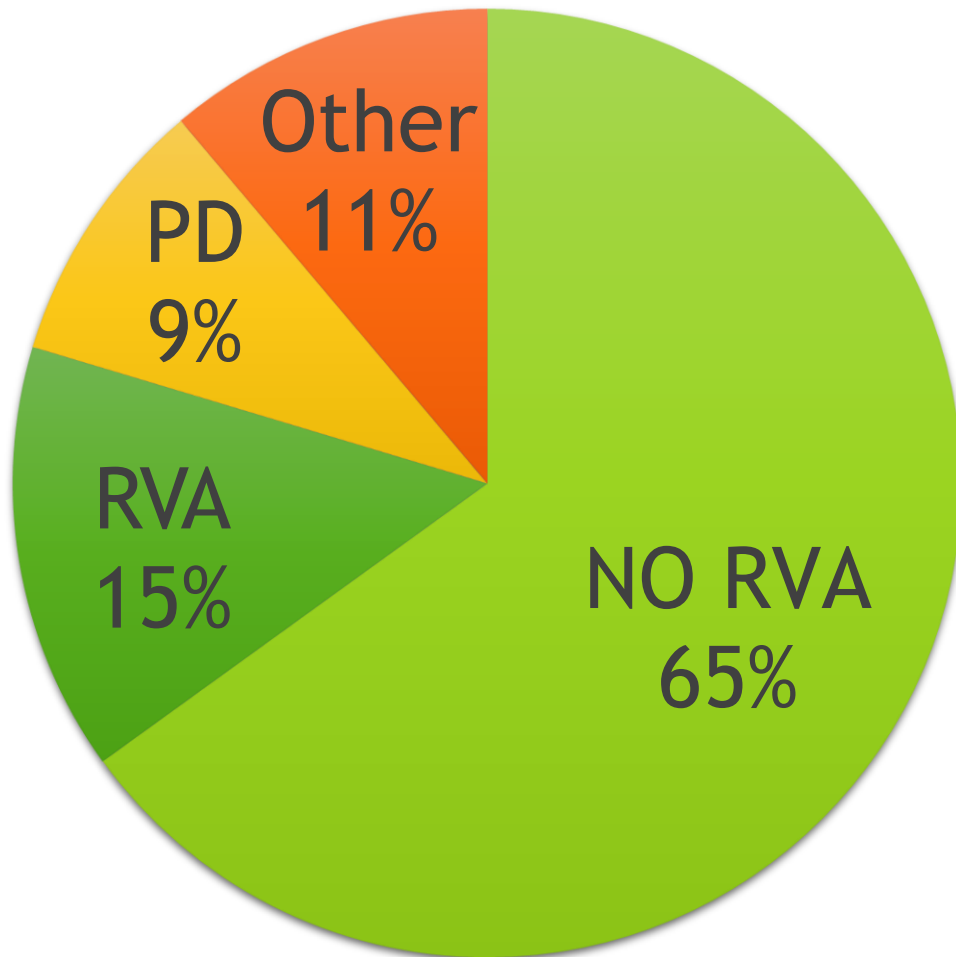
2. RVA vs. It. preconsonantal s-voicing
2.1 The input

Cluster type	Target word	Most typical realisation
DT	*sudcoreano* 'South Korean' *subcultura* 'subculture' *ragtime* *Südtirol* 'South Tyrol'	[sudkoreˈaːno] [subkulˈtuːra] [regˈtajmə] [sudtiˈrɔlːə]
TD	*McDonald's* *upgrade* *football* *Sampdoria*	[mekˈdɔˑnald] [apˈgrejdə] [ˈfutbalːə] [sampˈdɔːrja]
C + fricative fricative + C	*gangster* *abside* 'apse' *Afganistan* 'Afghanistan' *sovkhoz*	[ˈgaˑŋgster] [ˈaːbside] [afˑˈgaːnistan] [ˈsɔːvkoʣ̑]
C + affricate	*eczema*	[ekˑˈʣ̑ɛːma]

2. RVA vs. It. preconsonantal s-voicing
2.1 The input

Pie chart: Other 11%, PD 9%, RVA 15%, NO RVA 65%

- 15 Italian speakers
- 19 sample texts
- 51 target words for RVA
- 1685 obstruent clusters
- 1096 No RVA
- 246 RVA
- 155 progressive devoicings (PD)
- 188 other cases (e.g. deletion)

2. RVA vs. It. preconsonantal s-voicing
2.2 The trigger

▶ RVA may only arise between consonants contrastive for [voice], namely obstruents

▶ In Italian, sibilant fricatives may undergo voicing before any consonantal segment, sonorants and glides included

▶ In Italian we find presonorant voicing, e.g. *a*[z]*ma*, [z]*nob*, etc.

▶ Some phonologists analyse presonorant voicing as basically phonetic (*passive voicing*), and only partly systemic (Cyran 2011, 2012, 2014)

▶ Furthermore, in Italian /s/ often gets voiced before the glide /w/ in loanwords like *sw*imming* [zw], *su*ite* [zw], *sw*ing* [zw], etc. (Huszthy 2019: 104–105)

2. RVA vs. It. preconsonantal s-voicing
2.3 The domain of application

▶ RVA found in voice languages is typically a postlexical process, viz., "it applies across any type of boundary as long as no pause intervenes" (Siptár & Törkenczy 2000: 198)

▶ The domain of application of RVA is the phonological utterance (Nespor & Vogel 1986: 229–230)

▶ Italian preconsonantal s-voicing does not take place at the word boundary, e.g. (It.) *rebus difficilissimo* [sd] 'a very hard riddle', (It.) *autobus bianco* [sb] 'white bus' (Nespor 1993: 74); *lapis blu* [sb] 'blue pencil' (Bertinetto 1999: 271)

▶ Sometimes s-voicing is blocked at morpheme boundaries as well, for instance, at the edge of compound words, e.g. *gasdotto* [sd] 'pipeline' (Bertinetto 1999: 280), *facebook* [sb], *iceberg* [sb] (Huszthy 2019: 99); etc.

2. RVA vs. It. preconsonantal s-voicing
2.4 Occurrence

▶ RVA, being postlexical, is considered obligatory, i.e., exceptionless

▶ Preconsonantal s-voicing is consistent word-initially in Italian; however, it appears to be optional word-internally

▶ E.g., the (Eng.) loanword *slash* is regularly pronounced by Italians with [z], but in the compound word *backslash* the voicing process in the same cluster is optional

▶ s-voicing is optional in new loanwords as well, like in *iceberg* [sb]/[zb], *facebook* [sb]/[zb], *frisbee* [sb]/[zb], *baseball* [sb]/[zb], etc. (Huszthy 2019)

▶ In conclusion, preconsonantal s-voicing seems a tendency rather than a "rule" in the synchronic phonology of Italian

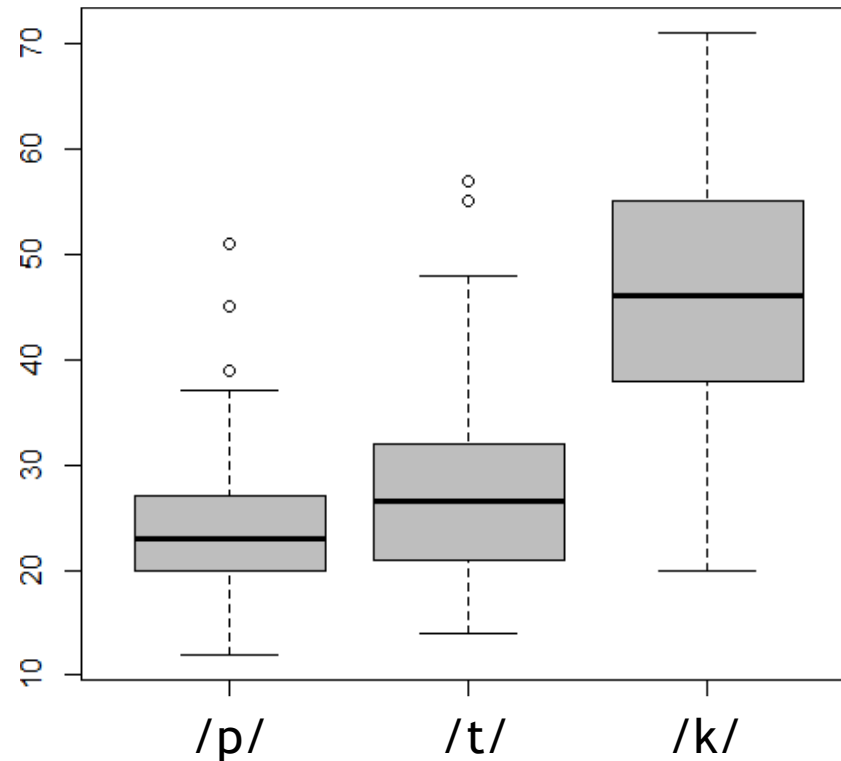# 3. Synchronic Italian laryngeal phonology
3.1. General symptoms

▶ Prevoiced initial lenis stops [b, d, g]
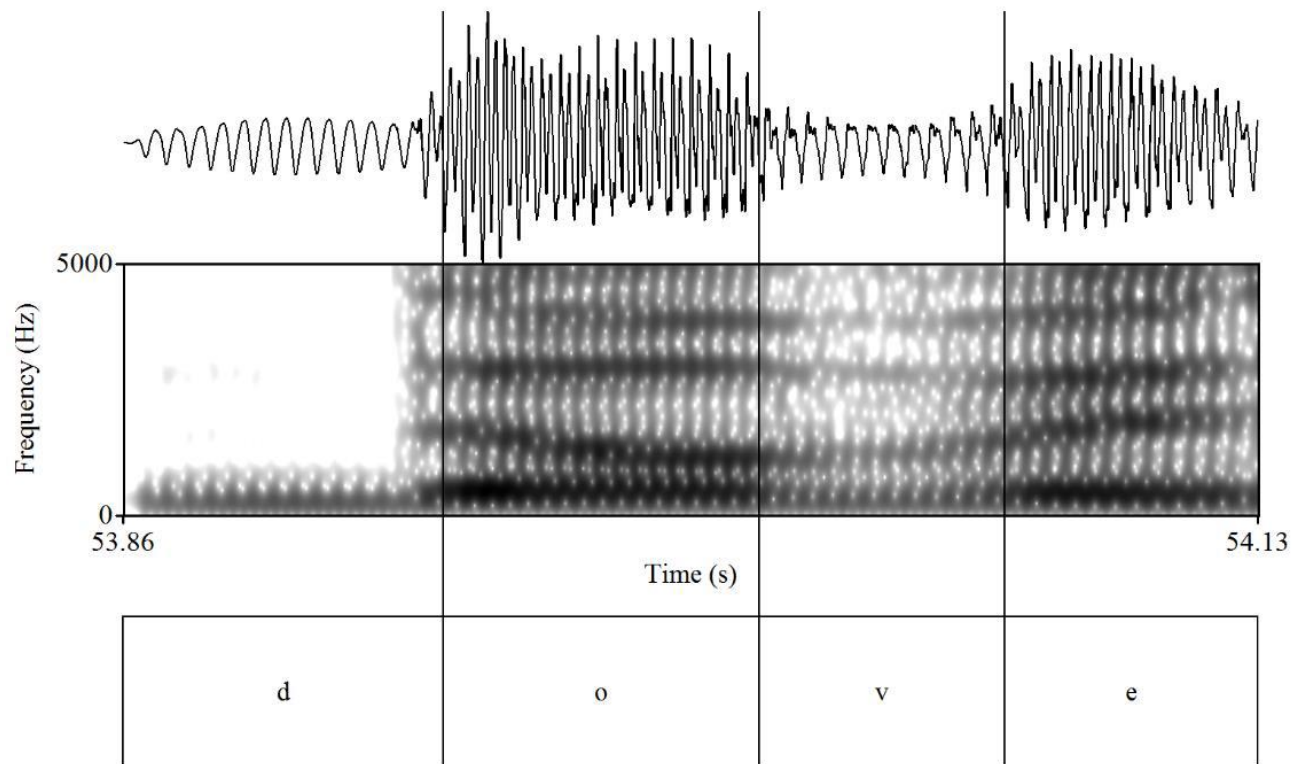
3. Synchronic Italian laryngeal phonology
3.1. General symptoms

▶ Prevoiced initial lenis stops [b, d, g]

▶ Mildly aspirated initial fortis stops (Huszthy 2019)

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▶ Phonological opposition upon the [voice] feature

Contrastive obstruents	Minimal pairs illustrating Italian obstruent voice-oppositions
/b/~/p/	a) *balla* [ˈbalːa] 'to dance, 3sg' vs. *palla* [ˈpalːa] 'ball'
/d/~/t/	c) *denti* [ˈdɛnti] 'tooth, pl.' vs. *tenti* [ˈtɛnti] 'to attempt, 2sg'
/g/~/k/	e) *gara* [ˈgaːra] 'race' vs. *cara* [ˈkaːra] 'dear, fem.'
/dʒ/~/tʃ/	g) *giro* [ˈdʒiːro] 'turn' vs. *Ciro* [ˈtʃiːro] 'first name'
/v/~/f/	i) *vede* [ˈveːde] 'to see, 3sg' vs. *fede* [ˈfeːde] 'faith'

3. Synchronic Italian laryngeal phonology
3.1. General symptoms

- Prevoiced initial lenis stops [b, d, g]

- Mildly aspirated initial fortis stops (Huszthy 2019)

- Phonological opposition upon the [voice] feature

- The lack of RVA in non-/sC/ obstruent clusters (no true laryngeal activity)

- Morphologically conditioned optional voicing in /sC/ clusters

3. Synchronic Italian laryngeal phonology
3.2. Discussion

▶ Cyran's Laryngeal Relativism: "Sufficient discriminability" in production and perception is a major driving force in the phonetic implementation of phonological contrasts (Cyran 2011, 2014, 2017)

▶ "Swedish goes for maximal dispersion rather than for sufficient phonetic distance" (Cyran 2017: 502)

▶ Italian: the phonetic distance between lenis and fortis is more than sufficient, but not as extreme as in Swedish

▶ Three subtypes **L** in the marked series of obstruents (e.g. voice languages); **h-systems**: the absence of a source element (e.g. aspiration languages); **H** in the marked series of obstruents (e.g. Cracow Polish) of binary laryngeal systems

▶ This three-way typology, combined with Cyran's "sufficient discriminability", accommodates Italian and Swedish as h-languages

Conclusion

▶ Italian exhibits substantial voicing in lenis obstruents

▶ The fortis set is basically voiceless mildly aspirated

▶ No true laryngeal activity is detected (RVA)

▶ The "devoicing processes" (PD, RVA in DT-clusters) are not processes, since the voiceless forms are not derived but underlying

▶ Actually, Italian is a kind of Swedish

Thank you for your kind attention!

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