

SUMMARY

Geographical variation observed in birdsong of some species results in between-population differences in vocalization, known as dialects. Dialects can emerge as a side effect of accumulation of errors while learning to sing in isolated populations, but they may also be adaptive, for example allowing females to recognize philopatric males, or males to resolve territorial conflicts with the use of conventional communication instead of physical encounters. One of poorly explored aspects of dialects is their stability over the years, as such studies require long-term monitoring of the same population, which is often difficult or impossible.

The aim of my dissertation was to find out whether (i) individual populations of the Great Reed Warbler *Acrocephalus arundinaceus* use different dialects, (ii) between-population differences in vocalisation increase with the geographic distance and (iii) the characteristic vocalization pattern of a given population is passed through generations.

The between-population differences in vocalization were analyzed by comparing the repertoires of whistles of the Great Reed Warbler males from ten populations recorded in different regions of Poland in 2017. Vocalization changes over time were studied by comparing the repertoires of whistles from subsequent generations of the Great Reed Warbler males from the same population recorded in 2005 and 2017.

The analyzes revealed that the within-population similarity of whistle repertoire was on average 72%, while the between-population similarity was on average 31,9%. The results of my study indicate that the composition of the whistle repertoire is characteristic for each population and constitutes its dialect. The Great Reed Warbler males could be correctly assigned to their native population on the basis of the composition of their whistle repertoire, irrespective of the classification method used. It has also been shown that the similarity in the composition of the whistle repertoire between populations decreases with the distance that separates the populations. My study also demonstrated that the dialect of a given population is not passed through generations. After 12 years, the differences in the vocalization of the population recorded in the same area were comparable to the differences between distant populations.

Keywords: dialect, cultural transmission, vocal behavior, the Great Reed Warbler, *Acrocephalus arundinaceus*

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