	Ri /d/ as [d]	Ri /d/ as [ɹ]	Ri /d/ as [ð]	Ri /d/ as [l]	NRi /d/ as [ɹ]	NRi /d/ as [ɹ]	NRi /d/ as [ð]	NRi /d/ as [l]	Ri /ð/ as [d]	Ri /ð/ as [ɹ]	Ri /ð/ as [ð]	Ri /ð/ as [l]	Ri /ð/ as [ɹ]	NRi /ð/as [ɹ]	NRi /ð/as [ð]	NRi /ð/ as [ð]	NRi /ð/ as [l]	[m]	[ɹm-]	HVD	No HVD	/d3/ for /dɹ/ with [ɹ]	/d3/ for /dʒ/ without [ɹ	[ʒ] for /dʒ/ with [ɹ]	[ʒ] for /dʒ/ without [ɹ]	[ɹ] for /dʒ/ with [ɹ]	[ɹ] for /dʒ/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1				1				1				1	1					1		1					1	1
Group 2		1				1				1				1			1		1						1	1
Group 3	1				1				1				1					1		1			1	1		
Group 4				1	1						1		1				1		1						1	1
Group 5																										

	Si /d/ as [d]	Si /d/ as [ð]	Si /d/ as [θ]	Si /d/ as [t]	Nsi /d/ as [ð]	Nsi /d/ as [ð]	Nsi /d/ as [θ]	Nsi /d/ as [t]	Si /ð/ as [d]	Si /ð/ as [ð]	Si /ð/ as [θ]	Si /ð/ as [t]	Nsi /ð/as [d]	Nsi /ð/as [ð]	Nsi /ð/ as [θ]	Nsi /ð/ as [t]	[m]	[mn-]	HVD	No HVD	[Cs] for /Cs/ with [s]	[Cs] for /Cs/ without [s]	[s] for /Cs/ with [s]	[s] for /Cs/ without [s]	[t] for /Cs/ with [s]	[t] for /Cs/ without [s]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1				1				1				1	1					1		1					1	1
Group 2		1				1				1			1				1		1						1	1
Group 3	1				1				1				1					1		1			1	1		
Group 4	1				1						1		1				1		1						1	1
Group 5																										

	/t/ /d/ as [t]	/t/ /d/ as [d]	/t/ /d/ as [ɪ]	/t/ /d/ as [ɪ]	NRI /d/ as [d]	NRI /d/ as [t]	NRI /d/ as [ɪ]	NRI /d/ as [ɪ]	/t/ /d/ as [ɪ]	/t/ /d/ as [d]	/t/ /d/ as [t]	/t/ /d/ as [ɪ]	NRI /t/ /d/ as [t]	NRI /t/ /d/ as [d]	NRI /t/ /d/ as [ɪ]	NRI /t/ /d/ as [ɪ]	[m]	[mɪ]	HVD	No HVD	[ʤ] for /ʤ/ with [ɹ]	[ʤ] for /ʤ/ without [ɹ]	[ʧ] for /ʧ/ with [ɹ]	[ʧ] for /ʧ/ without [ɹ]	[ɹ] for /ʤ/ with [ɹ]	[ɹ] for /ʤ/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1		1				1				1			1					1		1					1	1
Group 2		1				1				1				1			1		1						1	1
Group 3	1				1				1				1					1		1					1	1
Group 4				1	1						1		1				1		1						1	1
Group 5		1			1						1		1				1		1		1	1				

	Si /d/ as [d]	Si /d/ as [d]	Si /d/ as [ð]	Si /d/ as [ɹ]	NSi /d/ as [ð]	NSi /d/ as [ð]	NSi /d/ as [ð]	NSi /d/ as [ɹ]	Si /ð/ as [ð]	Si /ð/ as [ð]	Si /ð/ as [ɹ]	NSi /ð/ as [ð]	NSi /ð/ as [ð]	NSi /ð/ as [ð]	NSi /ð/ as [ɹ]	[m]	[mɹ]	HVD	No HVD	[ɹ] for /ɹ/ with [ɹ]	[ɹ] for /ɹ/ without [ɹ]	[ɹ] for /ɹ/ with [ɹ]	[ɹ] for /ɹ/ without [ɹ]	[ɹ] for /ɹ/ with [ɹ]	[ɹ] for /ɹ/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1		1						1				1	1					1		1					1	1
Group 2		1				1				1			1				1	1							1	1
Group 3	1				1				1				1					1		1			1	1		
Group 4				1	1						1		1				1		1		1					1
Group 5																										

	/t/ /d/ as [t]	/t/ /d/ as [d]	/t/ /d/ as [ɾ]	/ð/ /d/ as [t]	/ð/ /d/ as [d]	/ð/ /d/ as [ɾ]	/ð/ /d/ as [ð]	/ð/ /d/ as [l]	/ð/ /d/ as [n]	/θ/ /d/ as [t]	/θ/ /d/ as [d]	/θ/ /d/ as [ɹ]	/θ/ /d/ as [θ]	/θ/ /d/ as [n]	/θ/ /d/ as [l]	[m]	[/m-]	HVD	No HVD	[ʤ] for /dʒ/ with [ʒ]	[ʧ] for /tʃ/ without [ʃ]	[ʃ] for /tʃ/ with [ʃ]	[ʒ] for /dʒ/ without [ʒ]	[ʃ] for /tʃ/ with [ʃ]	[ʒ] for /dʒ/ without [ʒ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1				1				1				1	1					1		1			1	1		
Group 2		1				1				1			1					1		1					1	1
Group 3	1							1	1				1					1		1			1	1		
Group 4				1	1						1		1					1		1					1	1
Group 5																										

	RI /ɑ/ as [ɑ̃]	NI /ɑ̃/ as [ɑ̃]	RI /ɑ/ as [ɑ]	RI /ɑ̃/ as [ɑ]	NRI /ɑ̃/ as [ɑ̃]	NRI /ɑ̃/ as [ɑ̃]	NRI /ɑ̃/ as [ɑ]	NRI /ɑ̃/ as [ɑ]	RI /ɑ̃/ as [ɑ]	RI /ɑ̃/ as [ɑ]	RI /ɑ̃/ as [ɑ]	RI /ɑ̃/ as [ɑ]	NRI /ɑ̃/as [ɑ̃]	NRI /ɑ̃/as [ɑ̃]	NRI /ɑ̃/ as [ɑ]	NRI /ɑ̃/ as [ɑ]	[m]	[mɔ̃]	HVD	No HVD	[ʤ] for /ʤ/ with [ɹ]	[ʤ] for /ʤ/ without [ɹ]	[ʒ] for /ʒ/ with [ɹ]	[ʒ] for /ʒ/ without [ɹ]	[ʃ] for /ʒ/ with [ɹ]	[ʃ] for /ʒ/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1				1				1				1		1				1		1					1	1
Group 2		1				1				1			1					1		1			1	1		
Group 3	1				1				1					1				1		1			1	1		
Group 4				1	1						1		1					1		1					1	1
Group 5																										

	Ri /d/ as [d]	Ri /d/ as [ð]	Ri /d/ as [ɹ]	Ri /d/ as [t]	NRi /d/ as [ð]	NRi /d/ as [ð]	NRi /d/ as [ɹ]	Ri /d/ as [ɹ]	Ri /d/ as [ɹ]	Ri /d/ as [t]	Ri /d/ as [t]	NRi /ð/as [ð]	NRi /ð/as [ð]	NRi /ð/ as [t]	NRi /ð/ as [t]	[m]	[mɹ]	HVD	No HVD	[ʤ] for /dɹ/ with [ɹ]	[ʧ] for /tɹ/ without [ɹ]	[ʃ] for /tɹ/ with [ɹ]	[ʒ] for /dɹ/ without [ɹ]	[ʃ] for /tɹ/ with [ɹ]	[ʒ] for /dɹ/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1				1				1			1		1					1		1					1	1
Group 2		1				1					1		1					1		1					1	1
Group 3		1			1						1		1					1		1					1	1
Group 4																										
Group 5																										

	fil /d/ as [d]	fil /d/ as [ð]	fil /d/ as [ð]	fil /d/ as [t]	NRI /d/ as [ð]	NRI /d/ as [ð]	NRI /d/ as [ð]	NRI /d/ as [t]	fil /d/ as [d]	fil /d/ as [d]	fil /d/ as [t]	fil /d/ as [t]	NRI /ð/ as [ð]	NRI /ð/ as [ð]	NRI /ð/ as [ð]	NRI /ð/ as [t]	[m]	[mn.]	HVD	No HVD	[ʤ] for /dʒ/ with [ʃ]	[ʧ] for /dʒ/ without [ʃ]	[ʃ] for /dʒ/ with [ʃ]	[ʃ] for /dʒ/ without [ʃ]	[ʃ] for /dʒ/ with [ʃ]	[ʃ] for /dʒ/ without [ʃ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1				1				1				1						1		1	1					1
Group 2		1				1				1								1		1	1					1
Group 3	1				1				1									1		1						1
Group 4				1	1						1							1		1	1					
Group 5																										

	Si /d/ as [d]	Si /d/ as [ð]	Si /d/ as [θ]	Si /d/ as [t]	Nti /d/ as [ð]	Nti /d/ as [ð]	Nti /d/ as [θ]	Nti /d/ as [t]	Si /d/ as [d]	Si /d/ as [d]	Si /d/ as [t]	Nti /d/as [ð]	Nti /ð/as [ð]	Nti /ð/ as [θ]	Nti /ð/ as [t]	[m]	[mn.]	HVD	No HVD	[d] for /d/ with [z]	[d] for /d/ without [z]	[z] for /d/ with [z]	[z] for /d/ without [z]	[z] for /d/ with [z]	[z] for /d/ without [z]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1				1	1							1		1				1		1					1	1
Group 2	1				1					1				1			1	1							1	1
Group 3	1				1				1				1				1	1		1			1	1		1
Group 4				1	1						1		1				1		1		1					
Group 5																										

	Si /d/ as [d]	Si /d/ as [d]	Si /d/ as [ð]	Si /d/ as [ɹ]	Nñi /d/ as [ð]	Nñi /d/ as [ð]	Nñi /d/ as [ð]	Nñi /d/ as [ɹ]	Si /ð/ as [ð]	Si /ð/ as [ð]	Si /ð/ as [ɹ]	Si /ð/ as [ɹ]	Nñi /ð/as [ð]	Nñi /ð/ as [ð]	Nñi /ð/ as [ð]	Nñi /ð/ as [ɹ]	[m]	[mɹ]	HVD	No HVD	[ʤ] for /ʤ/ with [ɹ]	[ʤ] for /ʤ/ without [ɹ]	[ʧ] for /ʧ/ with [ɹ]	[ʧ] for /ʧ/ without [ɹ]	[ɹ] for /ʤ/ with [ɹ]	[ɹ] for /ʤ/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1				1				1				1	1					1		1					1	1
Group 2		1				1				1				1			1		1						1	1
Group 3	1				1				1				1					1		1			1	1		
Group 4				1	1					1			1				1		1		1					1
Group 5																										

	fil /d/_as [d]	fil /d/_as [ɹ]	fil /d/_as [ð]	fil /d/_as [t]	NRI /d/_as [ɹ]	NRI /d/_as [ɹ]	NRI /d/_as [ð]	NRI /d/_as [t]	fil /ð/_as [d]	fil /ð/_as [ɹ]	fil /ð/_as [ð]	fil /ð/_as [t]	fil /ð/_as [d]	fil /ð/_as [ɹ]	NRI /ð/as [ɹ]	NRI /ð/_as [ð]	NRI /ð/_as [t]	NRI /ð/_as [t]	[m]	[ɹm-]	HVD	No HVD	[ɹ] for /ɹ/ with [ɹ]	[ɹ] for /ɹ/ without [ɹ]	[ɹ] for /ɹ/ with [ɹ]	[ɹ] for /ɹ/ without [ɹ]	[ɹ] for /ɹ/ with [ɹ]	[ɹ] for /ɹ/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26		
Group 1				1				1				1		1				1		1	1					1		
Group 2		1				1				1				1			1	1		1						1		
Group 3	1				1				1					1				1		1			1	1				
Group 4				1	1						1			1			1		1		1					1		
Group 5																												

	Ri /d/ as [d]	Ri /d/ as [ɹ]	Ri /d/ as [ð]	Ri /d/ as [t]	NRi /d/ as [ɹ]	NRi /d/ as [ɹ]	NRi /d/ as [ð]	NRi /d/ as [t]	Ri /ð/ as [ð]	Ri /ð/ as [ɹ]	Ri /ð/ as [t]	Ri /ð/ as [d]	Ri /ð/ as [ɹ]	NRi /ð/as [ɹ]	NRi /ð/ as [ð]	NRi /ð/ as [t]	NRi /ð/ as [ɹ]	[m]	[mɹ]	HVD	No HVD	[ɹ] for /ɹ/ with [ɹ]	[ɹ] for /ɹ/ without [ɹ]	[ɹ] for /ɹ/ with [ɹ]	[ɹ] for /ɹ/ without [ɹ]	[ɹ] for /ɹ/ with [ɹ]	[ɹ] for /ɹ/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1				1				1				1	1					1		1					1	1
Group 2		1				1				1				1			1		1						1	1
Group 3	1				1				1				1					1		1			1	1		
Group 4	1				1						1		1				1		1				1	1		
Group 5																										

	Si /d/ as [d]	Si /d/ as [ɹ]	Si /d/ as [ð]	Si /d/ as [t]	Nsi /d/ as [ɹ]	Nsi /d/ as [ɹ]	Nsi /d/ as [ð]	Nsi /d/ as [t]	Si /ɹ/ as [ɹ]	Si /ɹ/ as [ð]	Si /ɹ/ as [d]	Si /ɹ/ as [t]	Nsi /ɹ/as [ɹ]	Nsi /ɹ/as [ð]	Nsi /ɹ/ as [t]	Nsi /ɹ/ as [l]	[m]	[ʌn-]	HVD	No HVD	[ʤ] for /ʤ/ with [ɹ]	[ʧ] for /ʤ/ without [ɹ]	[s] for /ʤ/ with [ɹ]	[s] for /ʤ/ without [ɹ]	[t] for /ʤ/ with [ɹ]	[t] for /ʤ/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1				1				1				1	1					1		1					1	1
Group 2	1					1				1				1			1		1						1	1
Group 3	1							1	1				1					1		1					1	1
Group 4	1				1				1				1				1		1						1	1
Group 5																										

	/t/ /d/ as [t]	/t/ /d/ as [d]	/t/ /d/ as [ɪ]	/t/ /d/ as [t]	NRI /d/ as [d]	NRI /d/ as [t]	NRI /d/ as [ɪ]	NRI /d/ as [t]	/t/ /d/ as [d]	/t/ /d/ as [ɪ]	/t/ /d/ as [t]	/t/ /d/ as [ɪ]	NRI /t/ /d/ as [d]	NRI /t/ /d/ as [t]	NRI /t/ /d/ as [ɪ]	NRI /t/ /d/ as [t]	[m]	[mɪ]	HVD	No HVD	[ʤ] for /dʒ/ with [ɹ]	[ʧ] for /tʃ/ without [ɹ]	[ɪ] for /tʃ/ with [ɹ]	[ɪ] for /tʃ/ without [ɹ]	[ɪ] for /dʒ/ with [ɹ]	[ɪ] for /dʒ/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1				1				1				1	1					1		1	1	1				
Group 2		1				1						1		1			1		1				1	1		
Group 3	1				1						1		1				1		1		1					1
Group 4																										
Group 5																										

	fil /d/ as [d]	fil /d/ as [ð]	fil /d/ as [t]	fil /d/ as [l]	Nfil /d/ as [ð]	Nfil /d/ as [l]	Nfil /d/ as [t]	fil /ð/ as [d]	fil /ð/ as [ð]	fil /ð/ as [t]	fil /ð/ as [l]	Nfil /ð/ as [ð]	Nfil /ð/ as [t]	Nfil /ð/ as [l]	[m]	[mn.]	HVD	No HVD	[ʤ] for /ʤ/ with [ʃ]	[ʤ] for /ʤ/ without [ʃ]	[ʃ] for /ʤ/ with [ʃ]	[ʃ] for /ʤ/ without [ʃ]	[ɹ] for /ʤ/ with [ɹ]	[ɹ] for /ʤ/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1				1				1				1	1					1		1	1					1
Group 2		1				1				1			1					1		1					1	1
Group 3	1				1				1				1					1		1			1	1		
Group 4				1	1				1				1					1		1	1					1
Group 5																										

	Ri /d/ as [d]	Ri /d/ as [d̪]	Ri /d/ as [ɖ]	Ri /ɖ/ as [ɖ]	NRi /d/ as [d̪]	NRi /d/ as [d̪]	NRi /d/ as [ɖ]	NRi /d/ as [ɖ]	Ri /ɖ/ as [ɖ]	Ri /ɖ/ as [d̪]	Ri /ɖ/ as [ɖ]	Ri /ɖ/ as [ɖ]	Ri /ɖ/ as [ɖ]	NRi /ɖ/as [d̪]	NRi /ɖ/as [ɖ]	NRi /ɖ/ as [ɖ]	NRi /ɖ/ as [ɖ]	[m]	[ɱm-]	HVD	No HVD	[ɖ] for /ɖ/ with [d]	[ɖ] for /ɖ/ without [ɖ]	[ɻ] for /ɖ/ with [d]	[ɻ] for /ɖ/ without [ɖ]	[ɻ] for /ɖ/ with [d]	[ɻ] for /ɖ/ without [ɖ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1				1				1		1				1				1		1					1	1
Group 2		1				1				1				1			1	1							1	1
Group 3	1				1				1				1					1		1			1	1		
Group 4				1	1						1		1				1		1		1	1				
Group 5																										

	/t/ /d/ as [t]	/t/ /d/ as [d]	/t/ /d/ as [ɪ]	/ð/ /d/ as [t]	/ð/ /d/ as [d]	/ð/ /d/ as [ɪ]	/ð/ /d/ as [ð]	/θ/ /d/ as [t]	/θ/ /d/ as [d]	/θ/ /d/ as [θ]	/θ/ /d/ as [ð]	/t/ /ð/ as [t]	/t/ /ð/ as [d]	/t/ /ð/ as [ɪ]	/θ/ /ð/ as [t]	/θ/ /ð/ as [d]	/θ/ /ð/ as [θ]	[m]	[ɪm-]	HVD	No HVD	[ʤ] for /ʤ/ with [t]	[ʤ] for /ʤ/ without [t]	[ʃ] for /ʧ/ with [t]	[ʃ] for /ʧ/ without [t]	[ɹ] for /ʤ/ with [t]	[ɹ] for /ʤ/ without [t]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1				1				1				1	1					1		1					1	1
Group 2		1				1				1				1			1		1						1	1
Group 3	1				1				1				1					1		1			1	1		
Group 4				1	1						1		1				1		1		1					1
Group 5																										

	Ri /d/ as [d]	Ri /d/ as [ɹ]	Ri /d/ as [ɾ]	Ri /d/ as [t]	NRi /d/ as [ɹ]	NRi /d/ as [ɹ]	NRi /d/ as [ɾ]	NRi /d/ as [t]	Ri /ɹ/ as [ɹ]	Ri /ɹ/ as [ɹ]	Ri /ɹ/ as [ɹ]	Ri /ɹ/ as [t]	Ri /ɹ/ as [ɹ]	NRi /ɹ/as [ɹ]	NRi /ɹ/as [ɹ]	NRi /ɹ/ as [t]	NRi /ɹ/ as [t]	[m]	[ɹm-]	HVD	No HVD	[d] for /d/ with [ɹ]	[ɹ] for /d/ without [ɹ]	[ɹ] for /d/ with [ɹ]	[ɹ] for /d/ without [ɹ]	[ɹ] for /d/ with [ɹ]	[ɹ] for /d/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1				1	1							1	1					1		1	1					1
Group 2		1			1					1				1			1		1		1					1
Group 3	1				1				1				1					1		1			1	1		
Group 4				1	1							1	1				1		1		1					1
Group 5																										

	/t/ /d/ as [t]	/t/ /d/ as [d]	/t/ /d/ as [ɾ]	/ti/ /di/ as [t]	NRI /d/ as [d]	NRI /d/ as [ɾ]	NRI /d/ as [ɪ]	NRI /d/ as [t]	/t/ /d/ as [ɾ]	/t/ /d/ as [d]	/t/ /d/ as [t]	/t/ /d/ as [ɪ]	NRI /ɒ/ as [ɒ]	NRI /ɒ/ as [ɒ]	NRI /ɒ/ as [ɒ]	NRI /ɒ/ as [ɪ]	[m]	[mɪ]	HVD	No HVD	/ʤ/ for /ʤ/ with [ɹ]	/ʤ/ for /ʤ/ without [ɹ]	[ʃ] for /ʤ/ with [ɹ]	[ʃ] for /ʤ/ without [ɹ]	[ɹ] for /ʤ/ with [ɹ]	[ɹ] for /ʤ/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1	0	1		1	1	0		1	1	1	1	1	1	1			0	1	1	1	1	0	1	0	1	1
Group 2	0	1		0	1	1		1	0	1	0	0	0	1			1	0	1	1	0	0	1	1	1	1
Group 3	1	0		1	1	0		1	1	0	1	0	1	1			0	1	1	1	0	0	1	1	1	0
Group 4	1	1		1	1	1		1	0	0	1	0	1	1			1	0	1	1	1	1	1	1	1	1
Group 5	0	0		1	1	1		0	1	0	0	1	1	1			0	0	0	1	0	0	0	0	1	0

	/i/ /ɑ/ as [ɑ]	/i/ /ɑ/ as [ɑ]	/i/ /ɑ/ as [ɑ]	/i/ /ɑ/ as [i]	NRI /ɑ/ as [ɑ]	NRI /ɑ/ as [ɑ]	NRI /ɑ/ as [ɑ]	NRI /ɑ/ as [i]	/i/ /ɑ/ as [ɑ]	/i/ /ɑ/ as [ɑ]	/i/ /ɑ/ as [i]	/i/ /ɑ/ as [i]	NRI /ɑ/as [ɑ]	NRI /ɑ/as [ɑ]	NRI /ɑ/ as [ɑ]	NRI /ɑ/ as [i]	[m]	[mɔ]	HVD	No HVD	[ʤ] for /ʤ/ with [ɑ]	[ʤ] for /ʤ/ without [ɑ]	[ɪ] for /ʤ/ with [ɑ]	[ɪ] for /ʤ/ without [ɑ]	[ɪ] for /ʤ/ with [ɑ]	[ɪ] for /ʤ/ without [ɑ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1	1	0		1	1	0		1	1	1	0	1	1	1			0	1	1	1	1	0	0	0	1	1
Group 2	1	1		0	1	1		0	1	1	0	0	1	1			1	1	1	0	0	0	1	1	1	1
Group 3	1	1		0	1	1		0	1	1	0	0	1	1			1	1	1	1	0	1	1	1	0	1
Group 4	1	1		0	1	1		0	0	0	1	0	1	0			1	1	1	0	0	0	1	0	1	1
Group 5	1	0		1	1	1		0	0	1	1	1	0	0			0	1	1	1	1	1	0	1	0	0

	/i/ /ɑ/ as [ə²]	/i/ /ɑ/ as [ə¹]	/i/ /ɑ/ as [ə]	/i/ /ɑ/ as [i]	NRI /ɑ/ as [ə²]	NRI /ɑ/ as [ə¹]	NRI /ɑ/ as [ə]	NRI /ɑ/ as [i]	/i/ /o/ as [ə]	/i/ /o/ as [ə²]	/i/ /o/ as [i]	/i/ /ɔ/ as [i]	NRI /ɒ/ as [ə¹]	NRI /ɒ/ as [ə²]	NRI /ɒ/ as [ə]	NRI /ɒ/ as [i]	[m]	[min.]	HVD	No HVD	[ʤ] for /ʤ/ with [ɹ]	[ʤ] for /ʤ/ without [ɹ]	[ʧ] for /ʧ/ with [ɹ]	[ʧ] for /ʧ/ without [ɹ]	[ʃ] for /ʤ/ with [ɹ]	[ʃ] for /ʤ/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1	0	1		0	0	1		0	0	1	0	0	1	1			0	1	1	1	0	0	1	0	1	1
Group 2	0	1		0	1	1		1	0	1	1	0	1	1			1	0	1	0	0	1	1	0	1	1
Group 3	1	1		1	1	1		1	1	0	1	0	1	0			1	1	1	1	0	1	1	1	1	1
Group 4	1	1		1	1	0		0	0	1	1	0	1	0			1	0	1	1	0	1	1	1	1	1
Group 5	0	1		1	1	1		1	0	1	1	1	1	0			1	0	1	0	1	1	0	1	1	0

	Ri /d/ as [d]	Ri /d/ as [ð]	Ri /d/ as [t]	Ri /d/ as [ɾ]	NRi /d/ as [ð]	NRi /d/ as [d]	NRi /d/ as [ɾ]	NRi /d/ as [t]	Ri /ð/ as [d]	Ri /ð/ as [ð]	Ri /ð/ as [t]	Ri /ð/ as [ɾ]	NRi /ð/as [ð]	NRi /ð/ as [d]	NRi /ð/ as [t]	NRi /ð/ as [ɾ]	[m]	[mʲ]	HVD	No HVD	[ʤ] for /dʒ/ with [ʒ]	[ʤ] for /dʒ/ without [ʒ]	[ʒ] for /dʒ/ with [ʤ]	[ʒ] for /dʒ/ without [ʤ]	[ɹ] for /ɹ/ with [ɹ]	[ɹ] for /ɹ/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1	0	1		0	0	1		1	1	1	0	1	1	1			0	1	0	1	1	0	0	0	1	1
Group 2	1	1		1	1	1		0	0	1	1	0	1	1			1	1	1	1	0	0	0	0	1	1
Group 3	1	0		1	1	1		0	1	1	0	0	1	1			0	1	1	1	0	1	1	1	0	1
Group 4	1	0		1	1	1		1	1	0	1	1	1	1			1	0	1	0	1	1	1	1	0	1
Group 5	0	0		1	0	1		1	0	1	0	1	0	0			0	1	0	1	0	0	0	1	0	1

	/t/ /d/ as [t]	/t/ /d/ as [d]	/t/ /d/ as [ɾ]	/ti/ /di/ as [t]	NRI /d/ as [d]	NRI /d/ as [ɾ]	NRI /d/ as [ɾ]	NRI /d/ as [t]	/t/ /d/ as [ɾ]	/t/ /d/ as [d]	/t/ /d/ as [t]	/t/ /d/ as [ɾ]	NRI /ɾ/as [d]	NRI /ɾ/as [t]	NRI /ɾ/ as [ɾ]	NRI /ɾ/ as [t]	[m]	[mɹ]	HVD	No HVD	[ʤ] for /ʤ/ with [ɹ]	[ʤ] for /ʤ/ without [ɹ]	[ʧ] for /ʧ/ with [ɹ]	[ʧ] for /ʧ/ without [ɹ]	[ʃ] for /ʃ/ with [ɹ]	[ʃ] for /ʃ/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1	1	1		1	1	1		1	1	0	1	1	1	0			0	1	0	1	1	1	1	1	0	1
Group 2	1	1		1	1	1		0	0	1	0	1	1	1			0	1	1	1	1	1	0	1	1	1
Group 3	1	1		0	0	1		1	1	0	1	0	1	0			1	1	0	1	1	1	1	1	1	0
Group 4	0	1		1	1	1		0	1	0	1	1	1	0			0	1	1	1	1	1	0	0	1	1
Group 5	1	0		1	1	1		1	0	1	1	1	1	1			1	1	0	1	0	0	1	0	0	1

	Ri /d/ as [d]	Ni /d/ as [d]	Ri /d/ as [ɒ]	Ri /d/ as [i]	NRi /d/ as [ɒ]	NRi /d/ as [ɒ]	NRi /d/ as [ɒ]	NRi /d/ as [i]	Ri /ɒ/ as [ɒ]	Ri /ɒ/ as [ɒ]	Ri /ɒ/ as [ɒ]	Ri /ɒ/ as [i]	NRi /ɒ/as [ɒ]	NRi /ɒ/ as [ɒ]	NRi /ɒ/ as [ɒ]	NRi /ɒ/ as [i]	[m]	[ma:]	HVD	No HVD	[ʤ] for /ʤ/ with [ɔ]	[ʤ] for /ʤ/ without [ɔ]	[ʧ] for /ʧ/ with [ɔ]	[ʧ] for /ʧ/ without [ɔ]	[ɹ] for /ʤ/ with [ɔ]	[ɹ] for /ʤ/ without [ɔ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1	0	0		1	0	0		1	0	0	1	1	0	1			1	1	0	1	1	0	1	1	1	1
Group 2	1	1		1	1	1		0	0	1	0	0	1	0			0	1	1	1	1	1	1	1	0	0
Group 3	1	0		0	1	1		0	1	0	0	1	1	1			1	1	1	1	1	0	1	1	0	0
Group 4	0	1		1	1	1		1	1	1	1	0	1	0			0	1	0	1	1	1	1	1	1	1
Group 5	0	0		0	1	0		1	1	0	0	0	1	1			1	0	0	0	0	1	1	1	0	1

	/i/ /ɑ/ as [ɑᴵ]	/i/ /ɑ/ as [ɑᴵ]	/i/ /ɑ/ as [i]	/i/ /ɑ/ as [i]	NRI /ɑ/ as [ɑᴵ]	NRI /ɑ/ as [ɑᴵ]	NRI /ɑ/ as [i]	NRI /ɑ/ as [i]	/i/ /ɑ/ as [ɑ]	/i/ /ɑ/ as [ɑᴵ]	/i/ /ɑ/ as [i]	/i/ /ɑ/ as [i]	NRI /ɑ/as [ɑᴵ]	NRI /ɑ/as [ɑᴵ]	NRI /ɑ/ as [i]	NRI /ɑ/ as [i]	[m]	[mᵇ]	HVD	No HVD	[ɑ] for /ɑ/ with [ɑ]	[ɑ] for /ɑ/ without [ɑ]	[ɪ] for /ɑ/ with [ɑ]	[ɪ] for /ɑ/ without [ɑ]	[ɪ] for /ɑ/ with [ɑ]	[ɪ] for /ɑ/ without [ɑ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1	0	1		1	0	1		1	0	0	1	1	1	1			0	1	0	1	0	1	0	1	1	1
Group 2	0	1		1	0	1		0	0	1	1	0	1	0			0	1	0	1	1	0	1	1	1	1
Group 3	1	1		0	1	1		0	0	1	1	0	1	0			0	1	0	1	0	1	0	1	1	1
Group 4	1	1		0	0	1		0	1	1	0	1	0	0			0	1	1	1	0	0	0	1	1	1
Group 5	0	0		0	0	1		0	0	1	1	0	1	1			0	0	1	0	1	1	0	0	1	1

	/i/ /ɑ/ as [ɑ]	/i/ /ɑ/ as [ɑ]	/i/ /ɑ/ as [ɑ]	/i/ /ɑ/ as [i]	NRI /ɑ/ as [ɑ]	NRI /ɑ/ as [ɑ]	NRI /ɑ/ as [ɑ]	NRI /ɑ/ as [i]	/i/ /ɑ/ as [ɑ]	/i/ /ɑ/ as [ɑ]	/i/ /ɑ/ as [i]	/i/ /ɑ/ as [i]	NRI /ɑ/ as [ɑ]	NRI /ɑ/ as [ɑ]	NRI /ɑ/ as [ɑ]	NRI /ɑ/ as [i]	[m]	[mɔ]	HVD	No HVD	[ʤ] for /ʤ/ with [ɔ]	[ʤ] for /ʤ/ without [ɔ]	[ʒ] for /ʤ/ with [ɔ]	[ʒ] for /ʤ/ without [ɔ]	[ɟ] for /ʤ/ with [ɔ]	[ɟ] for /ʤ/ without [ɔ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1	0	0		1	0	0		1	0	0	1	1	1	0			1	1	0	1	1	1	0	0	1	1
Group 2	0	1		1	0	1		1	0	1	1	1	0	0			1	1	1	1	1	0	1	1	0	1
Group 3	1	1		0	1	1		1	1	1	0	0	0	0			1	1	1	1	1	0	1	0	0	1
Group 4	1	0		1	1	0		0	1	0	1	1	1	1			1	1	0	1	1	1	1	1	0	0
Group 5	1	0		1	1	0		0	1	1	0	0	0	1			0	0	1	1	0	1	0	0	1	1

	Ri /d/ as [d]	Ri /d/ as [d]	Ri /d/ as [d]	Ri /d/ as [d]	NRi /d/ as [d]	NRi /d/ as [d]	NRi /d/ as [d]	NRi /d/ as [d]	Ri /d/ as [d]	Ri /d/ as [d]	Ri /d/ as [d]	Ri /d/ as [d]	NRi /d/as [d]	NRi /d/as [d]	NRi /d/ as [d]	NRi /d/ as [d]	[m]	[ma-]	HVD	No HVD	[d] for /d/ with [r]	[d] for /d/ without [r]	[ɹ] for /ɹ/ with [r]	[ɹ] for /ɹ/ without [r]	[ɹ] for /ɹ/ with [r]	[ɹ] for /ɹ/ without [r]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1	0	0		1	1	1		0	0	0	1	1	0	1			1	1	0	1	0	1	1	1	1	1
Group 2	1	1		1	1	1		0	0	1	0	0	1	1			1	1	1	1	1	0	0	1	1	1
Group 3	1	1		1	1	0		0	1	0	0	0	1	1			1	1	1	1	1	0	1	1	0	1
Group 4	1	1		1	1	1		1	1	1	1	0	1	1			1	1	1	0	1	1	0	1	0	0
Group 5	1	0		0	0	0		0	1	1	1	1	0	1			1	1	1	0	1	0	1	1	1	1

	/t/ /d/ as [t]	/t/ /d/ as [d]	/t/ /d/ as [ɾ]	/ti/ /di/ as [t]	NRI /d/ as [d]	NRI /d/ as [t]	NRI /d/ as [ɾ]	NRI /d/ as [l]	/t/ /d/ as [t]	/t/ /d/ as [d]	/t/ /d/ as [ɾ]	/t/ /d/ as [l]	NRI /ð/ as [d]	NRI /ð/ as [ð]	NRI /ð/ as [l]	NRI /ð/ as [t]	[m]	[mʌ]	HVD	No HVD	[ʤ] for /ʤ/ with [t]	[ʧ] for /ʤ/ without [t]	[ʃ] for /ʤ/ with [t]	[ʒ] for /ʤ/ without [t]	[ʃ] for /ʤ/ with [ʃ]	[ʒ] for /ʤ/ without [ʒ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1	1	1		1	1	1		1	0	1	0	1	1	0			0	1	1	1	1	1	1	0	1	1
Group 2	1	1		1	1	1		0	1	1	1	1	0	1			1	0	1	1	1	1	0	0	1	1
Group 3	1	0		0	1	1		0	1	1	0	0	1	0			0	1	0	1	1	1	1	1	0	1
Group 4	1	0		1	1	0		1	1	1	0	1	1	1			1	0	1	1	1	1	0	1	1	1
Group 5	0	1		0	1	1		0	0	0	1	0	0	0			0	1	1	1	0	1	0	0	1	0

	/t/ /d/ as [t]	/t/ /d/ as [d]	/t/ /d/ as [ɾ]	/ð/ /d/ as [t]	NRI /d/ as [d]	NRI /d/ as [ð]	NRI /d/ as [ɾ]	NRI /d/ as [t]	/t/ /d/ as [ɾ]	/t/ /d/ as [d]	/t/ /d/ as [t]	/t/ /d/ as [ɾ]	NRI /ð/as [d]	NRI /ð/ as [ð]	NRI /ð/ as [t]	NRI /ð/ as [ɾ]	[m]	[mn-]	HVD	No HVD	/ɑ/ for /ɑ:/ with [ɹ]	/ɑ/ for /ɑ:/ without [ɹ]	[ɔ] for /ɔ:/ with [ɹ]	[ɔ] for /ɔ:/ without [ɹ]	[ɜ] for /ɜ:/ with [ɹ]	[ɜ] for /ɜ:/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1	1	1		1	0	1		1	1	0	0	1	1	1			1	1	1	1	1	1	0	1	1	1
Group 2	1	1		1	0	1		0	1	1	0	0	0	1			1	1	1	0	1	0	1	1	1	1
Group 3	1	0		1	1	0		0	1	0	1	1	1	1			0	1	0	1	1	1	1	1	1	1
Group 4	0	1		1	1	1		0	1	1	1	1	1	1			1	0	1	1	1	0	1	1	0	1
Group 5	0	0		1	0	0		0	0	1	0	1	1	0			1	0	0	0	1	0	0	1	1	1

	Ri /d/ as [d]	Ri /d/ as [ɹ]	Ri /d/ as [ð]	Ri /d/ as [l]	NRi /d/ as [ɹ]	NRi /d/ as [ɹ]	NRi /d/ as [ð]	NRi /d/ as [l]	Ri /ɹ/ as [ɹ]	Ri /ɹ/ as [ð]	Ri /ɹ/ as [l]	Ri /l/ as [l]	NRi /l/as [ɹ]	NRi /l/ as [ð]	NRi /l/ as [l]	[m]	[nas.]	HVD	No HVD	[ʤ] for /ʤ/ with [ɹ]	[ʤ] for /ʤ/ without [ɹ]	[ʃ] for /ʃʤ/ with [ɹ]	[ʃ] for /ʃʤ/ without [ɹ]	[ʃ] for /ʃʤ/ with [ɹ]	[ʃ] for /ʃʤ/ without [ɹ]
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	F22	F23	F24	F25	F26
Group 1	0	0		1	0	1		1	1	1	1	1	1	0			0	1	1	1	0	0	1	1	1	1
Group 2	0	1		0	0	1		1	1	1	0	0	1	1			1	1	1	1	1	1	1	1	1	1
Group 3	1	1		1	1	0		0	1	0	1	1	1	0			0	1	0	1	0	0	1	1	1	1
Group 4	1	1		0	1	1		1	0	0	1	1	1	1			1	1	1	0	1	1	1	1	0	0
Group 5	0	0		0	1	1		1	0	1	1	0	0	1			1	1	1	1	0	0	1	1	0	0

Feature	Feature #	Group 1	Group 2	Group 3	Group 4	Group 5
RI /dˤ/ as [ðˤ]	F1	0	3	28	5	0
RI /dˤ/ as [θˤ]	F2	4	27	2	0	2
RI /dˤ/ as [θ]	F3	0	0	0	0	0
RI /dˤ/ as [f]	F4	26	0	0	22	0
NRI /dˤ/ as [ðˤ]	F5	3	3	27	27	2
NRI /dˤ/ as [θˤ]	F6	2	27	0	0	0
NRI /dˤ/ as [θ]	F7	0	0	0	0	0
NRI /dˤ/ as [f]	F8	25	0	3	0	0
RI /ðˤ/ as [ðˤ]	F9	0	0	27	2	0
RI /ðˤ/ as [θˤ]	F10	3	27	0	2	0
RI /ðˤ/ as [θ]	F11	2	2	3	22	2
RI /ðˤ/ as [f]	F12	25	1	0	1	0
NRI /ðˤ/as [ðˤ]	F13	21	11	24	23	2
NRI /ðˤ/as [θˤ]	F14	7	17	4	2	0
NRI /ðˤ/ as [θ]	F15	0	0	0	0	0
NRI /ðˤ/as [f]	F16	0	0	0	0	0
[m]	F17	0	21	1	20	2
[ʔim-]	F18	30	9	29	7	0
HVD	F19	0	21	1	20	2
No HVD	F20	30	9	29	7	0
[d͡ʒ] for /d͡ʒ/ with [z]	F21	7	5	1	14	2
[dʒ] for /d͡ʒ/ without [z]	F22	1	0	0	1	2
[ʒ] for /d͡ʒ/ with [z]	F23	2	3	22	2	0
[ʒ] for /d͡ʒ/ without [z]	F24	2	3	22	2	0
[ź] for /d͡ʒ/ with [z]	F25	21	22	5	11	0
[ź] for /d͡ʒ/ without [z]	F26	27	27	10	20	0

Highest value for each feature group is highlighted with the group's color

F	Group 1	Group 2	Group 3	Group 4
Allophone of /ðˤ/ (CA /dˤ/)				
Root-initial	[f]	[θˤ]	[ðˤ]	[f]
Non root-initial	[f]	[θˤ]	[ðˤ]	[ðˤ]
Allophone of /ðˤ/ (CA /ðˤ/)				
Root-initial	[ðˤ]	[θˤ]	[ðˤ]	[θ]
Non root-initial	[ðˤ]	[θˤ]	[ðˤ]	[ðˤ]
Allomorph of /m-/	[ʔim-]	[m-]	[ʔim-]	[m-]
High vowels in initial	Not deleted	Deleted	Not deleted	Deleted
Allophone of /d͡ʒ/				
With /z/	[ź]	[ź]	[ʒ]	[d͡ʒ]
Without /z/	[ź]	[ź]	[ʒ]	[ź]