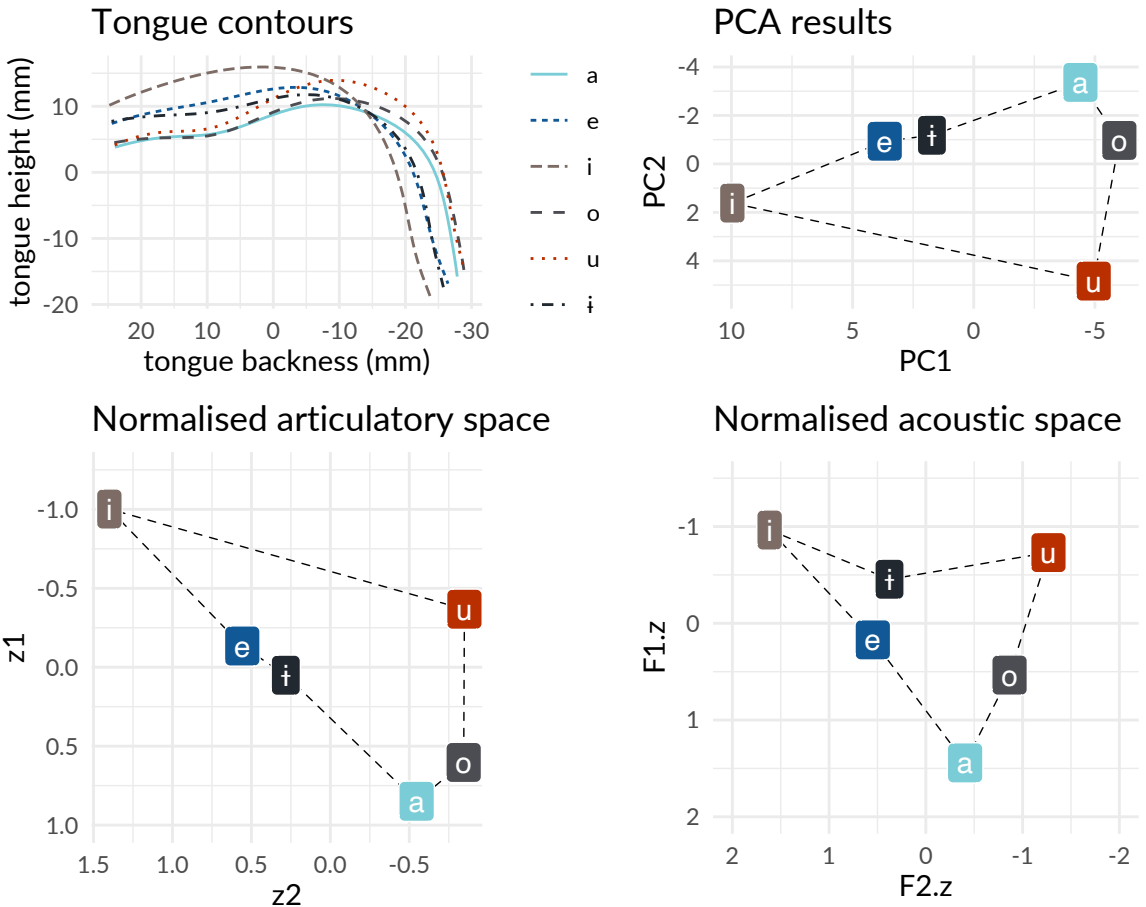
Tongue contours
tongue height (mm)
10
0
-10
-20
20
10
0
-10
-20
-30
tongue backness (mm)
a
e
i
o
u
ɨ
PCA results
PC2
-4
-2
0
2
4
10
5
0
-5
PC1
a
e
ɨ
o
i
u
Normalised articulatory space
z1
-1.0
-0.5
0.0
0.5
1.0
1.5
1.0
0.5
0.0
-0.5
z2
i
u
e
ɨ
o
a
Normalised acoustic space
F1.z
-1
0
1
2
2
1
0
-1
-2
F2.z
i
ɨ
u
e
o
a