

Vocal communication between riders and horses

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Abstract

This presentation will discuss a project aimed at studying communication between riders and horses with regard to the voice. There is a need for detailed description of voice communication between the rider and the horse, since this is a neglected area in comparison with studies on non-verbal communication. On the theoretical basis of the frequency code the project will analyze audio and video recordings of interactions between riders and horses. Theoretical as well as methodological questions will be discussed.

Index Terms: voice, communication, horses, humans

1. Introduction

The purpose of this presentation is to discuss a project aimed at studying communication between riders and horses with regard to the voice. The horses studied are Icelandic horses since they have four or five paces that are to be separated, both by horse and rider. There is therefore a need for detailed communication with the horse even at the beginner's level. The study relates to communication during riding, working on the ground, and care in the stable.

Voice communication is, in this study, mostly about the voice of the person towards the horse, but also to some extent about the horse's sounds. In riding instructions voice communication is often mentioned, in combination with weight, leg and rein communication, but voice communication is seldomly described in any detail.

Voice is defined here as the sound produced by the vocal cords in the speech organ and which is due to the activity of the respiratory organ and the tension and tuning of the vocal cords. The voice can be described as light or dark, strong or weak, monotonous or varied, rough, hoarse, whispering and more. In human language, the voice can express feelings and attitudes, identity, physiological state, status and power.

There is some research on nonverbal (bodily) communication between humans and horses and in some cases riding instructors [1], [2], [3], [4], [5], but not much research on voice communication between humans and horses. The starting point for this study is Ohala's [6], so-called frequency code, which claims that humans and other animals interpret and respond to audio and body signals in similar ways. A high-pitched voice (light voice) signals smallness, submission or friendliness while a low-tone voice (dark voice) signals greatness and dominance. In parallel a small, low posture signals subjection while a large or elongated posture signals greatness and dominance; There is thus a link between body language and voice. Voice strength (weak - strong) works in a similar way. The frequency code in human language is reflected in, for example, how we speak to young children and in the fact that emotions are expressed in similar ways in different

languages of the world through voice and body. There are therefore prerequisites for horses being able to understand the voice we use when communicating with them.

2. Research questions

- How is voice used in communication between riders and horses during riding, work on the ground, and care in the stable?
- How does the rider later interpret the horse's reactions to the voice?

3. Method

10 pairs of riders and horses will be video and audio recorded for analysis of the rider's voice communication with the horse. The riders will be equipped with portable microphones, and camcorders will be installed in suitable places. After the sessions the riders will be interviewed and recorded. The analysis tools are acoustic analysis of voices from audio recordings during work and care, complementary analysis of the rider's body language and the horse's reactions based on video recordings, as well as content analysis of riders' stories of experiences during subsequent interviews.

The audio files are analyzed acoustically with respect to level and variation of fundamental frequency, level and variation of amplitude as well as vocal cord variation such as roughness or whisper. In addition, video recordings from the different sessions are analyzed to some extent with respect to body language. The riders' voice qualities in interaction with the horse are compared with their voice qualities in the interviews; The latter voice qualities serve as the baseline for each rider.

Riders' perceptions of the horses' understanding of voice modes and words is analyzed through qualitative content analysis of the interviews and from the recordings of the work and care sessions. Qualitative content analysis means that the recordings, both during the work and care sessions and in subsequent interviews, are analyzed with regard to what the riders tell about the voice communication (cf. Bergström & Boréus [7]). Theoretical as well as methodological questions will be discussed.

4. References

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