

Supplementary Material 2

We tested changes in vocal distance in call structure based on the combination of all call parameters, therefore it is not straightforward to identify which parameter contributed most to the change in vocal distance. We nevertheless provide the average parameter for each individual and each call type before and after the translocation in the supplementary material 2 (Table S2.1 – S2-4) for an overview, but would like to emphasize that it is the combination of all rather than a single parameter that was responsible for the observed results. Changes in any single parameter therefore only have a limited informative value.

Table E Average value of each call parameter from the ZH animal in experiment 1 from “Before” and “After1”

| | Kapi | | Kapo | | Tabor | | Thilo | | Kaliper | | Marlene | | Vesta | | Vito | |
|-------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | <i>Before</i> | <i>After1</i> | <i>Before</i> | <i>After1</i> | <i>Before</i> | <i>After1</i> | <i>Before</i> | <i>After1</i> | <i>Before</i> | <i>After1</i> | <i>Before</i> | <i>After1</i> | <i>Before</i> | <i>After1</i> | <i>Before</i> | <i>After1</i> |
| sound duration | 0.472 | 0.522 | 0.446 | 0.599 | 0.583 | 0.565 | 0.498 | 0.508 | 0.517 | 0.579 | 0.645 | 0.735 | 0.415 | 0.383 | 0.776 | 0.451 |
| Mean F0 | 6733.6 | 5516.2 | 6036.9 | 6068.1 | 6376.5 | 6582.8 | 6631.9 | 6634.3 | 6826.3 | 6450.0 | 6561.4 | 6353.6 | 5979.2 | 5909.6 | 6923.8 | 6055.9 |
| F0 start | 6198.9 | 4890.4 | 5610.8 | 5357.1 | 5355.1 | 5724.6 | 6019.5 | 6342.7 | 6536.9 | 5916.2 | 5850.3 | 5432.8 | 5632.0 | 5679.6 | 5168.3 | 5507.8 |
| F0 end | 7025.2 | 5718.4 | 6086.5 | 6333.3 | 6961.5 | 6925.2 | 7057.1 | 6916.0 | 6877.7 | 6602.8 | 6982.8 | 6784.7 | 6249.9 | 6079.5 | 7712.5 | 6251.2 |
| Max F0 | 7120.7 | 5908.6 | 6255.0 | 6417.8 | 7101.7 | 7074.8 | 7122.8 | 6939.7 | 7077.3 | 6826.6 | 7037.2 | 6902.8 | 6303.6 | 6186.3 | 7839.0 | 6321.8 |
| % Time Max F0 | 77.1 | 72.9 | 66.7 | 76.3 | 73.9 | 82.1 | 81.4 | 66.1 | 67.4 | 69.3 | 77.7 | 80.3 | 68.2 | 60.1 | 83.0 | 71.3 |
| Min F0 | 6180.1 | 4869.7 | 5592.0 | 5357.1 | 5292.8 | 5724.6 | 6015.0 | 6231.9 | 6493.0 | 5833.1 | 5842.4 | 5406.9 | 5597.5 | 5613.6 | 5168.3 | 5503.7 |
| F0 abs slope | 2958.0 | 3073.0 | 2385.0 | 2654.5 | 3957.0 | 3424.8 | 3105.2 | 2392.2 | 2251.0 | 2864.5 | 2470.2 | 2761.0 | 2165.7 | 2301.6 | 4308.5 | 2762.8 |
| Trill calls F0 Var | 1883.1 | 2150.6 | 1405.3 | 1874.3 | 2821.7 | 2356.0 | 2126.8 | 1431.2 | 1417.1 | 1921.9 | 1656.0 | 2049.2 | 1242.9 | 1318.0 | 3348.4 | 1688.7 |
| Q25% | 8017.7 | 7586.3 | 6446.2 | 6746.6 | 6876.4 | 7959.0 | 6488.2 | 6658.3 | 7093.1 | 6747.6 | 6702.5 | 7637.5 | 6290.2 | 8454.0 | 7035.5 | 6623.3 |
| Q50% | 10822.4 | 11807.5 | 9977.1 | 10265.0 | 9265.7 | 9630.5 | 7861.4 | 8216.6 | 8756.7 | 8888.5 | 9293.8 | 9123.6 | 9563.2 | 11241.1 | 8137.6 | 9696.6 |
| Q75% | 15473.7 | 16793.8 | 12508.1 | 13324.6 | 12657.5 | 12845.7 | 11361.9 | 13216.4 | 12689.6 | 13287.1 | 12841.3 | 12085.5 | 12978.0 | 14749.5 | 11919.1 | 12492.1 |
| Fpeak | 200.6 | 229.9 | 214.2 | 204.7 | 219.5 | 222.4 | 174.0 | 158.4 | 229.7 | 215.7 | 203.1 | 211.1 | 203.2 | 198.8 | 338.2 | 217.5 |
| % Time of max intensity | 22.8 | 28.8 | 28.9 | 53.0 | 35.2 | 19.5 | 26.1 | 28.9 | 29.7 | 32.1 | 33.5 | 49.8 | 28.0 | 25.2 | 65.9 | 26.9 |
| jitter | 0.019 | 0.021 | 0.023 | 0.027 | 0.019 | 0.023 | 0.023 | 0.016 | 0.021 | 0.018 | 0.024 | 0.020 | 0.023 | 0.023 | 0.015 | 0.020 |
| Fm Rate | 2.2 | 1.7 | 2.0 | 2.0 | 1.5 | 2.6 | 2.1 | 2.2 | 2.9 | 2.0 | 1.8 | 1.2 | 2.5 | 2.7 | 0.8 | 2.0 |
| FM extend | 1355.9 | 1664.3 | 1117.8 | 1223.8 | 2822.0 | 1405.4 | 1432.3 | 727.4 | 744.3 | 1271.9 | 1468.3 | 2287.1 | 949.6 | 601.9 | 4724.1 | 994.0 |

| | | | | | | | | | | | | | | | | | |
|------------|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Phee Calls | sound duration | 1.089 | 0.971 | 0.962 | 1.165 | 0.787 | 0.878 | 1.231 | 1.014 | 1.305 | 1.358 | 1.097 | 1.324 | 1.963 | 1.318 | 1.137 | 1.672 |
| | Mean F0 | 7244.2 | 6804.8 | 7747.3 | 7359.7 | 6979.1 | 6977.2 | 7507.5 | 7560.4 | 7856.1 | 7455.8 | 7690.0 | 7546.2 | 7095.3 | 7214.6 | 7957.3 | 7765.0 |
| | F0 start | 6518.2 | 5866.6 | 6833.5 | 6276.5 | 6238.7 | 5983.4 | 6623.9 | 6553.1 | 7130.3 | 6634.4 | 6855.1 | 6736.4 | 6511.8 | 6234.8 | 7310.6 | 6765.2 |
| | F0 end | 7627.5 | 7338.1 | 8119.8 | 7806.6 | 6899.9 | 7003.9 | 7592.4 | 7824.8 | 8168.0 | 7742.8 | 8033.1 | 7701.9 | 6719.9 | 7319.5 | 8165.3 | 7862.4 |
| | Max F0 | 7858.1 | 7477.6 | 8393.8 | 8058.1 | 7450.3 | 7438.7 | 8116.8 | 8118.4 | 8438.6 | 8061.4 | 8272.5 | 8127.7 | 7430.9 | 7663.0 | 8479.3 | 8116.0 |
| | % Time Max F0 | 84.0 | 85.2 | 79.4 | 82.9 | 71.6 | 77.3 | 79.4 | 79.8 | 86.6 | 84.7 | 77.2 | 78.3 | 86.6 | 83.8 | 80.5 | 71.3 |
| | Min F0 | 6478.8 | 5859.4 | 6754.1 | 6251.2 | 6190.6 | 5979.6 | 6545.7 | 6549.7 | 7127.5 | 6629.2 | 6791.7 | 6731.9 | 6359.1 | 6229.4 | 7115.0 | 6735.8 |
| | F0 abs slope | 2146.6 | 2725.5 | 2892.4 | 2719.9 | 3022.1 | 2895.4 | 2200.6 | 2524.8 | 1454.3 | 1505.2 | 2293.4 | 1758.2 | 982.2 | 1767.2 | 1827.9 | 1381.9 |
| | F0 Var | 1691.5 | 2171.6 | 2209.9 | 2123.2 | 2202.5 | 2167.5 | 1734.4 | 1889.0 | 1169.3 | 1212.6 | 1844.2 | 1347.1 | 687.2 | 1391.6 | 1483.2 | 1091.0 |
| | Q25% | 7195.4 | 6816.4 | 7700.6 | 7351.8 | 6976.3 | 7004.5 | 7314.8 | 7408.4 | 7690.7 | 7370.8 | 7479.8 | 7553.1 | 7126.9 | 7287.9 | 7729.7 | 7753.8 |
| | Q50% | 8151.8 | 8358.6 | 8596.7 | 8472.0 | 7557.0 | 7705.0 | 7713.7 | 7794.9 | 7995.7 | 7940.8 | 7856.9 | 8679.3 | 7333.5 | 8097.6 | 8192.1 | 7943.9 |
| | Q75% | 13085.6 | 13276.4 | 12133.5 | 12678.7 | 10402.2 | 11439.4 | 9525.2 | 9399.7 | 9097.2 | 10925.2 | 8482.6 | 13598.8 | 10371.8 | 12785.2 | 10460.8 | 9029.7 |
| | Fpeak | 234.9 | 277.5 | 233.9 | 263.9 | 212.0 | 231.6 | 255.2 | 252.8 | 257.1 | 346.4 | 229.7 | 286.0 | 276.7 | 289.1 | 253.4 | 245.3 |
| | % Time of max intensity | 46.8 | 48.0 | 48.5 | 47.9 | 48.0 | 48.3 | 39.5 | 41.1 | 46.4 | 46.6 | 47.6 | 50.1 | 52.1 | 58.8 | 32.3 | 53.9 |
| jitter | 0.007 | 0.005 | 0.008 | 0.007 | 0.006 | 0.005 | 0.006 | 0.007 | 0.006 | 0.006 | 0.006 | 0.006 | 0.005 | 0.005 | 0.005 | 0.012 | 0.007 |
| Food Call | sound duration | 0.099 | 0.107 | 0.144 | 0.152 | 0.114 | 0.106 | 0.101 | 0.101 | 0.117 | 0.120 | 0.238 | 0.229 | 0.121 | 0.120 | 0.112 | 0.115 |
| | Mean F0 | 7448.5 | 6527.5 | 8138.7 | 8121.5 | 7301.1 | 6584.5 | 7841.2 | 7382.4 | 7984.1 | 7480.4 | 7942.5 | 6553.5 | 8348.6 | 7999.4 | 7031.2 | 6822.1 |
| | F0 start | 8067.1 | 7218.1 | 8895.4 | 8867.7 | 7946.7 | 7185.6 | 8477.5 | 8123.7 | 8663.7 | 8205.0 | 8739.1 | 7440.5 | 9047.2 | 8789.7 | 7628.1 | 7398.0 |
| | F0 end | 6819.3 | 5821.7 | 7067.7 | 7203.0 | 6584.6 | 5843.2 | 7138.2 | 6575.1 | 7314.0 | 6736.3 | 7302.9 | 5894.2 | 7586.1 | 7122.9 | 6417.0 | 6225.8 |
| | Max F0 | 8067.1 | 7219.0 | 8903.1 | 8881.2 | 7959.9 | 7200.0 | 8486.0 | 8124.8 | 8664.2 | 8205.0 | 8751.4 | 7446.5 | 9048.2 | 8790.1 | 7628.1 | 7399.3 |
| | % Time Max F0 | 27.8 | 28.0 | 22.8 | 20.3 | 25.7 | 26.2 | 27.7 | 29.0 | 24.0 | 24.3 | 18.3 | 15.5 | 24.4 | 24.1 | 26.3 | 24.8 |
| | Min F0 | 6819.3 | 5821.7 | 7067.7 | 7202.4 | 6580.2 | 5836.8 | 7138.2 | 6574.5 | 7314.0 | 6736.2 | 7297.4 | 5890.0 | 7586.1 | 7122.9 | 6417.0 | 6225.8 |
| | F0 abs slope | 34734.7 | 37231.5 | 33278.0 | 28902.9 | 30543.6 | 28568.0 | 43676.9 | 43796.5 | 27748.5 | 29509.3 | 14781.1 | 13924.2 | 33416.2 | 36044.3 | 31096.8 | 25747.0 |
| | F0 Var | 3816.9 | 3777.7 | 6666.6 | 6844.7 | 4866.8 | 5948.4 | 3726.6 | 5064.1 | 5485.9 | 6172.5 | 4451.8 | 6036.7 | 4856.5 | 5109.4 | 3251.4 | 4042.3 |
| | Q25% | 7554.2 | 6809.7 | 7887.3 | 7951.6 | 7525.0 | 7731.8 | 7539.9 | 7239.5 | 7636.1 | 7397.6 | 7831.4 | 6836.6 | 7630.9 | 7783.1 | 6872.5 | 6817.1 |
| | Q50% | 9057.1 | 9160.1 | 9577.3 | 9498.3 | 9773.9 | 10402.1 | 9284.7 | 9100.3 | 8600.0 | 8912.2 | 8919.7 | 9415.2 | 9014.5 | 9292.2 | 8092.1 | 8450.8 |
| | Q75% | 12558.7 | 14194.1 | 13684.2 | 13964.8 | 13884.2 | 13675.0 | 13272.2 | 12366.2 | 11502.0 | 13466.7 | 12746.3 | 13439.9 | 11630.8 | 13982.6 | 11227.0 | 11862.0 |
| | Fpeak | 170.6 | 175.2 | 186.6 | 177.4 | 164.6 | 160.8 | 145.8 | 187.6 | 159.3 | 177.1 | 197.7 | 199.9 | 164.1 | 187.8 | 175.5 | 174.6 |
| | % Time of max intensity | 41.6 | 44.3 | 44.7 | 41.5 | 46.0 | 48.9 | 44.0 | 44.4 | 41.8 | 43.8 | 36.9 | 36.5 | 48.7 | 44.3 | 43.7 | 45.1 |
| jitter | 0.032 | 0.028 | 0.025 | 0.024 | 0.025 | 0.023 | 0.027 | 0.024 | 0.024 | 0.024 | 0.026 | 0.015 | 0.015 | 0.023 | 0.020 | 0.028 | 0.024 |

Table F Average value of each call parameter from the ZH animals in experiment 1 from “Before” and “After2”

| | Kapi | | Kapo | | Tabor | | Thilo | | Kaliper | | Marlene | | Vesta | | Vito | | |
|-------------|-------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------|
| | <i>Before</i> | <i>After2</i> | <i>Before</i> | <i>After2</i> | <i>Before</i> | <i>After2</i> | <i>Before</i> | <i>After2</i> | <i>Before</i> | <i>After2</i> | <i>Before</i> | <i>After2</i> | <i>Before</i> | <i>After2</i> | <i>Before</i> | <i>After2</i> | |
| Trill calls | sound duration | 0.472 | 0.477 | 0.446 | 0.387 | 0.583 | 0.570 | 0.498 | 0.468 | 0.517 | 0.501 | 0.645 | 0.596 | 0.415 | 0.344 | 0.776 | 0.360 |
| | Mean F0 | 6733.6 | 6149.8 | 6036.9 | 5444.6 | 6376.5 | 5864.6 | 6631.9 | 6542.2 | 6826.3 | 6439.8 | 6561.4 | 6161.5 | 5979.2 | 6013.9 | 6923.8 | 6101.2 |
| | F0 start | 6198.9 | 5670.1 | 5610.8 | 5196.0 | 5355.1 | 4809.7 | 6019.5 | 5906.2 | 6536.9 | 6177.0 | 5850.3 | 5502.3 | 5632.0 | 5904.1 | 5168.3 | 5736.5 |
| | F0 end | 7025.2 | 6270.3 | 6086.5 | 5384.6 | 6961.5 | 6417.5 | 7057.1 | 6941.5 | 6877.7 | 6456.3 | 6982.8 | 6472.6 | 6249.9 | 6145.6 | 7712.5 | 6192.5 |
| | Max F0 | 7120.7 | 6437.5 | 6255.0 | 5587.1 | 7101.7 | 6459.4 | 7122.8 | 6978.1 | 7077.3 | 6630.1 | 7037.2 | 6566.1 | 6303.6 | 6221.9 | 7839.0 | 6284.5 |
| | % Time Max F0 | 77.1 | 67.1 | 66.7 | 57.2 | 73.9 | 78.6 | 81.4 | 79.7 | 67.4 | 54.5 | 77.7 | 78.2 | 68.2 | 64.0 | 83.0 | 68.9 |
| | Min F0 | 6180.1 | 5630.2 | 5592.0 | 5148.9 | 5292.8 | 4809.7 | 6015.0 | 5904.8 | 6493.0 | 6112.3 | 5842.4 | 5493.7 | 5597.5 | 5847.3 | 5168.3 | 5732.3 |
| | F0 abs slope | 2958.0 | 2651.3 | 2385.0 | 2190.1 | 3957.0 | 3550.2 | 3105.2 | 3150.6 | 2251.0 | 1904.0 | 2470.2 | 2387.1 | 2165.7 | 1943.4 | 4308.5 | 2322.7 |
| | F0 Var | 1883.1 | 1585.7 | 1405.3 | 1187.6 | 2821.7 | 2669.2 | 2126.8 | 2081.4 | 1417.1 | 1191.4 | 1656.0 | 1643.9 | 1242.9 | 895.0 | 3348.4 | 1365.1 |
| | Q25% | 8017.7 | 7940.5 | 6446.2 | 6564.9 | 6876.4 | 6642.8 | 6488.2 | 6471.7 | 7093.1 | 6454.5 | 6702.5 | 7159.8 | 6290.2 | 8032.8 | 7035.5 | 6885.2 |
| | Q50% | 10822.4 | 11494.8 | 9977.1 | 9669.0 | 9265.7 | 9606.7 | 7861.4 | 8229.4 | 8756.7 | 8679.4 | 9293.8 | 9987.3 | 9563.2 | 11160.6 | 8137.6 | 9966.6 |
| | Q75% | 15473.7 | 14959.2 | 12508.1 | 12075.6 | 12657.5 | 12252.4 | 11361.9 | 11779.1 | 12689.6 | 11935.7 | 12841.3 | 12271.3 | 12978.0 | 14502.4 | 11919.1 | 13274.6 |
| | Fpeak | 200.6 | 219.5 | 214.2 | 174.8 | 219.5 | 205.0 | 174.0 | 266.7 | 229.7 | 200.1 | 203.1 | 224.4 | 203.2 | 201.7 | 338.2 | 180.6 |
| | % Time of max intensity | 22.8 | 24.4 | 28.9 | 30.9 | 35.2 | 25.7 | 26.1 | 22.2 | 29.7 | 29.3 | 33.5 | 33.1 | 28.0 | 27.5 | 65.9 | 24.9 |
| | jitter | 0.019 | 0.022 | 0.023 | 0.028 | 0.019 | 0.025 | 0.023 | 0.019 | 0.021 | 0.024 | 0.024 | 0.022 | 0.023 | 0.024 | 0.015 | 0.024 |
| Fm Rate | 2.2 | 2.4 | 2.0 | 2.3 | 1.5 | 1.8 | 2.1 | 1.7 | 2.9 | 2.5 | 1.8 | 1.6 | 2.5 | 2.8 | 0.8 | 2.2 | |
| FM extend | 1355.9 | 1113.7 | 1117.8 | 728.5 | 2822.0 | 2196.4 | 1432.3 | 1621.2 | 744.3 | 613.8 | 1468.3 | 1579.8 | 949.6 | 444.9 | 4724.1 | 1030.8 | |
| Phee Calls | sound duration | 1.089 | 1.040 | 0.962 | 1.172 | 0.787 | 1.044 | 1.231 | 0.949 | 1.305 | 1.374 | 1.097 | 1.469 | 1.963 | 1.442 | 1.137 | 1.546 |
| | Mean F0 | 7244.2 | 6809.9 | 7747.3 | 7399.6 | 6979.1 | 6789.1 | 7507.5 | 7506.5 | 7856.1 | 6950.7 | 7690.0 | 7767.3 | 7095.3 | 7409.1 | 7957.3 | 8053.2 |
| | F0 start | 6518.2 | 6138.4 | 6833.5 | 6381.8 | 6238.7 | 5952.1 | 6623.9 | 6491.3 | 7130.3 | 6368.5 | 6855.1 | 7179.0 | 6511.8 | 6897.1 | 7310.6 | 7055.6 |
| | F0 end | 7627.5 | 7504.7 | 8119.8 | 7789.5 | 6899.9 | 6885.4 | 7592.4 | 8086.8 | 8168.0 | 7240.1 | 8033.1 | 7906.7 | 6719.9 | 7798.6 | 8165.3 | 8046.6 |
| | Max F0 | 7858.1 | 7590.6 | 8393.8 | 8053.4 | 7450.3 | 7241.8 | 8116.8 | 8231.6 | 8438.6 | 7342.0 | 8272.5 | 8240.5 | 7430.9 | 8091.5 | 8479.3 | 8591.8 |
| | % Time Max F0 | 84.0 | 85.0 | 79.4 | 81.4 | 71.6 | 80.2 | 79.4 | 83.7 | 86.6 | 87.2 | 77.2 | 76.8 | 86.6 | 76.1 | 80.5 | 87.4 |

| | | | | | | | | | | | | | | | | | | |
|-----------|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| | Min F0 | 6478.8 | 6101.8 | 6754.1 | 6381.1 | 6190.6 | 5931.6 | 6545.7 | 6491.3 | 7127.5 | 6368.5 | 6791.7 | 7075.8 | 6359.1 | 6608.4 | 7115.0 | 6984.6 | |
| | F0 abs slope | 2146.6 | 2132.1 | 2892.4 | 2327.1 | 3022.1 | 2180.8 | 2200.6 | 2529.9 | 1454.3 | 993.7 | 2293.4 | 1299.3 | 982.2 | 1683.2 | 1827.9 | 1751.9 | |
| | F0 Var | 1691.5 | 1606.4 | 2209.9 | 1769.0 | 2202.5 | 1601.2 | 1734.4 | 2003.3 | 1169.3 | 792.0 | 1844.2 | 1083.1 | 687.2 | 1375.0 | 1483.2 | 1314.2 | |
| | Q25% | 7195.4 | 6710.8 | 7700.6 | 7339.8 | 6976.3 | 7003.5 | 7314.8 | 7265.5 | 7690.7 | 6921.2 | 7479.8 | 7731.5 | 7126.9 | 7301.1 | 7729.7 | 7937.6 | |
| | Q50% | 8151.8 | 9044.4 | 8596.7 | 8157.2 | 7557.0 | 7904.7 | 7713.7 | 7854.3 | 7995.7 | 8650.4 | 7856.9 | 8267.6 | 7333.5 | 7700.8 | 8192.1 | 8258.5 | |
| | Q75% | 13085.6 | 13160.3 | 12133.5 | 12002.0 | 10402.2 | 12576.1 | 9525.2 | 10367.2 | 9097.2 | 12579.2 | 8482.6 | 12761.4 | 10371.8 | 11399.9 | 10460.8 | 9501.8 | |
| | Fpeak | 234.9 | 306.3 | 233.9 | 256.5 | 212.0 | 258.5 | 255.2 | 242.3 | 257.1 | 215.0 | 229.7 | 317.4 | 276.7 | 268.4 | 253.4 | 235.7 | |
| | % Time of max intensity | 46.8 | 44.0 | 48.5 | 48.9 | 48.0 | 58.6 | 39.5 | 39.8 | 46.4 | 45.7 | 47.6 | 46.9 | 52.1 | 48.4 | 32.3 | 49.5 | |
| | jitter | 0.007 | 0.005 | 0.008 | 0.006 | 0.006 | 0.006 | 0.006 | 0.009 | 0.006 | 0.005 | 0.006 | 0.005 | 0.005 | 0.008 | 0.012 | 0.007 | |
| | sound duration | 0.099 | 0.106 | 0.144 | 0.150 | 0.114 | 0.101 | 0.101 | 0.101 | 0.117 | 0.136 | 0.238 | 0.195 | 0.121 | 0.114 | 0.112 | 0.107 | |
| | Mean F0 | 7448.5 | 7100.7 | 8138.7 | 8041.1 | 7301.1 | 6748.1 | 7841.2 | 7743.0 | 7984.1 | 8557.2 | 7942.5 | 7407.6 | 8348.6 | 7826.1 | 7031.2 | 7009.6 | |
| | F0 start | 8067.1 | 7708.7 | 8895.4 | 8907.8 | 7946.7 | 7423.4 | 8477.5 | 8548.4 | 8663.7 | 9430.6 | 8739.1 | 8019.8 | 9047.2 | 8436.2 | 7628.1 | 7601.2 | |
| | F0 end | 6819.3 | 6442.6 | 7067.7 | 7001.9 | 6584.6 | 5895.4 | 7138.2 | 6860.2 | 7314.0 | 7547.3 | 7302.9 | 6930.1 | 7586.1 | 7135.7 | 6417.0 | 6365.3 | |
| | Max F0 | 8067.1 | 7708.7 | 8903.1 | 8916.6 | 7959.9 | 7436.1 | 8486.0 | 8549.3 | 8664.2 | 9434.1 | 8751.4 | 8031.1 | 9048.2 | 8447.0 | 7628.1 | 7622.7 | |
| | % Time Max F0 | 27.8 | 27.7 | 22.8 | 25.4 | 25.7 | 23.7 | 27.7 | 28.7 | 24.0 | 24.8 | 18.3 | 19.4 | 24.4 | 24.5 | 26.3 | 25.2 | |
| Food Call | Min F0 | 6819.3 | 6442.6 | 7067.7 | 7001.9 | 6580.2 | 5895.4 | 7138.2 | 6859.6 | 7314.0 | 7547.3 | 7297.4 | 6929.1 | 7586.1 | 7135.7 | 6417.0 | 6345.6 | |
| | F0 abs slope | 34734.7 | 37533.0 | 33278.0 | 37110.2 | 30543.6 | 30958.6 | 43676.9 | 47140.1 | 27748.5 | 34204.0 | 14781.1 | 12508.3 | 33416.2 | 27700.1 | 31096.8 | 27553.7 | |
| | F0 Var | 3816.9 | 3158.2 | 6666.6 | 4575.7 | 4866.8 | 8319.9 | 3726.6 | 4628.1 | 5485.9 | 6633.9 | 4451.8 | 4783.3 | 4856.5 | 5133.3 | 3251.4 | 5280.4 | |
| | Q25% | 7554.2 | 7212.9 | 7887.3 | 8186.2 | 7525.0 | 7847.3 | 7539.9 | 7524.2 | 7636.1 | 8376.6 | 7831.4 | 7228.6 | 7630.9 | 7211.7 | 6872.5 | 6959.1 | |
| | Q50% | 9057.1 | 9619.1 | 9577.3 | 10062.3 | 9773.9 | 10495.8 | 9284.7 | 9022.0 | 8600.0 | 9601.0 | 8919.7 | 7992.2 | 9014.5 | 8607.5 | 8092.1 | 8499.8 | |
| | Q75% | 12558.7 | 13933.2 | 13684.2 | 15714.6 | 13884.2 | 14320.3 | 13272.2 | 12336.6 | 11502.0 | 12165.4 | 12746.3 | 11253.0 | 11630.8 | 11347.2 | 11227.0 | 12851.8 | |
| | Fpeak | 170.6 | 165.3 | 186.6 | 172.8 | 164.6 | 165.0 | 145.8 | 176.5 | 159.3 | 160.0 | 197.7 | 186.3 | 164.1 | 153.1 | 175.5 | 191.7 | |
| | % Time of max intensity | 41.6 | 45.8 | 44.7 | 40.2 | 46.0 | 48.5 | 44.0 | 44.2 | 41.8 | 38.7 | 36.9 | 39.2 | 48.7 | 51.8 | 43.7 | 47.5 | |
| | | jitter | 0.032 | 0.027 | 0.025 | 0.022 | 0.025 | 0.020 | 0.027 | 0.023 | 0.024 | 0.025 | 0.015 | 0.017 | 0.023 | 0.035 | 0.028 | 0.022 |

Table G Average value of each call parameter from the MA animals in experiment 1 from “*Before*” and “*NewPhys*”.

| | | Conan | | Craken | | Washington | | Wisconsin | |
|----------------|-------------------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|
| | | <i>Before</i> | <i>NewPhys</i> | <i>Before</i> | <i>NewPhys</i> | <i>Before</i> | <i>NewPhys</i> | <i>Before</i> | <i>NewPhys</i> |
| Trill calls | sound duration | 0.274 | 0.334 | 0.398 | 0.647 | 0.272 | 0.419 | 0.214 | 0.364 |
| | Mean F0 | 7291.6 | 8362.9 | 7684.3 | 8556.6 | 7321.6 | 7063.3 | 7846.9 | 7414.4 |
| | F0 start | 7337.4 | 8259.7 | 7784.6 | 7883.0 | 7448.7 | 6921.6 | 7905.5 | 7203.8 |
| | F0 end | 7090.6 | 8427.4 | 7499.4 | 8554.0 | 7218.5 | 7075.5 | 7708.4 | 7430.1 |
| | Max F0 | 7433.1 | 8484.5 | 7944.6 | 8919.5 | 7542.4 | 7176.6 | 8001.1 | 7530.7 |
| | % Time Max F0 | 25.5 | 70.1 | 30.5 | 72.2 | 25.6 | 54.0 | 33.1 | 52.2 |
| | Min F0 | 7090.6 | 8208.9 | 7381.6 | 7738.7 | 7142.6 | 6894.5 | 7668.5 | 7180.8 |
| | F0 abs slope | 2511.1 | 1642.8 | 2806.3 | 3257.0 | 2194.3 | 1780.9 | 2585.2 | 2283.8 |
| | F0 Var | 1441.6 | 945.6 | 1640.0 | 2104.5 | 1568.5 | 849.2 | 1664.6 | 1111.6 |
| | Q25% | 7339.3 | 8279.3 | 7664.0 | 8116.9 | 7296.6 | 6932.6 | 7770.0 | 7230.1 |
| | Q50% | 7785.3 | 9206.0 | 8149.4 | 9190.3 | 7681.2 | 7663.7 | 8244.9 | 7938.1 |
| | Q75% | 13205.8 | 18796.1 | 12568.3 | 16116.0 | 9051.9 | 13086.0 | 9795.7 | 13019.9 |
| | Fpeak | 213.0 | 227.9 | 206.5 | 297.0 | 193.3 | 202.9 | 169.9 | 198.5 |
| | % Time of max intensity | 40.1 | 24.3 | 28.1 | 45.8 | 25.7 | 22.5 | 33.1 | 23.8 |
| | jitter | 0.030 | 0.040 | 0.034 | 0.043 | 0.025 | 0.043 | 0.026 | 0.043 |
| Fm Rate | 2.6 | 3.7 | 3.0 | 3.4 | 3.8 | 3.4 | 3.5 | 2.7 | |
| FM extend | 580.5 | 406.1 | 652.2 | 1094.8 | 470.8 | 287.9 | 638.4 | 519.7 | |
| Phee calls | sound duration | 0.422 | 0.703 | 0.447 | 0.987 | 0.539 | 0.800 | 0.532 | 0.839 |
| | Mean F0 | 7697.6 | 8111.2 | 7680.6 | 8313.3 | 7161.8 | 7417.3 | 7528.9 | 7692.3 |
| | F0 start | 7557.4 | 7571.8 | 7502.7 | 7554.5 | 6936.8 | 6886.9 | 7309.4 | 7197.1 |
| | F0 end | 7667.3 | 8338.8 | 7635.9 | 8563.0 | 7138.1 | 7704.8 | 7590.5 | 7996.0 |
| | Max F0 | 7923.2 | 8412.0 | 7973.5 | 8749.5 | 7415.9 | 7803.0 | 7775.5 | 8082.4 |
| | % Time Max F0 | 54.7 | 75.0 | 37.5 | 72.5 | 60.9 | 79.9 | 66.9 | 79.6 |
| | Min F0 | 7358.9 | 7548.5 | 7248.5 | 7514.8 | 6813.9 | 6866.3 | 7231.7 | 7181.2 |
| | F0 abs slope | 2319.4 | 1680.3 | 2720.1 | 1966.7 | 2073.9 | 2315.3 | 1789.8 | 2098.0 |
| | F0 Var | 1726.2 | 1337.3 | 1836.2 | 1489.8 | 1707.9 | 1408.8 | 1476.2 | 1447.5 |

| | | | | | | | | | |
|-------|-------------------------|---------|---------|---------|---------|--------|--------|---------|---------|
| | Q25% | 7699.6 | 7932.2 | 7560.5 | 8001.7 | 7044.7 | 7174.2 | 7396.2 | 7503.3 |
| | Q50% | 8080.9 | 8290.3 | 8373.5 | 8585.8 | 7263.1 | 7455.5 | 7633.5 | 7849.5 |
| | Q75% | 12431.5 | 10284.2 | 12309.1 | 11570.2 | 8183.9 | 8530.1 | 9562.5 | 10562.4 |
| | Fpeak | 205.5 | 219.7 | 225.3 | 242.3 | 210.1 | 239.1 | 219.1 | 227.3 |
| | % Time of max intensity | 35.5 | 42.9 | 37.5 | 33.4 | 41.6 | 27.6 | 44.5 | 36.9 |
| | jitter | 0.029 | 0.016 | 0.028 | 0.025 | 0.011 | 0.019 | 0.019 | 0.021 |
| | sound duration | 0.064 | 0.090 | 0.078 | 0.093 | | | 0.084 | 0.101 |
| | Mean F0 | 7892.3 | 8259.3 | 7543.4 | 7263.6 | | | 7623.8 | 7994.9 |
| | F0 start | 8239.8 | 8574.1 | 7905.2 | 7639.9 | | | 8037.4 | 8388.4 |
| | F0 end | 7471.5 | 7914.4 | 7122.8 | 6860.8 | | | 7211.5 | 7592.3 |
| | Max F0 | 8281.6 | 8576.9 | 7975.7 | 7648.4 | | | 8050.8 | 8388.9 |
| | % Time Max F0 | 21.7 | 27.1 | 23.8 | 24.6 | | | 20.0 | 29.6 |
| | Min F0 | 7435.6 | 7914.4 | 7118.1 | 6860.8 | | | 7206.4 | 7592.3 |
| Food | F0 abs slope | 25835.3 | 23996.9 | 19278.0 | 31121.8 | | | 17044.9 | 27056.9 |
| calls | F0 Var | 8636.1 | 1595.3 | 8047.0 | 1183.5 | | | 7333.6 | 1263.7 |
| | Q25% | 7406.3 | 7356.7 | 7332.2 | 7349.6 | | | 7294.0 | 7290.3 |
| | Q50% | 8221.8 | 8209.2 | 7953.1 | 8882.0 | | | 8100.4 | 8294.2 |
| | Q75% | 9762.2 | 9537.9 | 10549.3 | 14215.8 | | | 11086.8 | 11320.9 |
| | Fpeak | 161.9 | 165.9 | 146.0 | 163.0 | | | 153.0 | 163.9 |
| | % Time of max intensity | 50.6 | 47.6 | 47.0 | 43.6 | | | 48.0 | 44.7 |
| | jitter | 0.030 | 0.049 | 0.035 | 0.053 | | | 0.030 | 0.041 |

Table H Average value of each call parameter for each MA individual in the situation “Before” and “NewSoc” as well as of the ZH animals (Baseline) involved in experiment 2.

| | | Conan | | Craken | | Washington | | Wisconsin | | Lilly | Gatto | Mibba | Nautilus |
|-------------|----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|-----------------|-----------------|-----------------|
| | | <i>Before</i> | <i>NewSoc</i> | <i>Before</i> | <i>NewSoc</i> | <i>Before</i> | <i>NewSoc</i> | <i>Before</i> | <i>NewSoc</i> | <i>Baseline</i> | <i>Baseline</i> | <i>Baseline</i> | <i>Baseline</i> |
| Trill calls | sound duration | 0.274 | 0.634 | 0.398 | 0.738 | 0.272 | 0.516 | 0.214 | 0.502 | 0.570 | 0.369 | 0.702 | 0.808 |
| | Mean F0 | 7291.6 | 7254.5 | 7684.3 | 7273.1 | 7321.6 | 7010.8 | 7846.9 | 7355.6 | 6609.6 | 6684.0 | 6652.1 | 7042.3 |
| | F0 start | 7337.4 | 6704.6 | 7784.6 | 6399.2 | 7448.7 | 6607.6 | 7905.5 | 6901.5 | 6191.9 | 6439.6 | 5956.3 | 6320.6 |
| | F0 end | 7090.6 | 7296.5 | 7499.4 | 7567.4 | 7218.5 | 7120.6 | 7708.4 | 7439.2 | 6688.2 | 6769.2 | 6812.9 | 7393.1 |
| | Max F0 | 7433.1 | 7564.9 | 7944.6 | 7697.1 | 7542.4 | 7217.1 | 8001.1 | 7553.6 | 6957.9 | 6836.4 | 7090.9 | 7555.6 |
| | Perc Time Max F0 | 25.5 | 63.0 | 30.5 | 74.9 | 25.6 | 69.2 | 33.1 | 65.3 | 62.2 | 64.3 | 65.9 | 74.8 |
| | Min F0 | 7090.6 | 6647.6 | 7381.6 | 6393.9 | 7142.6 | 6603.7 | 7668.5 | 6886.9 | 6086.9 | 6432.9 | 5826.7 | 6284.5 |
| | F0 abs slope | 2511.1 | 2639.1 | 2806.3 | 2394.3 | 2194.3 | 1989.7 | 2585.2 | 2342.2 | 2831.2 | 2052.6 | 2629.1 | 2471.9 |
| | F0 Var | 1441.6 | 1625.9 | 1640.0 | 1776.7 | 1568.5 | 1212.4 | 1664.6 | 1395.5 | 1688.8 | 1114.4 | 1961.8 | 1666.5 |
| | Q25perc | 7339.3 | 7077.8 | 7664.0 | 6977.1 | 7296.6 | 6821.8 | 7770.0 | 7093.7 | 8148.4 | 6731.1 | 6787.9 | 7123.6 |
| | Q50perc | 7785.3 | 7797.6 | 8149.4 | 7583.1 | 7681.2 | 7455.9 | 8244.9 | 7579.8 | 9878.8 | 8633.1 | 9234.4 | 8072.6 |
| | Q75perc | 13205.8 | 10030.5 | 12568.3 | 9888.1 | 9051.9 | 10284.9 | 9795.7 | 9482.6 | 12738.7 | 13279.8 | 13103.2 | 12240.7 |
| | Fpeak | 213.0 | 201.6 | 206.5 | 191.4 | 193.3 | 186.1 | 169.9 | 186.9 | 235.9 | 210.3 | 236.1 | 220.9 |
| | Perc Time of max intensity | 40.1 | 26.3 | 28.1 | 30.0 | 25.7 | 23.1 | 33.1 | 22.2 | 33.3 | 26.9 | 24.7 | 54.4 |
| | jitter | 0.030 | 0.030 | 0.034 | 0.027 | 0.025 | 0.040 | 0.026 | 0.037 | 0.026 | 0.023 | 0.016 | 0.022 |
| | Fm Rate | 2.6 | 2.8 | 3.0 | 2.6 | 3.8 | 2.9 | 3.5 | 2.7 | 2.8 | 2.9 | 1.7 | 1.9 |
| FM extend | 580.5 | 1026.5 | 652.2 | 1119.0 | 470.8 | 610.3 | 638.4 | 721.5 | 1244.1 | 525.3 | 1843.6 | 1855.9 | |
| Phee calls | sound duration | 0.422 | 0.725 | 0.447 | 1.378 | 0.539 | 1.502 | 0.532 | 1.182 | 0.863 | 0.757 | 0.955 | 0.927 |
| | Mean F0 | 7697.6 | 8006.5 | 7680.6 | 7660.0 | 7161.8 | 7464.9 | 7528.9 | 7344.7 | 7141.2 | 7296.1 | 7692.7 | 7512.6 |
| | F0 start | 7557.4 | 7422.0 | 7502.7 | 6864.4 | 6936.8 | 6585.0 | 7309.4 | 6627.7 | 6348.5 | 6609.7 | 6699.9 | 6625.7 |
| | F0 end | 7667.3 | 8165.3 | 7635.9 | 7777.7 | 7138.1 | 7859.9 | 7590.5 | 7619.1 | 7614.9 | 7226.1 | 8047.1 | 7793.5 |
| | Max F0 | 7923.2 | 8300.8 | 7973.5 | 8065.5 | 7415.9 | 8024.8 | 7775.5 | 7872.2 | 7715.2 | 7656.6 | 8358.7 | 8224.8 |
| | percTime Max F0 | 54.7 | 74.8 | 37.5 | 74.9 | 60.9 | 85.1 | 66.9 | 78.9 | 81.5 | 64.5 | 82.0 | 79.8 |
| | Min F0 | 7358.9 | 7391.8 | 7248.5 | 6817.4 | 6813.9 | 6571.9 | 7231.7 | 6604.9 | 6316.7 | 6572.9 | 6673.8 | 6576.4 |

| | | | | | | | | | | | | | |
|------------|---------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | F0 abs slope | 2319.4 | 1847.3 | 2720.1 | 1612.6 | 2073.9 | 1422.6 | 1789.8 | 1943.4 | 2240.0 | 2580.2 | 2503.8 | 3049.4 |
| | F0 Var | 1726.2 | 1432.9 | 1836.2 | 1284.5 | 1707.9 | 1161.3 | 1476.2 | 1543.2 | 1807.5 | 2018.8 | 2012.2 | 2204.6 |
| | Q25perc | 7699.6 | 7826.0 | 7560.5 | 7471.7 | 7044.7 | 7218.2 | 7396.2 | 7094.9 | 7187.4 | 7176.9 | 7582.9 | 7363.4 |
| | Q50perc | 8080.9 | 8179.0 | 8373.5 | 7785.7 | 7263.1 | 7465.5 | 7633.5 | 7386.1 | 8079.7 | 7436.9 | 8285.8 | 7725.3 |
| | Q75perc | 12431.5 | 9817.2 | 12309.1 | 9009.0 | 8183.9 | 7906.2 | 9562.5 | 8298.8 | 12734.9 | 7912.3 | 11777.0 | 9214.9 |
| | Fpeak | 205.5 | 188.1 | 225.3 | 214.6 | 210.1 | 218.4 | 219.1 | 215.4 | 224.7 | 218.5 | 231.1 | 253.2 |
| | percTime of max intensity | 35.5 | 43.9 | 37.5 | 49.5 | 41.6 | 40.7 | 44.5 | 40.2 | 58.9 | 46.8 | 53.4 | 51.5 |
| | jitter | 0.029 | 0.018 | 0.028 | 0.014 | 0.011 | 0.011 | 0.019 | 0.012 | 0.004 | 0.005 | 0.007 | 0.007 |
| | sound duration | 0.064 | 0.115 | 0.078 | 0.132 | 0.084 | 0.141 | 0.084 | 0.143 | 0.156 | 0.105 | 0.122 | 0.135 |
| | Mean F0 | 7892.3 | 8484.7 | 7543.4 | 7783.6 | 7830.2 | 9300.1 | 7623.8 | 7860.0 | 7947.8 | 7549.6 | 7955.0 | 6785.4 |
| | F0 start | 8239.8 | 8894.7 | 7905.2 | 8221.4 | 8157.1 | 9973.1 | 8037.4 | 8375.3 | 8791.3 | 7989.7 | 8519.9 | 7603.9 |
| | F0 end | 7471.5 | 7814.5 | 7122.8 | 7144.2 | 7502.7 | 8355.4 | 7211.5 | 7274.8 | 6770.2 | 7045.9 | 7227.1 | 5798.9 |
| | Max F0 | 8281.6 | 8969.2 | 7975.7 | 8287.1 | 8164.7 | 9990.9 | 8050.8 | 8396.3 | 8853.4 | 8002.4 | 8542.4 | 7616.5 |
| | percTime Max F0 | 21.7 | 28.3 | 23.8 | 25.8 | 19.8 | 23.8 | 20.0 | 22.0 | 21.3 | 24.4 | 21.4 | 23.3 |
| | Min F0 | 7435.6 | 7798.4 | 7118.1 | 7133.4 | 7499.6 | 8355.4 | 7206.4 | 7264.7 | 6764.4 | 7041.9 | 7222.3 | 5798.9 |
| Food Calls | F0 abs slope | 25835.3 | 26740.0 | 19278.0 | 22176.7 | 11980.1 | 28653.7 | 17044.9 | 20804.3 | 30917.6 | 26234.2 | 25412.5 | 36039.0 |
| | F0 Var | 8636.1 | 4804.7 | 8047.0 | 4422.5 | 6319.8 | 6115.8 | 7333.6 | 4172.0 | 9012.8 | 3988.3 | 6376.6 | 5804.9 |
| | Q25perc | 7406.3 | 8252.5 | 7332.2 | 7531.6 | 7485.0 | 8544.7 | 7294.0 | 7530.3 | 8161.5 | 7445.0 | 7803.0 | 6977.1 |
| | Q50perc | 8221.8 | 9237.8 | 7953.1 | 8430.4 | 8094.5 | 9502.0 | 8100.4 | 8677.6 | 10155.3 | 8569.0 | 9449.9 | 9113.9 |
| | Q75perc | 9762.2 | 11469.7 | 10549.3 | 10405.1 | 9573.3 | 11227.9 | 11086.8 | 11027.2 | 14319.6 | 11181.6 | 13796.3 | 12628.6 |
| | Fpeak | 161.9 | 152.2 | 146.0 | 147.4 | 156.9 | 158.4 | 153.0 | 154.2 | 175.7 | 171.2 | 164.8 | 179.1 |
| | percTime of max intensity | 50.6 | 46.9 | 47.0 | 43.2 | 47.5 | 47.8 | 48.0 | 40.3 | 40.3 | 43.1 | 45.2 | 44.2 |
| | jitter | 0.030 | 0.026 | 0.035 | 0.026 | 0.020 | 0.023 | 0.030 | 0.027 | 0.019 | 0.024 | 0.023 | 0.034 |