

DogCam: A way to measure Visual patterns in Social interaction in dogs

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Abstract: Modern technology, including lightweight cameras and eye tracking equipment now seem to afford the possibility of tracking where an animals visual attention is directed in real time and with greater precision than can be had by fixed cameras or third-party observers. The current hypothesis is that a dog-mounted camera can provide a reliable source of precise information about the dogs moment-to-moment visual attention at a resolution that exceeds other techniques for assessing gaze direction. In particular, we are interested in gaining precision at scales of 10cm or less, and 500ms or less, which will allow us to say precisely where dogs look at when are engaged in communicative signaling, such as during a stereotypical play bow or petting situation.

With this new technology we will put some of the techniques that have been effective in generating knowledge about human cognition to work in studying dog-dog and dog-human interaction.