

Dogs considered colour cues to be more informative than brightness

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Early behavioural studies on colour vision in the dog produced ambiguous results and gave way to suggestion that it is hardly used by the species in its normal life. In more recent works elimination of brightness cues in coloured stimuli permitted to show capability for discriminating certain colours in the dog, though the results turned out to be controversial. Nevertheless up to date the question if dogs use chromatic information for recognition of visual objects in natural scenes has not been answered yet.

In our studies we used an approach investigating the hierarchy of features in pattern recognition. According to this approach animals learn to discriminate stimuli differing in two features at the same time and then their spontaneous reaction to the combination reversal is tested.

Eight previously untrained dogs were presented with visual stimuli differing both in chromaticity and brightness (e.g. dark yellow vs. light blue) and test trials were then performed to establish which of the two was used by them during the discrimination. The dogs were trained and tested under natural ambient daylight conditions. It has been demonstrated that in the experimental situation colour proved to be a more informative cue than brightness.