

# Phonetik und Phonologie der slavischen Sprachen

Wintersemester 2025/2026

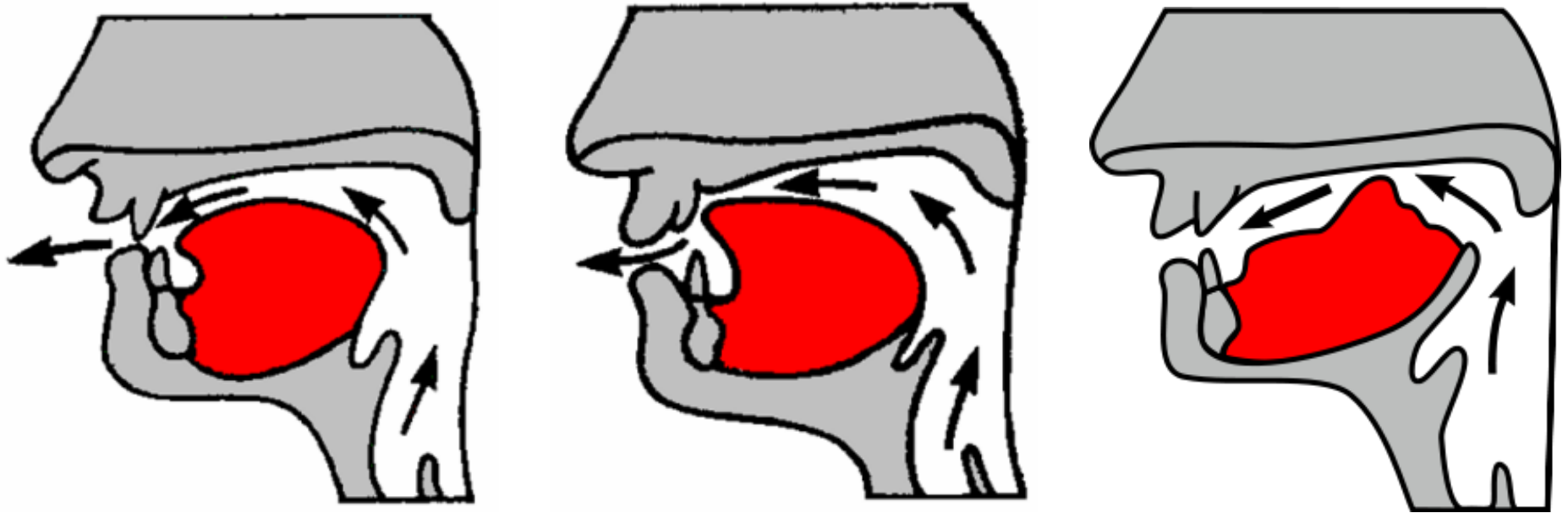


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# Frikative: Artikulation



labio-dental

alveolar

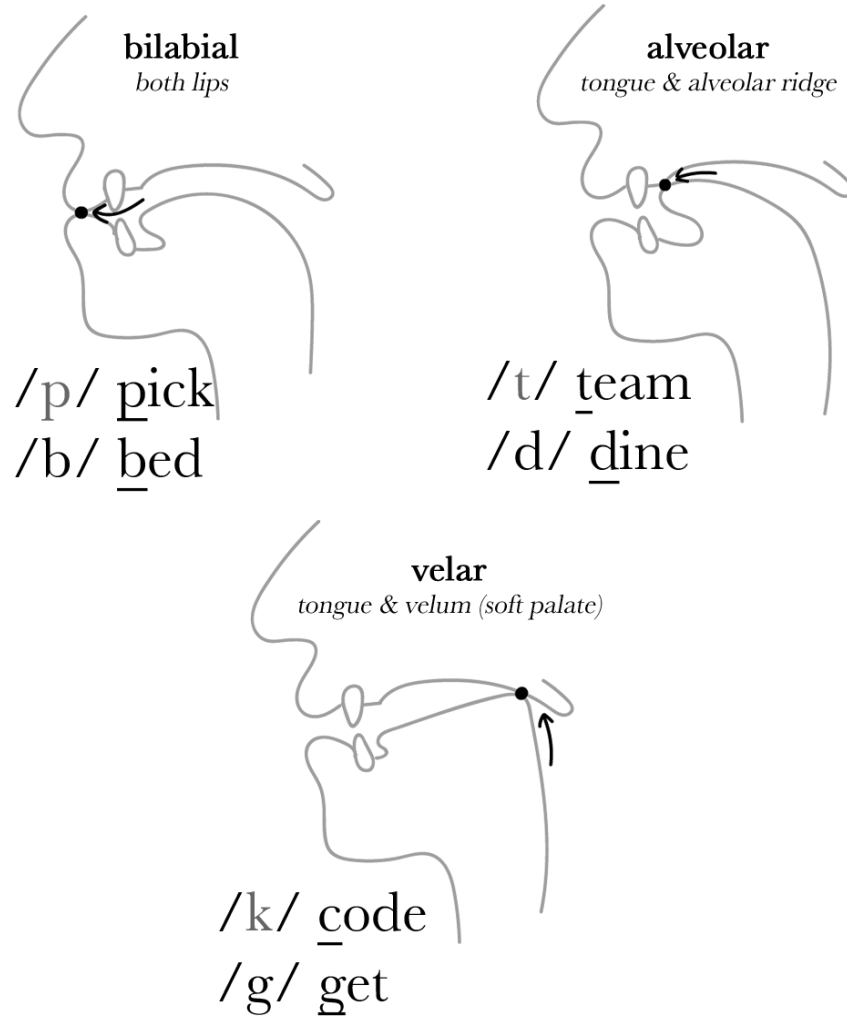
palatal

<https://de.wikipedia.org/w/index.php?curid=610182>, I. Giel, CC BY-SA 3.0

<https://commons.wikimedia.org/w/index.php?curid=2080344>, I. Giel, CC BY-SA 3.0

<https://commons.wikimedia.org/w/index.php?curid=5017489>. Roland Geider

# Plosive: Artikulation



# Stimmhaftigkeit: Akustik

- *im Oszillogramm: Periodizität und hohe Amplitude*
- *im Spektrogramm: voice bar (bei Vokalen: Formanten)*

# Frikative: Akustik

## ➤ Quelle:

- Enge im Artikulationstrakt (bei /h/ - glottal)  
(+ Glottis bei stimmhaften Frikativen)
- evtl. weiteres Hindernis im Artikulationstrakt  
(Zähne bei Sibilanten)

## ➤ Filter:

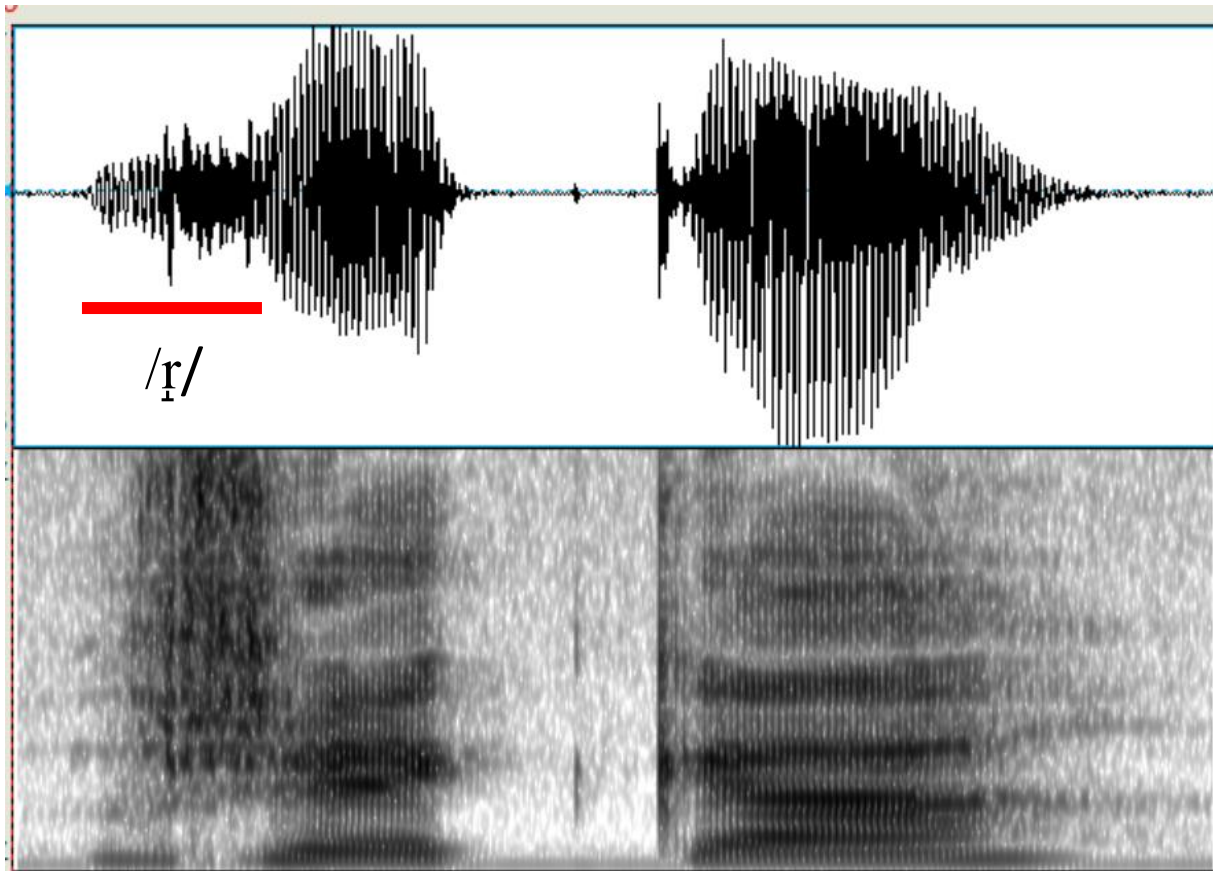
- zwischen der Artikulationsstelle und Mundöffnung  
(bei /h/ das gesamte Ansatzrohr)
- je weiter hinten die Artikulationsstelle (je näher an der Glottis, desto tiefer der Frequenzschwerpunkt und desto strukturierter das Spektrum)

Phonetisch stellt /ɾ/ eine Phase von Reibung dar, die am Anfang durch einen oder mehrere Kontakte unterbrochen wird, die durch eine zurückgezogene apikoalveolare Geste erzeugt werden.

Howson u. a. (2014): stimmhafte Behauchung während der Artikulation des [r]

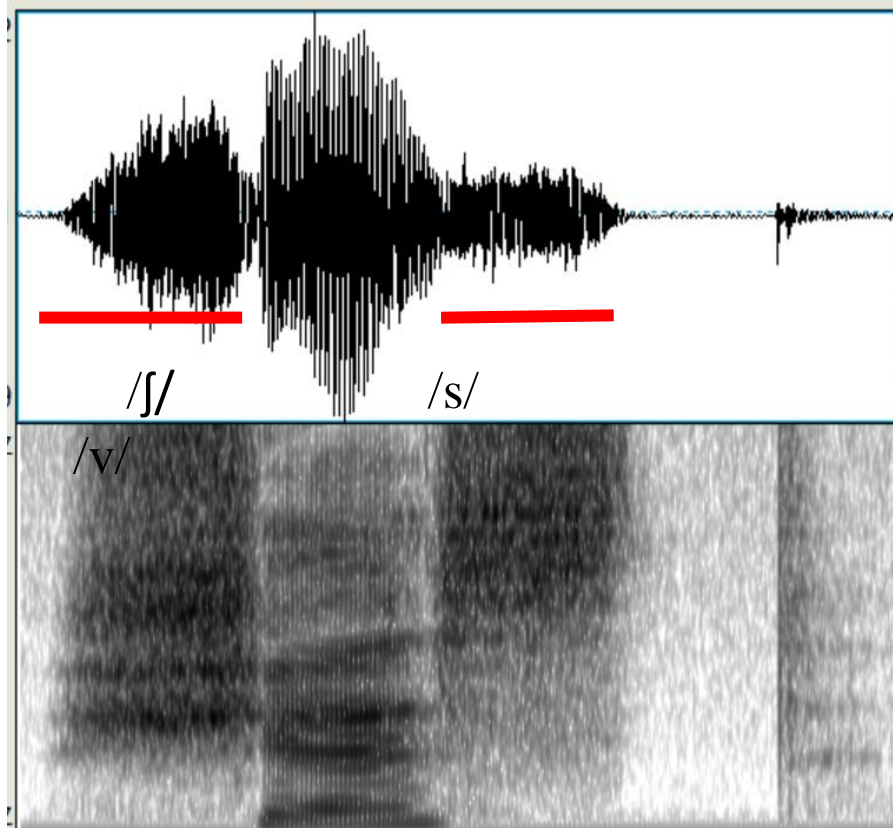


/ɾeka/ - Fluss

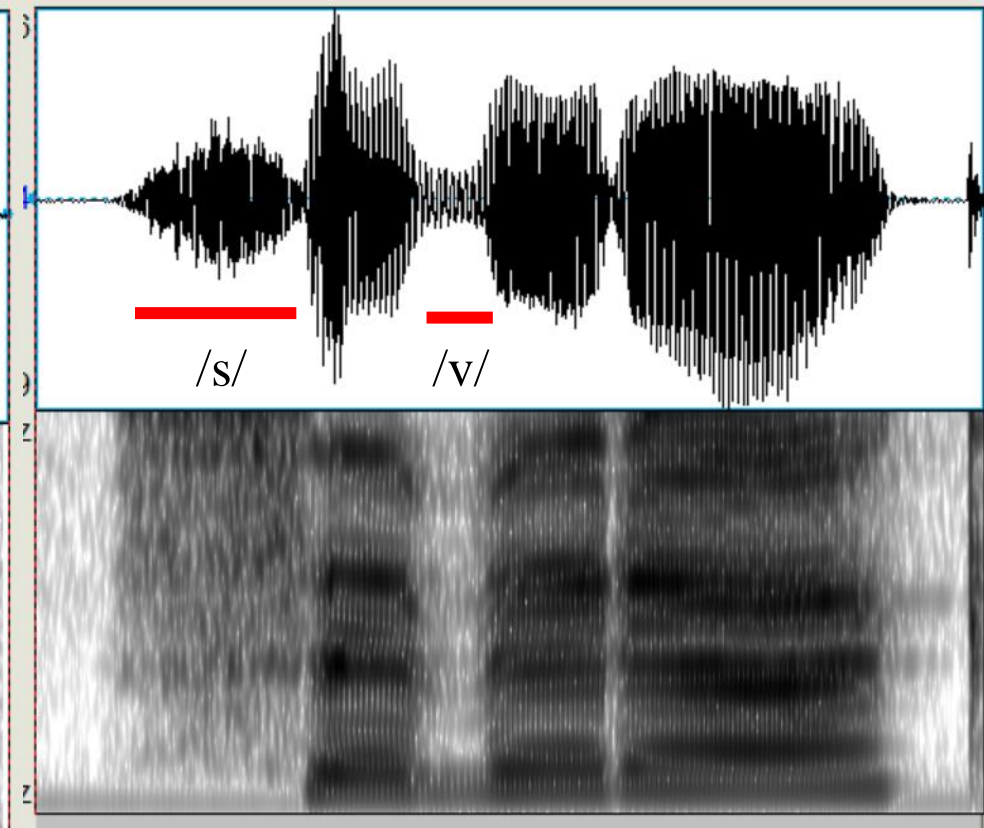


*Tschechisch*

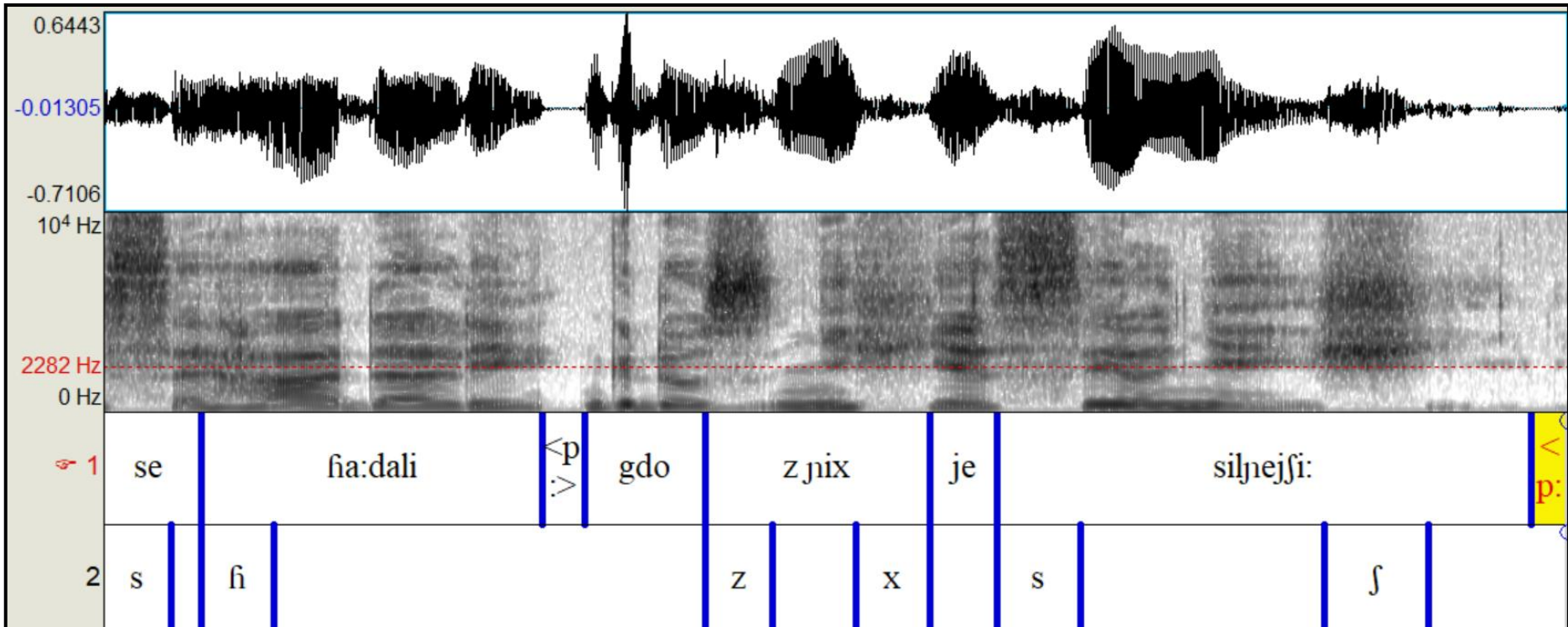
🔊 /ʃest/ - sechs



🔊 /severa:k/ - der Nordwind



*Tschechisch*



*Tschechisch*



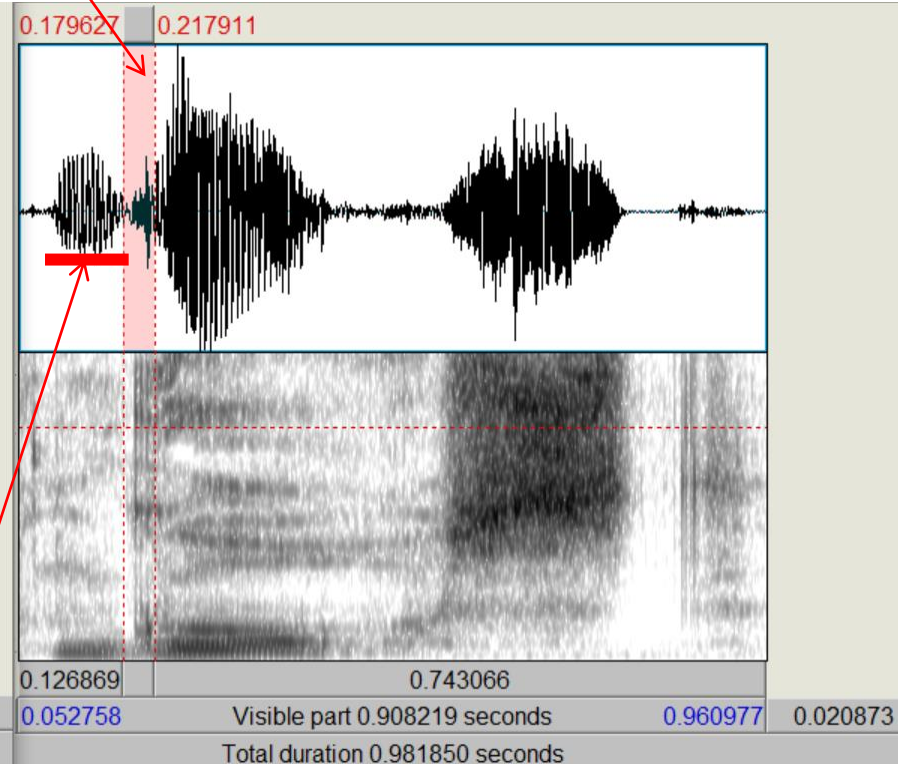
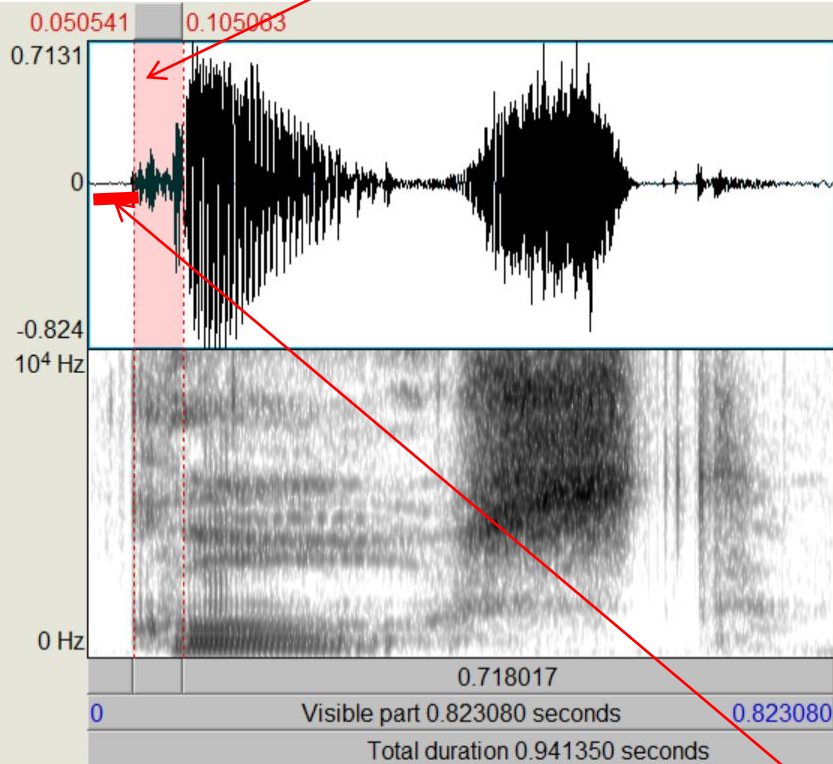
# Plosive: Akustik

- Quelle:
  - Verschlusslösung (Burst-Impuls) und evtl. Glottisschwingung bei stimmhaften Plosiven
- Filter:
  - je nach Artikulationsstelle Mundraum vom Verschluss zu Mundöffnung

# Voice onset time (VOT)

🔊 /kô:st/ - Knochen

🔊 /gô:st/ - Gast



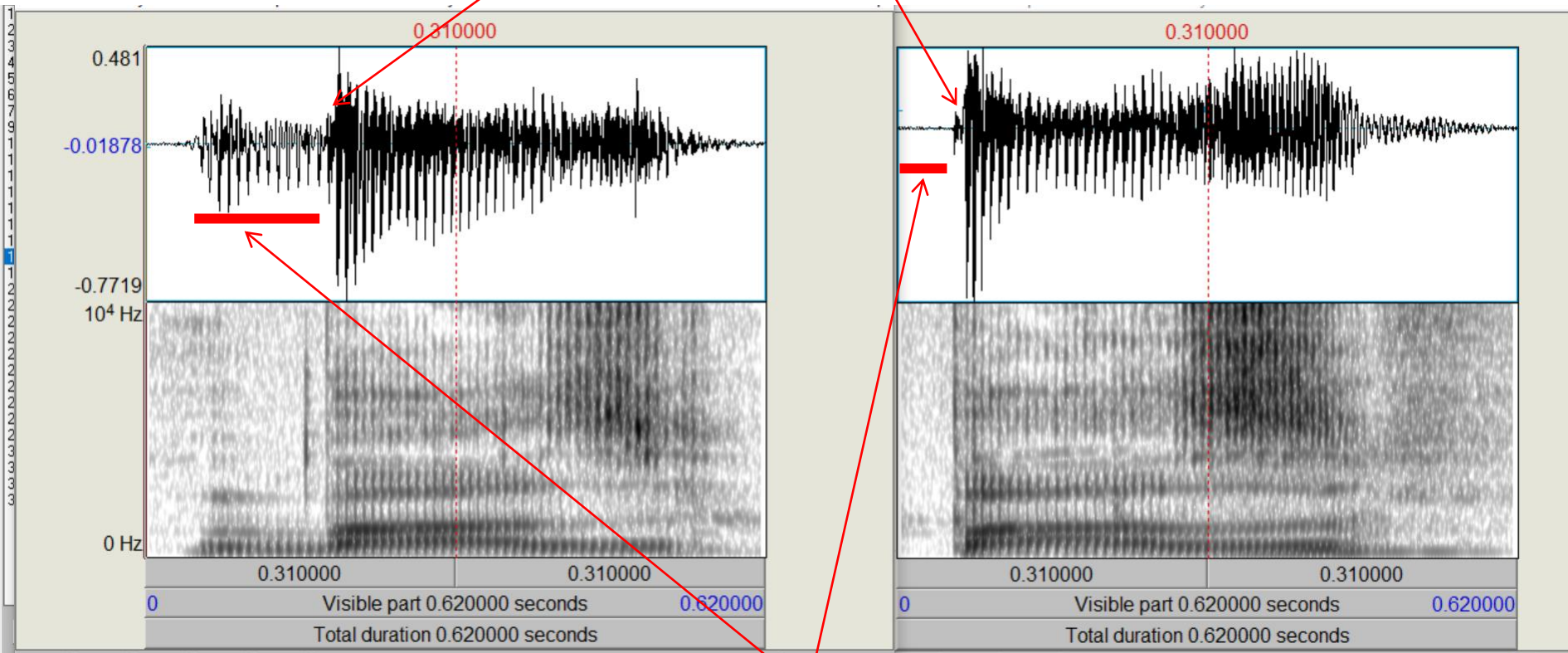
Verschluss

*Kroatisch*

# Voice onset time (VOT)

 /baz/ - Basen (Gen. Pl.)

 /paz/ - Joint



Verschluss

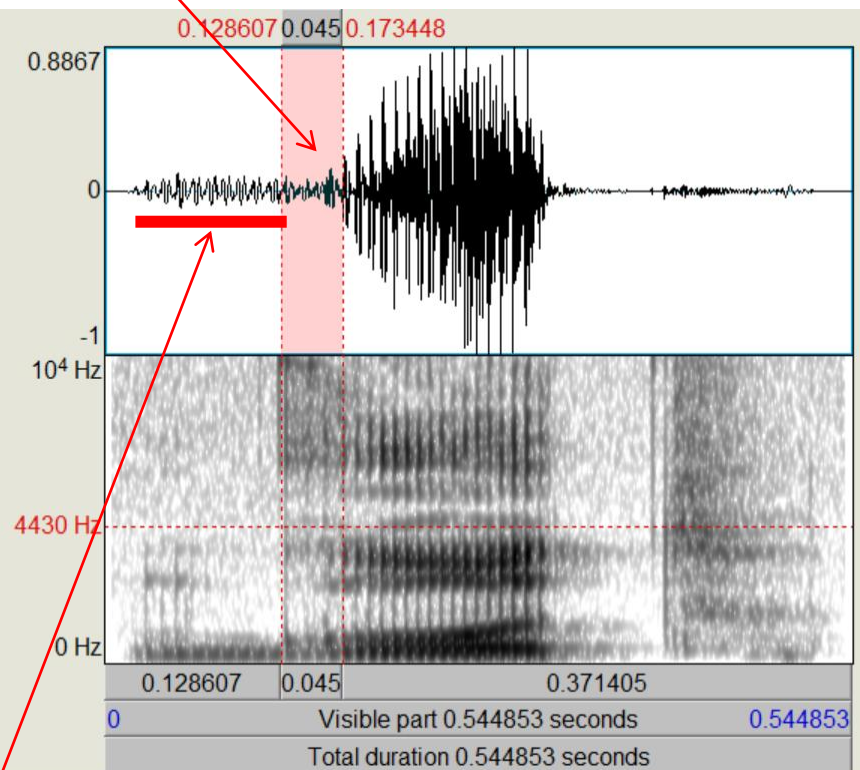
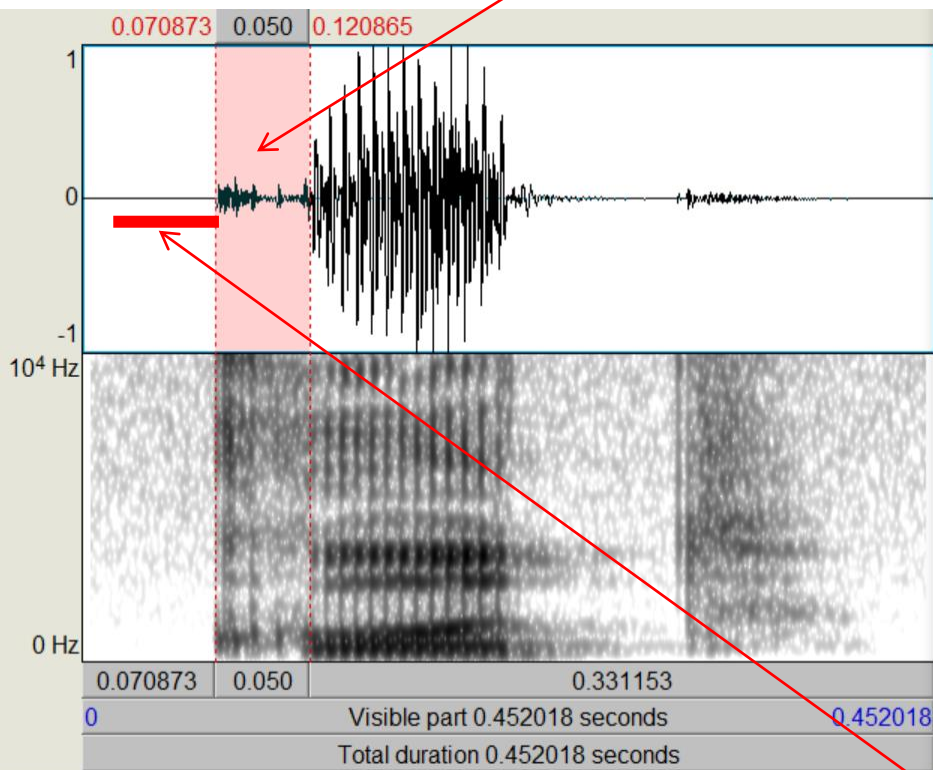
# Voice onset time (VOT)



/kot/ - Katze (кот)



/got/ - Jahr (год)



Verschluss

*Russisch*

Russisch:

[ k o t ]

[ g o t ]

Verschluss-  
lösung

Mund

Stimmeinsatz  
VOT

Glottis

xxxxxxxxxxxxxxxx

Deutsch:

[ k<sup>h</sup> u: ]

[ g u: t ]

Verschluss-  
lösung

Mund

Stimmeinsatz  
VOT

Glottis

xxxxx

xxxxxxxxxx

Zeit	→			
Verschlußlösung				
Stimmeinsatz				
Stimmhaftigkeit	voll stimmhaft	teilweise stimmhaft	stimmlos unaspiriert	stimmlos aspiriert
bilabiales Beispiel	b	<u>b</u>	p	p <sup>h</sup>

[https://www.christianlehmann.eu/ling/lg\\_system/phon/06\\_konsonanten.php](https://www.christianlehmann.eu/ling/lg_system/phon/06_konsonanten.php)

	lenis	fortis
Slavisch	[+stimmhaft] [-aspiriert]	[-stimmhaft] [-aspiriert]
Deutsch	[-stimmhaft] [-aspiriert]	[-stimmhaft] [+aspiriert]

Table 3.8. *Slavic consonant phonemes*

	Labial		Dental		Post-Alveolar	Alveolo-Palatal	Palatal	Velar/Uvular	Glottal
Stop	p	p'	t	t'			t'	k'	[ʔ]
	b	b'	d	d'			d'	g'	
Nasal	m	m'	n	n'			n'	[ŋ]	
Fricative	f	f'	s	s'	š	š'	ś	x	
	v	v'	z	z'	ž	ž'	ź	ɣ	h
(or Semivowels)	w	w' [ɯ]					j	[i]	
Affricate			c	c'	č	č'	ć		
			dʒ	dʒ'	dž	dž'	dź		
Liquid			r	r'	ř		r'	[ɣʲ]	
			l	l'	[ř̥]		l'		

Table 3.9. *Consonant phonemes common to all Slavic languages*

	Labial	Dental/Alveolar	Post-Alveolar	Palatal	Velar	Glottal
Stops	p b	t d			k (g)	
Nasals	m	n				
Fricatives	(v) (w)	s z	š ž	j	x (ɣ)	(h)
Affricates		c	č			
Liquids		r l				



# Russisch:



a'dnazdʲi 'sʲevʲirnʲi 'vʲetʲir i 'sontsɨ pa'sporʲilʲi | 'kto izʲ 'nʲix sʲi'lʲnʲeji || kak 'ras 'vʲeta  
'vrʲemʲa | a'nʲi za'mʲetʲilʲi za'kutanava 'f\_plaʃʲ: 'putʲnʲika | ka'torʲi 'ʃol pa da'rogʲi | i rʲi'ʃɨlʲi |  
'ʃto 'tot izʲ 'nʲix 'budʲit ʃ'i'tatʲsa 'samim 'sʲilʲnim | ka'mu 'ranʲʃi u'dastʲsa za'stavʲitʲ 'putʲnʲika  
'sʲnʲatʲ 'plaʃʲ: || 'tut 'sʲevʲirnʲi 'vʲetʲir 'prʲinʲilsʲa 'dutʲ izʲa 'fsʲex 'sʲil || 'no 'tʃʲem sʲi'lʲnʲeji  
'on 'dul | 'tʲem sʲi'lʲnʲeji 'kutalsʲa 'putʲnʲik 'f\_svoj 'plaʃʲ: || 'tak 'ʃto f\_kan'tse kan'tsof  
| 'sʲevʲirnʲi 'vʲetʲir 'dolʒin 'bɨl atka'zatʲsa at sva'jej za'tʲeji || ta'gda zasʲi'jala 'solnʲʃka  
|| 'putʲnʲik panʲi'mnogu ata'grʲelsʲa | i 'fskorʲi 'sʲnʲal 'svoj 'plaʃʲ: || ta'kim 'obrazam |  
'sʲevʲirnʲi 'vʲetʲir 'vinuzdʲin 'bɨl prʲi'znatʲ | 'ʃto 'sontsɨ sʲi'lʲnʲeji ji'vo

Yanushevskaya, I., & Bunčić, D. (2015). Russian. *Journal of the International Phonetic Association*, 45(2), 221-228.  
doi:10.1017/S0025100314000395



# Russisch:

p	/ˈpalʲtɕi/	<i>pal'cy</i>	‘fingers’	r	/ˈrat/	<i>rad</i>	‘(am etc.) glad’
pʲ	/ˈpʲalʲtɕi/	<i>pjal'cy</i>	‘embroidery hoop’	rʲ	/ˈrʲat/	<i>rjad</i>	‘row’
b	/ˈbas/	<i>bas</i>	‘bass’	s	/ˈsat/	<i>sad</i>	‘garden’
bʲ	/ˈbʲasʲ/	<i>bjaz’</i>	‘calico’	sʲ	/ˈsʲatʲ/	<i>sjad’</i>	‘sit’ (imperative)
m	/ˈmala/	<i>malo</i>	‘little, not enough’	z	/ˈzapax/	<i>zapax</i>	‘smell’ (noun)
mʲ	/ˈmʲala/	<i>mjala</i>	‘(she) crumpled’	zʲ	/ˈzʲapkʲij/	<i>zjabkij</i>	‘sensitive to cold’
f	/ˈfota/	<i>foto</i>	‘photo’	ts	/ˈtsarʲ/	<i>car’</i>	‘tzar’
fʲ	/ˈfʲodar/	<i>Fëdor</i>	‘Fëdor’ (name)	tɕʲ	/ˈtɕʲarʲi/	<i>čary</i>	‘charms’
v	/ˈvalʲik/	<i>valik</i>	‘bolster’	ʃʲ:	/ˈʃʲuka/	<i>ščuka</i>	‘pike’
vʲ	/ˈvʲalʲit/	<i>vjalit</i>	‘(s/he) dry-cures’	ʃ	/ˈʃar/	<i>šar</i>	‘ball’
t	/ˈtapka/	<i>tapka</i>	‘slipper’	ʒ	/ˈʒar/	<i>žar</i>	‘heat’
tʲ	/ˈtʲapka/	<i>tjapka</i>	‘chopper’ (tool)	j	/ˈjama/	<i>jama</i>	‘pit’
d	/ˈdom/	<i>dom</i>	‘house’	k	/ˈkot/	<i>kot</i>	‘tomcat’
dʲ	/ˈdʲorn/	<i>dërn</i>	‘turf’	kʲ	/ˈtkʲot/	<i>tkët</i>	‘(s/he) weaves’
n	/ˈnos/	<i>nos</i>	‘nose’	g	/ˈgot/	<i>god</i>	‘year’
nʲ	/ˈnʲos/	<i>nës</i>	‘(he) carried’	gʲ	/ˈgʲote/	<i>Gëte</i>	‘Goethe’
l	/ˈlot/	<i>lot</i>	‘plummet’	x	/ˈxunta/	<i>xunta</i>	‘junta’
lʲ	/ˈlʲot/	<i>lëd</i>	‘ice’	xʲ	/ˈxʲubner/	<i>Xjubner</i>	‘Hübner’ (name)

# Russisch:

	Bilabial	Labiodental	Dental/ Alveolar	Post- alveolar	Palatal	Velar
Plosive	p b p <sup>j</sup> b <sup>j</sup>		t d t <sup>j</sup> d <sup>j</sup>			k g k <sup>j</sup> g <sup>j</sup>
Affricate			ts	tʃ		
Nasal	m m <sup>j</sup>		n n <sup>j</sup>			
Trill			r r <sup>j</sup>			
Fricative		f v f <sup>j</sup> v <sup>j</sup>	s z s <sup>j</sup> z <sup>j</sup>	ʃ ʒ ʃ <sup>j</sup> ʒ <sup>j</sup>		x x <sup>j</sup>
Approximant					j	
Lateral approximant			l l <sup>j</sup>			

# Ukrainisch:



ɔd'nɔɦɔ 'razu | pɔspere'tʃalisʲa 'sɔntɕe i piv'nʲitʃniɯ̌ 'viter 's\_priʋɔdu 'tɔɦɔ | 'xtɔ  
z nix 'duɔx sil'nʲisʲiɯ̌ || aʒ 'raptɔm ʋɔ'ni | pɔ'mitɨli mandr'ivni'ka | ja'kiɯ̌ 'same  
prɔ'xɔdiʋ pɔʋz nix | 'kutajutʃisʲ u palʲ'tɔ || ɔ'bidʋa dʲii'ʃli 'spil'noʒi 'dumki |  
ʃtʃɔ 'tɔɯ̌ 'bude 'viznaniɯ̌ sil'nʲisʲim | 'xtɔ 'vimusɨtʲ mandr'ivni'ka 'znʲatɨ ʋɔ'je  
palʲ'tɔ || piv'nʲitʃniɯ̌ 'viter duʋ z usi'jeʒi 'sɨli | a'le tʃim 'duʒtʃe vin duʋ |  
tim ʃtʃilʲniʃe 'kutaʋsʲa mandr'iv'nik u ʋɔ'je palʲ'tɔ || 'ʋreʃtʲi 'reʃt piv'nʲitʃniɯ̌  
'viter pere'staʋ bɔ'rɔtɨsʲa || i 'tut 'sɔntɕe zʲih'rʲilɔ pɔ'vitrʲa ʋɔ'jimi pri'vitnɨmi  
'prɔmenʲami | i ʋʒe 'tʃereʒ 'deki'l'ka xʋ'lɨn | mandr'iv'nik znʲaʋ ʋɔ'je palʲ'tɔ  
|| ɔ'tɔʒ | piv'nʲitʃniɯ̌ 'viter 'vimuʒeniɯ̌ 'buʋ 'viznatɨ | ʒtʃɔ 'sɔntɕe s 'pɔmɨʒ nix  
'duɔx | bu'ɭɔ sil'nʲisʲim

Pompino-Marschall, B., Steriopolo, E., & Żygis, M. (2017).

Ukrainian. *Journal of the International Phonetic Association*, 47(3), 349-357. doi:10.1017/S0025100316000372

p	paz	паз	paz	'joint'
(p <sup>l</sup> )	p <sup>h</sup> iŋ	пів	piv	'half'
b	baz	баз	baz	'base (GEN.PL)'
(b <sup>l</sup> )	'b <sup>h</sup> iŋi	білий	bilyj	'white (MASC)'
t	tam	там	tam	'there'
t <sup>l</sup>	t <sup>h</sup> am	тям	tjam	'keep (IMP)'
d	ɬad	лад	lad	'harmony'
d <sup>l</sup>	ɬad <sup>h</sup>	ладь	lad <sup>h</sup>	'manage (IMP)'
k	kəɬ	кол	kol	'stake'
(k <sup>l</sup> )	k <sup>h</sup> in <sup>l</sup>	кінь	kin <sup>h</sup>	'horse'
g	geḏz <sup>l</sup>	гедзь	gedz <sup>h</sup>	'horsefly'
(g <sup>l</sup> )	g <sup>h</sup> il <sup>h</sup> ɔ'tina	гільотина	gil <sup>h</sup> otyna	'guillotine'
m	mau	мав	mav	'had'
(m <sup>l</sup> )	m <sup>h</sup> au	мяу	mjau	'miaow'
n	stan	стан	stan	'state'
n <sup>l</sup>	stan <sup>h</sup>	стань	stan <sup>h</sup>	'become (IMP)'
f	'faza	фаза	faza	'phase'
(f <sup>l</sup> )	'fikus	фікус	fikus	'figus' (tree)
s	ris	рис	rys	'rice'
s <sup>l</sup>	ris <sup>h</sup>	рись	rys <sup>h</sup>	'lynx'
z	perε'taz	перелаз	perelaz	'stile'
z <sup>l</sup>	perε'taz <sup>h</sup>	перелазь	perelaz <sup>h</sup>	'climb over (IMP)'
ʃ	ʃar	шар	šar	'globe'
(ʃ <sup>l</sup> )	p <sup>h</sup> i'd:aʃ:a	піддашся	piddaššja	'bulkhead'
ʒ	ʒar	жар	žar	'glow (N)'
(ʒ <sup>l</sup> )	'pɔdɔrɔʒ'i	подорожі	podoroži	'journeys'
x	xaj	хай	xaj	'let (OPTATIVE PARTICLE)'
(x <sup>l</sup> )	x <sup>h</sup> id	хід	xid	'pace'
h	haj	гай	haj	'bosk'
(h <sup>l</sup> )	h <sup>h</sup> is <sup>h</sup> t <sup>h</sup>	гість	hist <sup>h</sup>	'guest'
ts	tsɛp	цеп	cep	'chain'
ts <sup>l</sup>	ts <sup>h</sup> ɔm	цьом	c <sup>h</sup> om	'kiss'
ḏz	'ḏzɔni	дзвони	dzvony	'bells'
ḏz <sup>l</sup>	ḏz <sup>h</sup> ur'tʃatɪ	дзюрчати	dzjurčaty	'to drizzle'
tʃ	tʃɔm	чом	čom	'why'
(tʃ <sup>l</sup> )	'n <sup>h</sup> i'tʃ <sup>h</sup> :u	ніччю	niččju	'nightly'
ḏʒ	su'ḏʒu	суджу	sudžu	'judge (1SG)'
(ḏʒ <sup>l</sup> )	'bḏʒ <sup>h</sup> itka	бджілка	bdžilka	'little bee'
r	rad	рад	rad	'councillor (GEN.PL)'
r <sup>l</sup>	r <sup>h</sup> ad	ряд	rjad	'row'
v	svat	сват	svat	'marriage broker'
(v <sup>l</sup> )	s <sup>h</sup> v <sup>h</sup> at	свят	svjat	'holiday (GEN.PL)'
j	'jiʒa	їжа	jiža	'food'
l	ɬuk	лук	luk	'bow'
l <sup>h</sup>	l <sup>h</sup> uk	люк	ljuk	'hatch'

# Ukrainisch:

		Bilabial	Labio-dental	Dental/-Alveolar	Alveolo-palatal/Post-alveolar	Palatal	Velar	Glottal
Plosive	Plain	p b		t d			k g	
	Palatalized	(pʲ) (bʲ)		tʲ dʲ			(kʲ) (gʲ)	
Nasal	Plain	m		n				
	Palatalized	(mʲ)		nʲ				
Fricative	Plain		f	s z	ʃ ʒ		x	ɦ
	Palatalized		(fʲ)	sʲ zʲ	(ʃʲ) (ʒʲ)		(xʲ)	(ɦʲ)
Affricate	Plain			ts dz	tʃ dʒ			
	Palatalized			tsʲ dzʲ	(tʃʲ) (dʒʲ)			
Trill	Plain			r				
	Palatalized			rʲ				
Approximant	Plain		v					
	Palatalized		(vʲ)			j		
Lateral Approximant	Plain			l				
	Palatalized			lʲ				

*Note:* Palatalized sounds in brackets are the context-dependent allophones of the non-palatalized phonemes (i.e. the so called ‘half-palatalized’ sounds).

# Polnisch:



pe`vnego ɹazu || puw`notsnĩ °vjatr i,swontse || spje>tʃalice || `ktoznix  
jest ɕil,nejʃi || `vwaɕne pʃe°xodziw °drogoŃ jaciɕ >tʃwovjek || ovi`nenti  
°ftɕepwi ɹpwaʃtʃ || `umu ɹilice °vjents || zetenznix °kturi `pjerʃi zmuɕi  
pʃexodzon,tsego || abi`zdjow o`kritɕe || `bendze uva°zani zaɕilnej,ʃego ||  
puw`notsnĩ °vjatr °zatʃow od`razu °doptɕ s`tsawej ɕiwi || aleim`motsnej  
>dow || tim`ɕilnej po°druzni o°tulawɕe ɹpwaʃtʃ || `vrestɕe puw°notsnĩ  
°vjatr daw,spokuj || `ftedi °swontse za`tʃewo pʃi,gzevaɕ, || af'xfile  
'puznej po'druzni zdjow,ɹpwaʃtʃ || 'ften >sposup || puw`notsnĩ °vjatr `muɕaw  
>pʃiznatɕ || ze`swontse jestɕil°nejʃe od, nego

Jassem, W. (2003). Polish. *Journal of the International Phonetic Association*, 33(1), 103-107. doi:10.1017/S0025100303001191

ʧ : ʒ

'ʧina    *sina*    'livid (fem.)'

'zima    *zima*    'winter'

ʧ : k

'ʧelʲna    *kielnia*    'a trowel'

'kelner    *kelner*    'waiter'

ʤ : ʤ

'droʤe    *drogie*    'dear (nom. pl.)'

'droge(ŵ)    *drogę*    'way (acc. sing.)'

S : ʃ : ʧ

'kasa    *kasa*    'cash register'

'kafa    *kasza*    'groats'

'kaça    *Kasia*    'Cate'

ʒ : ʒ : ʒ

zet    *zet*    'letter z'

ʒet    *żet*    'letter ż'

zet    *ziet*    'letter ź'

ts : tʃ : tʧ

'katse    *kace*    'hangovers'

'katʃe    *kacze*    'of ducks' (adj.pl.)

'katʃe    *kacie*    'hangman (voc.)'

dz : dʒ : dz

'riḏze    *rydze*    'agarics'

'briḏʒe    *brydże*    'games of bridge'

'idze    *idzie*    'he goes'

n : ɲ : ɲ

i'renka    *Irenka*    'Irene (dim.)'

ma'lepka    *małeńka*    'wee (fem.)'

'reɲka    *ręka*    'hand'

ɲ : ɲj

'daɲa    *dania*    'dishes'

'daɲja    *Dania*    'Denmark'

ʃ̌ : ʃ̌

'kojsci    *koński*    'horse's'

# Polnisch:

	Labial	Labiodental	(Post)dental	Alveolar	Alveolo- palatal	Palatal	Velar
Plosive	p b		t d			c ɟ	k g
Fricative		f v	s z	ʃ ʒ	ç ʒ		x
Affricate			ts dz	tʃ dʒ	tɕ dʑ		
Nnasal	m		n		ɲ		ŋ
Lateral			l				
Flap/Trill				r			
	Front			Back			
Approximant	j (ĩ)			w (ũ)			





# Tschechisch:

severa:k a sluntse se ha:dali, gdo z nix je silneifi:; f tom spatřili potsestne:ho, kteri: kra:tjel zahalen pla:řcem. ujednali tedi, že ten se ma: považovaci za silneifi:ho, gdo prvni: doka:že, abisi potsestni: svle:kl pla:řc. tu zatřal severa:k foukaci ze fři: siřli; ale třim vřts foukal, ci:m vřtse se potsestni: zahaloval do sve:ho pla:řce. konetřne vzdal se severa:k marne:ho uřsili:. pak zatřalo slunko svi:cit a hřa:t, a za nejaki: okamžik potsestni:, kteremu bilo horko, sxojil pla:řc. tak musil severa:k uznaci, že sluntse je silneifi:.

Dankovičová, J. (1997). Czech. *Journal of the International Phonetic Association*, 27(1-2), 77-80.  
doi:10.1017/S0025100300005442

[http://archive.phonetics.ucla.edu/Language/CES/ces\\_word-list\\_1976\\_01.html](http://archive.phonetics.ucla.edu/Language/CES/ces_word-list_1976_01.html)

# Tschechisch:

	BILABIAL	LABIO-DENTAL	ALVEOLAR	POST-ALVEOLAR	PALATAL	VELAR	GLOTTAL
PLOSIVE	p b		t d		c ɟ	k g	
NASAL	m		n		ɲ		
FRICATIVE		f v	s z	ʃ ʒ		x	h
AFFRICATE			ts	tʃ			
TRILL			r r̄				
APPROXIMANT					j		
LATERAL APPROXIMANT			l				



# Slovakisch:

'ras sa 'severa:k a 'slŋkɔ 'ɦa:daɫi | 'ktɔ z nɪɣ je 'sɪɫɲejʃi: || 'f tɔm 'zbaɫaɫi  
 'pɔtsɛstnɛ:ɦɔ | 'ktɔri: 'kra:tʃal 'zakri:tɪ: 'pla:ʃɔm || 'dɔɦɔɫi sa | ʒɛ 'sɪɫɲejʃi:  
 je 'tɛn | ktɔ 'akɔ 'prɯi: 'dɔka:ʒɛ | 'abɪ sɪ 'pɔtsɛstni: 'vɪzɫɪɛkɔɫ 'pla:ʃɔ || 'a tag  
 'za:tʃal 'severa:k 'fɯ:kaɫ zɔ 'fʃɛtkɪx 'sɪ:ɫ | 'alɛ tʃɪ:m vɫa:ts 'fɯ:kaɫ | 'tɪ:m vɫa:ts  
 sa 'pɔtsɛstni: 'zakri:vaɫ 'pla:ʃɔm || 'nakɔɲɪɛts sa 'severa:g 'vzdal 'zbɪtɔtʃnej  
 'na:maɦɪ || 'pɔtɔm 'slŋkɔ 'za:tʃalɔ 'svɪɛɕɪɕ a 'ɦrɪac || 'za maɫɯ: 'xvɪ:ʎkɯ 'bɔɫɔ  
 'pɔtsɛstnɛ:mɯ 'ɕɛplɔ | a 'vɪzɫɪɛkɔɫ sɪ 'pla:ʃɔ || 'severa:k 'mɯsɛɫ 'nakɔɲɪɛts 'ɯznac  
 | ʒɛ 'slŋkɔ je 'sɪɫɲejʃɪɛ 'akɔ ɔn ||

Hanulíková, A., & Hamann, S. (2010). Slovak. *Journal of the International Phonetic Association*, 40(3), 373-378.  
 doi:10.1017/S0025100310000162

p	paktᵢ	<i>pakty</i>	‘pacts’
t	taʃka	<i>taška</i>	‘bag’
c	cava	<i>t’ava</i>	‘camel’
k	kaba:t	<i>kabát</i>	‘coat’
f	fatska	<i>facka</i>	‘slap’
s	sadra	<i>sadra</i>	‘plaster’
ʃ	ʃatka	<i>šatka</i>	‘kerchief’
ṡ	ṡap	<i>cap</i>	‘billy goat’
tḥ	tḥakac	<i>čakat’</i>	‘to wait’
x	xata	<i>chata</i>	‘cottage’
r	rakᵢ	<i>raky</i>	‘crayfish’ (pl)
	kṛk	<i>krk</i>	‘neck’
l	lapkᵢ	<i>labky</i>	‘paws’
	vlk	<i>vlk</i>	‘wolf’
ʕ	ʕavᵢ:	<i>l’avý</i>	‘left’
m	matka	<i>matka</i>	‘mother’
ɲ	ɲadro	<i>ňadro</i>	‘breast’

b	bapka	<i>babka</i>	‘grandma’
d	dartsa	<i>darca</i>	‘donor’
ɟ	ɟasno	<i>d’asno</i>	‘gum’
g	gace	<i>gate</i>	‘slacks’
v	vakᵢ	<i>vaky</i>	‘bagpacks’
z	zapnᵤ:c	<i>zapnút’</i>	‘to switch on’
ʒ	ʒapka	<i>žabka</i>	‘frog’
ḑ	ṡuḑḑᵢa	<i>cudzia</i>	‘foreign’
ḑʒ	ḑʒavot	<i>džavot</i>	‘jabber’
h	hadi	<i>hady</i>	‘snakes’
r:	mṛ:tvᵢ	<i>mřtvy</i>	‘dead’
l:	mḭ:kvᵢ	<i>mřkvy</i>	‘silent’
j	jablkᵔ	<i>jablko</i>	‘apple’
n	nanᵤk	<i>nanuk</i>	‘ice lolly’

# Slovakisch:

	Bilabial	Labio-dental	Alveolar	Post-alveolar	Palatal	Velar	Glottal
Plosive	p b		t d		c ɟ	k g	
Nasal	m		n		ɲ		
Fricative		f v	s z	ʃ ʒ		x	ɦ
Affricate			ʦ ʣ	ʧ ʤ			
Trill			r r̥				
Approximant					j		
Lateral approximant			l l̥		ʎ		

# Obersorbisch:



|| 'nidə kas so 'seani 'vit<sup>h</sup>a: 'swuntso 'vadʒest<sup>h</sup>e: | st<sup>h</sup>u 'znjeju ja 'siln<sup>j</sup>iʃi ||  
p<sup>h</sup>o 'p<sup>h</sup>utʃu 'dʒiʃe 'putʃowa | 'k<sup>h</sup>otkɪʃ 'bi'd<sup>h</sup>o 'tʃap<sup>h</sup>fɛho 'p<sup>h</sup>faʃ:a 'zaba<sup>h</sup>b<sup>j</sup>e<sup>h</sup>ni ||  
'vit<sup>h</sup>a: 'swuntso se 'p<sup>h</sup>ajestej | 'siln<sup>j</sup>iʃi a 'd<sup>h</sup>obe je tun | 'kotkɪʒ d<sup>h</sup>otʃin<sup>j</sup>i | zo  
'soputʃowa: syə 'p<sup>h</sup>waʃtʃ 'sletʃe || 'sevani v<sup>j</sup>eta: | ze'wʃej moitsu 'dujese ||  
'alje tʃim 'bu<sup>h</sup>je dujese tʃim 'k<sup>h</sup>utʃiʃo so putʃowa do 'swojeho 'p<sup>h</sup>vaʃtʃa za  
bab<sup>j</sup>i || 'boze b<sup>j</sup>i 'sevani vit<sup>h</sup>a b<sup>j</sup>ez 'diʃa || a 'n<sup>j</sup>it<sup>h</sup>k<sup>h</sup>o 'swuntso zə 'swojm<sup>j</sup>i  
'p<sup>h</sup>etʃel<sup>j</sup>n<sup>j</sup>im<sup>j</sup>i 'p<sup>h</sup>oam<sup>j</sup>i po'wet<sup>h</sup>o 'k<sup>j</sup>ejeʃe || a 'lej | h<sup>j</sup>izo 'boze sə 'putʃowa  
swej p<sup>h</sup>faʃtʃ sletʃe || 's<sup>j</sup>ev<sup>j</sup>eni v<sup>j</sup>it<sup>h</sup>a 'n<sup>j</sup>itk<sup>h</sup>o 'v<sup>j</sup>iɖeʃe | zo b<sup>j</sup>i 'swuntso siln<sup>j</sup>iʃə  
hatʃ wun ||

Howson, P. (2017). Upper Sorbian. *Journal of the International Phonetic Association*, 47(3), 359-367. doi:10.1017/S0025100316000414

p	<i>pad</i>	[pat <sup>h</sup> ]	‘case’
p <sup>j</sup>	<i>pjany</i>	[p <sup>j</sup> ani]	‘drunk’
b	<i>bałma</i>	[bawma]	‘cotton’
b <sup>j</sup>	<i>bjakać</i>	[b <sup>j</sup> akatʃ]	‘to bleat’
m	<i>mač</i>	[matʃ]	‘slush’
m <sup>j</sup>	<i>mjaso</i>	[m <sup>j</sup> aso]	‘meat’
w	<i>wačka</i>	[watʃka]	‘worm’
w <sup>j</sup>	<i>wjaynyć</i>	[w <sup>j</sup> azniʃ]	‘to get stuck’
f	<i>fabula</i>	[fabula]	‘fable’
v	<i>vatikanski</i>	[vat <sup>h</sup> ik <sup>h</sup> anski]	‘Vatikan’
t	<i>tajić</i>	[tajiʃ]	‘to hide’
d	<i>dań</i>	[dajn]	‘interest’
ts	<i>calta</i>	[tsawta]	‘bread-roll’
n	<i>nabać</i>	[nabatʃ]	‘to talk nonesense’
n <sup>j</sup>	<i>hromadžernja</i>	[hɣomadʒean <sup>j</sup> a]	‘collecting point’
s	<i>sadło</i>	[sadwo]	‘fat, grease’
z	<i>zabić</i>	[zabiʃ]	‘to kill’
l	<i>lac</i>	[lats]	‘waistcoat’
ʃ	<i>ćahać so</i>	[ʃaɦatʃ so]	‘to quarrel’
ɕ	<i>dżak</i>	[ɕak]	‘thanks’
ʃ	<i>šach</i>	[ʃax]	‘chess’
ʒ	<i>žaba</i>	[ʒaba]	‘frog’
j	<i>jadro</i>	[jadɤo]	‘core’
k	<i>kabat</i>	[k <sup>h</sup> abat <sup>h</sup> ]	‘coat’
g	<i>gagać</i>	[gagatʃ]	‘to cackle’
x	<i>čichawa</i>	[ʃixawa]	‘sneezing’
R	<i>rad</i>	[Rat <sup>h</sup> ]	‘gladly’
R <sup>j</sup>	<i>rjadka</i>	[R <sup>j</sup> atka]	‘line; verse’
h	<i>habla</i>	[habla]	‘pine-cone’



# Obersorbisch:

	Bilabial		Labio-dental	Alveolar		Post-alveolar	Palatal	Velar	Uvular		Glottal
	Hard	Soft		Hard	Soft				Hard	Soft	
Plosive	P b	p <sup>j</sup> b <sup>j</sup>		t	d			k g			
Affricate				ts		tʃ ɕʃ					
Nasal	m	m <sup>j</sup>		n	n <sup>j</sup>						
Trill									ʀ	ʀ <sup>j</sup>	
Fricative			f v	s	z	ʃ ʒ		x			h
Approximant	w	w <sup>j</sup>					j				
Lateral approximant					l						

# Bulgarisch:



'severnijet 'vjater i 'slyntseto se pre'pirexe 'koj e 'posilen, ko'gato edin 'pytnik, ze'vit f 'tope 'drexə, 'mine pokrej 'tjax. te re'fixe tje 'tozi, 'kojto 'prv nəkare 'pytnike də si sve'li 'drexetə, jte se 'stfite 'posilen od 'drugije. to'gave 'severnijet 'vjater ze'potsne də 'duxe s 'fsitske 'sile, no 'kolkoto 'posilno 'vjateret 'duxeje, 'tolkove 'popletno 'pytniket o'viveje 'drexetə okolo 'sebe si. 'naj 'posle 'severnijet 'vjater pre'kysne o'silijete si. to'gave 'slyntseto ze'potsne də 'gree 'silno, i 'pytniket ved'nage sve'li 'drexetə si. i tēka, 'severnijet 'vjater 'beje pri'nuden də pri'znae, tje 'slyntseto e 'posilno ot 'nego.

Ternes, E., & Vladimirova-Buhtz, T. (1990). Bulgarian. *Journal of the International Phonetic Association*, 20(1), 45-47.  
doi:10.1017/S0025100300004072

[http://archive.phonetics.ucla.edu/Language/BUL/bul\\_word-list\\_1971\\_01.html](http://archive.phonetics.ucla.edu/Language/BUL/bul_word-list_1971_01.html)

# Bulgarisch:

	Bilab.	Lab.dent	Dental	Alv.	Postalv.	Retrofl.	Palatal	Velar	Uvular	Pharyng	Glottal
Plosive	p b		t d					k g			
Nasal	m		n								
Trill			r								
Fricative		f v		s z	ʃ ʒ			x			
Approximant							j				
Lateral			l								

(p<sup>j</sup>, b<sup>j</sup>, t<sup>j</sup>, d<sup>j</sup>, k<sup>j</sup>, g<sup>j</sup>, m<sup>j</sup>, n<sup>j</sup>, r<sup>j</sup>, f<sup>j</sup>, v<sup>j</sup>, s<sup>j</sup>, z<sup>j</sup>, x<sup>j</sup>, l<sup>j</sup>)

ts̃ d̃z̃ tʃ̃ d̃ʒ̃

# Kroatisch:



|| sjêve:rni: lědeni: vjêtar i\_sû:ntse\_su\_se prěpirali o\_svôjoj snă:zi || stôga  
ôdlutfe: da\_ônimo ôd\_ni:x prîpadne pôbjeda kôji: svû:tfe: | tŝôvjeکا  
pû:tnika || vjêtar zăpotfe snă:3no pû:xati | a\_bûdu:tçi da\_je tŝôvjeکا tŝuŝ:sto  
dŝ3ao ôdjetçu | năvali ô:n jôŝ jâtfe: || tŝôvjeکا pâ:k jôŝ jâtfe: ot\_stûdeni  
prîtisnu:t | navû:tfe: nă\_sebe jôŝ vîfe: ôdjetçe: | dôk\_se vjêtar ne\_ûmori:  
i\_prěpusti:\_ga tâda sû:ntsu || ôno: u\_potŝě:tku zăsija ûmjereno || kăd\_je  
tŝôvjeکا skînuo suvî:ŝak ôdjetçe: | pövi:si ôno: jôŝ jâtfe: zêgu | dôk\_se  
tŝôvjeکا | u\_nemogû:tcnosti da\_ôdoli sũntŝevo:j toplîni ne\_svû:tfe: |  
i\_ně\_podze: na\_kû:pape u\_rijě:ku tekûtcitsu || prî:tŝa pokăzuje:  
da\_je\_tŝê:sto uspŝŝnije: uvjeră:va:pe | nêgoli nă:si:ŝe ||

Landau, E., Lončarić, M., Horga, D., & Škarić, I. (1995).  
Croatian. *Journal of the International Phonetic Association*, 25(2),  
83-86. doi:10.1017/S002510030000520X

[http://archive.phonetics.ucla.edu/Language/HRV/hrv\\_word-list\\_1976\\_01.html](http://archive.phonetics.ucla.edu/Language/HRV/hrv_word-list_1976_01.html)

# Kroatisch:

## Consonants

	Bilabial	Labio-dental	Dental	Alveolar	Post-alveolar	Palatal	Velar
Plosive	p b		t d				k g
Affricate			ts		tʃ dʒ	tɕ dʑ	
Nasal	m			n		ɲ	
Fricative		f	s z		ʃ ʒ		x
Trill				r			
Approximant		ʋ				j	
Lateral Approximant				l		ʎ	

# Slovenisch:



'se:vərni 've:tər in 'so:ntse sta se pre'pi:r̩ala | ka'te:ri ɔd 'nji:ju je mɔtʃ'neɪfi |  
kɔ je 'mi:mɔ pri'ʃeu pɔ'pɔ:tnik | za'vi:t u 'tɔ:pəu 'plɑ:ʃtʃ. || dɔgɔvɔ'ri:lɑ sta se  
| da bo vɛl'jau za mɔtʃ'neɪfɛga 'ti:sti | ki mu bo 'pə:rʋemu u'spe:lɔ | da bo  
pɔ'pɔ:tnik 'sle:kəu svoi 'plɑ:ʃtʃ. || 'se:vərni 've:tər je za'pi:xau z u'sɔ: mɔ'tʃjo: ||  
toda 'bo:l kɔ je 'pi:xau | 'bo:l tə'sn:ɔ je pɔ'pɔ:tnik | ɔ'vi:jau svoi 'plɑ:ʃtʃ ɔkoli  
'se:be. || 'kɔ:ntʃnɔ | je 'se:vərni 've:tər pɔ'pu:stiu. || na'to: je 'so:ntse tɔ'plo:  
pɔsi'ja:lɔ | in pɔ'pɔ:tnik je ta'koi 'sle:kəu svoi 'plɑ:ʃtʃ. || in ta'ko: je 'se:vərni  
've:tər 'mo:r̩au pri'znati | da je 'so:ntse mɔtʃ'neɪfɛ ɔd 'nje:ga. ||

Šuštaršič, R., Komar, S., & Petek, B. (1995). Slovene. *Journal of the International Phonetic Association*, 25(2), 86-90.  
doi:10.1017/S0025100300005211



# Slovenisch:

	Bilabial	Labio-dental	Dental	Alveolar	Palato-alveolar	Palatal	Velar
Plosive	p b		t d				k g
Affricate				ts	tʃ dʒ		
Nasal	m		n			(ɲ)	
Tap				ɾ			
Fricative		f		s z	ʃ ʒ		x
Approximant		ʋ				j	
Lateral approx.				l		(ʎ)	

/f/ vs. /v/:

Russisch

Polnisch, Tschechisch, Slowakisch , Obersorbisch

Bulgarisch, Mazedonisch

/f/ vs. /v/:

Ukrainisch, Weißrussisch

BKMS, Slowenisch

/h/:

Ukrainisch

Tschechisch, Slowakisch

/h/:

Obersorbisch, Niedersorbisch

wortfinal:

keine Entsonorisierung der Obstruenten im Ukrainischen und BKMS