

Abstract

The aim of the thesis is to point out the possible proximity of communication systems of taxonomically distant species and to take the next step in the effort to understand evolution of these systems and their possible uniqueness. The thesis first focuses on the introduction of communication systems in humans and parrots in connection with the factors that seem to have a major impact on their development. The chapter presenting the evolutionary and social context of the two compared species is followed by a chapter from a peer-reviewed book and two articles published or prepared for publication in international peer-reviewed impact journals. The chapter from the monograph presents the definition of communication from an evolutionary and ethological point of view and introduces the actors of communication, their motivations, and the general reliability of communication. In the follow-up article, we first apply and compare different methodologies of categorization of vocal repertoires of grey parrots and then compare the repertoires of two females of the same species from different social groups. This comparison shows that even a species that is highly dependent on vocal learning retains certain innate tendencies in acquiring vocal repertoire. The last presented article is unique in its attempt to directly compare the productive vocabularies of talking grey parrots and small children using a unified methodology. The results show that parrots and children preferentially learn different categories, but in principle they have similar motivations to establish and maintain social interaction. Comparison of phylogenetically distant species provides new information about the factors that influenced the development of cognitive abilities and communication skills, because in this case it is not possible to primarily refer to genetic proximity. So far, there is no doubt about the uniqueness of some elements in human communication, but for a clear conclusion, more detailed research in animal species is first needed.

Keywords: vocal communication, interspecific comparative research, grey parrot (*Psittacus erithacus*), human, language