

Supplementary Table S2. Principal component analysis of 26 acoustic features measured from 4,787 syllables of the songs of 31 long-tailed finches (L) used for syllable type identification. Table shows variance explained, cumulative variance explained and loadings of each acoustic feature for principal components one through six. Descriptions of acoustic features are provided in references cited in the Methods. (Q25: 25th quartile; Q75: 75th quartile; IQR: inter-quartile range; DF: dominant frequency)

	<i>Principal Component</i>					
	1	2	3	4	5	6
<i>Variance explained</i>	37.54%	24.99%	12.82%	5.73%	4.42%	3.66%
<i>Cumulative var. explained</i>	37.54%	62.52%	75.35%	81.08%	85.50%	89.16%
duration	0.3341	0.8289	-0.3940	0.0640	0.0408	0.0056
mean frequency	0.7484	0.1543	0.5826	0.1787	-0.0970	-0.0331
standard deviation	-0.7562	0.2465	0.3799	0.2630	-0.1521	-0.0073
median frequency	0.8386	0.1239	0.4443	0.0957	-0.0343	-0.0418
frequency Q25	0.9421	-0.0820	0.2680	0.0371	-0.0100	0.0069
frequency Q75	0.3016	0.3794	0.7572	0.2824	-0.1731	-0.1226
frequency IQR	-0.6305	0.4454	0.4670	0.2356	-0.1569	-0.1248
time median	0.3339	0.7964	-0.4391	0.1327	0.0373	0.0495
time Q25	0.3203	0.7405	-0.4334	0.2040	0.0213	0.0714
time Q75	0.3378	0.8223	-0.4190	0.0947	0.0427	0.0254
time IQR	0.3263	0.8144	-0.3858	0.0322	0.0512	0.0000
skew	0.2792	-0.5721	-0.4275	0.5538	-0.2857	-0.0602
kurtosis	0.2724	-0.4620	-0.3742	0.6287	-0.3319	-0.0750
spectral entropy	-0.5761	0.7007	0.3038	-0.0406	0.0213	0.0939
time entropy	0.2369	-0.3224	0.1132	0.2313	-0.0268	0.8647
entropy	-0.5423	0.6290	0.3559	0.0187	0.0166	0.3484
spectral flatness	-0.7532	0.3325	0.4123	0.1276	-0.0737	-0.0617
mean DF	0.9637	0.0767	0.2005	-0.0472	0.0095	-0.0009
minimum DF	0.8759	-0.2100	0.1694	-0.1290	-0.0589	-0.0038
maximum DF	0.7708	0.4565	0.1376	-0.0651	-0.0440	-0.0272
DF range	0.0408	0.7287	-0.0053	0.0498	0.0063	-0.0276
modulation index	-0.3062	0.5613	-0.0243	0.1284	-0.0985	-0.0843
start DF	0.7881	0.2388	0.0149	-0.3525	-0.3100	0.0057
end DF	0.8602	-0.0601	0.2198	0.0853	0.2513	-0.0258
DF slope	0.0664	-0.1766	0.1724	0.4694	0.8224	-0.1025
mean peak frequency	0.9216	0.0217	0.1981	-0.0421	0.0507	0.0109