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discriminant function analysis based on acoustic parameters classified the most frequently delivered sequences of five syllable types according to the identity of the singer. These results suggested that individual identity of a male canary was, at least, encoded in recurrent sequences of multiple syllable types. At present, we are assessing to what extend features of recurrent sequences play a critical role in neural song processing, i.e. in the selectivity of neuronal responses for the bird's own song in song nuclei.

The long-term stability of pair-specific duet structures in the red-crowned crane *Grus japonensis* can be used for the vocal-based monitoring of territorial pairs through the years

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The vocal-based monitoring has proved its use in many bird species and is promising for the endangered red-crowned crane. We studied if the acoustic features of duets in mating pairs of this species may carry information about a pair identity, and if these pair-specific differences are sustainable through years. In 2003-2006, we recorded 343 duets from 8 captive and 2 wild pairs. The duets represented the sequence of syllables, containing 1-2 male and 1-4 female calls per syllable. We subdivided the syllables into five types, by the number of the male and the female calls per syllable, and found the sustainable pair-specific preference of particular syllable types through years. Besides, for 88 duets of good quality (5-10 duets per pair, 10 pairs in total), the discriminant analysis standard procedure, based on 7 frequency and temporal parameters of male and female calls in syllables, showed 97.7% correct assignment to pair, significantly higher the value expected by chance.

For five captive pairs, we investigated the stability of pair-specific duets throughout four years, 2003-2006. We took 4 - 20 duets per pair per year, 272 duets in total. MANOVA showed that the effect of pair identity on syllable parameters was always stronger than the effect of the year of recording. Discriminant analysis standard procedure showed high percentages of correct classification to pair, varying from 98.2 to 100% between different years. Cross-validation of duets from the test sets (represented by samples of 2004, 2005 and 2006) with discriminant functions derived from the training duet sets (represented respectively by pooled samples of 2003, 2003-2004, and 2003-2005) showed comparable high percentages of correct classification to pair, varying from 91.2 to 95.4% between analyses. Our data suggest that red-crowned crane pairs can be reliable identified by their duets and that pair-specific differences in syllable parameters are stable between years.

Iberian Azure-winged magpie *(Cyanopica (cyana) cooki)* nestlings begging calls: call characterization and hunger signalling

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Nestlings begging behaviour has long been seen as a signal by which nestling solicited care to parents and most of the existing evidence provides some support for being an honest signal.