

# Geographic Variability in Primate Social Networks

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## Abstract:

Social network analysis is growing in popularity, but analysts often neglect the fact that social interactions are embedded in some geographic context. The spatial embeddedness of the network has profound effects on the formation and hence the structure of the social network. To understand the emergence and dynamics of social interactions, embeddedness of the actors must be factored in. We look at primate social networks and how they are affected by the underlying landscape. By looking at groups from areas that have undergone different intensities of logging we can start understanding the effects of landscape characteristics on the structure of social ties within the group. We use social network metrics like the various centrality measures to understand the dynamics of the ties while landscape metrics such as abundance, and density is used for characterizing resource distribution. The initial exploratory analysis highlights the effect of variability of resources on the social networks structures of the primates, but, further analysis is required to quantify how the resource distribution of the landscape affects the social ties.