

Table II. Vowel confusion matrix, poorer listeners

	æ	ɑ	ɛ	eɪ	ə	ɪ	i	oʊ	ʊ	ʊ	u
æ	303	28	66	20	30	16	12	4	2	4	1
ɑ	143	207	11	6	61	2	1	22	6	22	5
ɛ	19	5	186	14	4	186	11	4	25	30	2
eɪ	21	6	16	305	12	17	98	3	2	2	4
ə	8	11	29	8	240	13	2	36	47	27	65
ɪ	6	0	66	12	3	356	30	1	4	7	1
i	10	0	11	49	6	18	387	4	1	0	0
oʊ	2	17	7	4	33	2	2	231	31	8	149
ʊ	7	10	28	4	22	39	4	31	257	47	37
ʌ	11	19	64	3	19	38	6	15	164	134	13
u	10	12	7	7	54	5	1	94	38	12	246

Table III. Vowel confusion matrix, better listeners

	æ	ɑ	ɛ	eɪ	ɚ	ɪ	i	oʊ	ʊ	ʌ	u
æ	358	4	26	2	0	0	0	0	0	0	0
ɑ	25	357	1	0	1	0	0	1	0	4	1
ɛ	8	1	310	1	0	55	1	0	3	11	0
eɪ	0	0	1	374	3	2	10	0	0	0	0
ɚ	0	0	3	0	342	3	1	3	22	3	13
ɪ	0	0	48	4	2	332	3	0	1	0	0
i	0	0	3	14	0	0	371	2	0	0	0
oʊ	0	0	0	0	0	1	1	328	1	3	56
ʊ	1	1	6	1	9	1	1	7	320	9	34
ʌ	0	2	10	0	2	0	0	1	52	322	1
u	0	0	0	1	22	0	0	60	8	4	295

Table IV. Consonant confusion matrix, poorer listeners

	p	t	k	b	d	g	f	θ	s	ʃ	v	ð	z	ʒ	m	n	r	l	j
p	188	98	106	12	6	15	17	13	5	1	3	3	2	2	0	2	2	4	1
t	55	234	135	2	2	5	8	22	3	4	1	3	2	2	0	0	0	2	0
k	72	115	242	1	1	4	7	11	9	4	0	5	1	0	1	2	0	3	2
b	32	3	6	190	55	60	31	21	3	0	33	10	3	0	16	9	3	5	0
d	13	12	9	42	151	200	9	11	0	0	7	7	0	0	4	5	1	3	6
g	14	16	15	15	80	268	7	9	3	1	11	5	6	2	2	11	3	3	9
f	39	14	13	11	1	4	177	86	55	17	20	13	5	8	3	2	3	2	7
θ	44	16	12	9	8	4	171	127	50	5	5	19	4	0	0	2	0	3	1
s	24	8	6	7	7	4	102	79	128	46	10	21	11	18	1	3	4	1	0
ʃ	2	5	0	0	1	0	5	1	49	353	1	2	11	46	1	0	1	2	0
v	15	9	8	55	16	39	16	42	19	2	101	22	25	6	26	26	22	21	10
ð	10	7	6	66	24	28	22	51	7	2	101	23	21	8	17	37	18	19	13
z	9	2	5	22	11	14	17	39	31	32	57	9	79	43	5	22	22	11	50
ʒ	1	4	2	1	0	3	4	3	7	103	5	2	54	258	2	2	7	4	18
m	7	0	7	23	2	5	19	4	4	1	14	2	6	2	217	119	20	25	3
n	7	6	6	8	21	12	4	4	5	1	16	2	12	2	67	250	8	11	38
r	4	0	2	14	2	7	5	6	5	0	56	5	10	5	22	24	206	29	78
l	5	1	0	17	1	4	5	1	3	1	12	2	5	0	78	87	95	128	35
j	2	5	5	1	4	10	4	3	6	12	11	2	24	13	6	28	8	5	33

Table V. Consonant confusion matrix, better listeners

	p	t	k	b	d	g	f	θ	s	ʃ	v	ð	z	ʒ	m	n	r	l
p	342	50	13	1	0	1	3	2	1	1	0	0	0	0	0	1	1	0
t	30	311	64	0	0	0	0	3	0	6	0	0	0	0	0	0	0	1
k	25	52	329	0	0	1	2	2	0	0	0	1	0	0	0	2	1	0
b	0	0	0	300	50	7	11	12	0	0	15	11	1	0	4	3	1	1
d	0	0	0	7	238	160	1	0	0	0	0	6	2	0	0	0	1	0
g	0	2	2	5	27	371	2	2	1	0	0	2	2	0	0	0	0	0
f	5	2	0	7	1	2	240	60	61	7	15	8	3	0	2	1	1	0
θ	2	0	0	7	2	1	135	198	49	0	8	12	1	0	1	0	0	0
s	1	1	1	2	0	3	49	94	237	6	3	11	7	0	0	0	0	0
ʃ	0	3	0	0	0	0	0	0	18	385	0	0	1	8	0	1	0	0
v	8	3	0	47	8	0	11	13	1	1	187	61	29	0	16	6	16	8
ð	0	0	0	40	21	18	2	32	0	0	98	130	39	0	6	14	8	7
z	1	0	0	1	12	13	8	16	27	11	15	60	202	13	0	7	10	1
ʒ	0	1	0	0	0	0	0	0	2	15	0	0	23	364	0	0	0	0
m	1	0	0	2	0	0	0	2	0	0	2	2	0	0	315	81	3	8
n	1	0	0	0	3	0	0	0	0	0	1	3	0	0	19	381	0	1
r	0	0	0	0	0	0	0	3	0	0	11	1	1	0	0	1	345	53
l	1	0	2	0	0	0	0	0	0	0	4	0	1	0	19	46	73	269
j	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	3	0