1

STRUCTURAL ASPECTS

Subjecting the anisotropic network model to a critical examination of its structural features, we identify prevalent patterns of connectivity and relate theoretical and computational results to findings from experiments in the rat's cortex.

1.1 MOTIFS

In this chapter we analyze the strucarl. The term motif referes to... . Studies of Song et al. (2005) and Perin et al. (2011) show stuff. Pernice2011, Sporns , Zhao2011.

we find resembling Perin et al.'s observation. We calculate

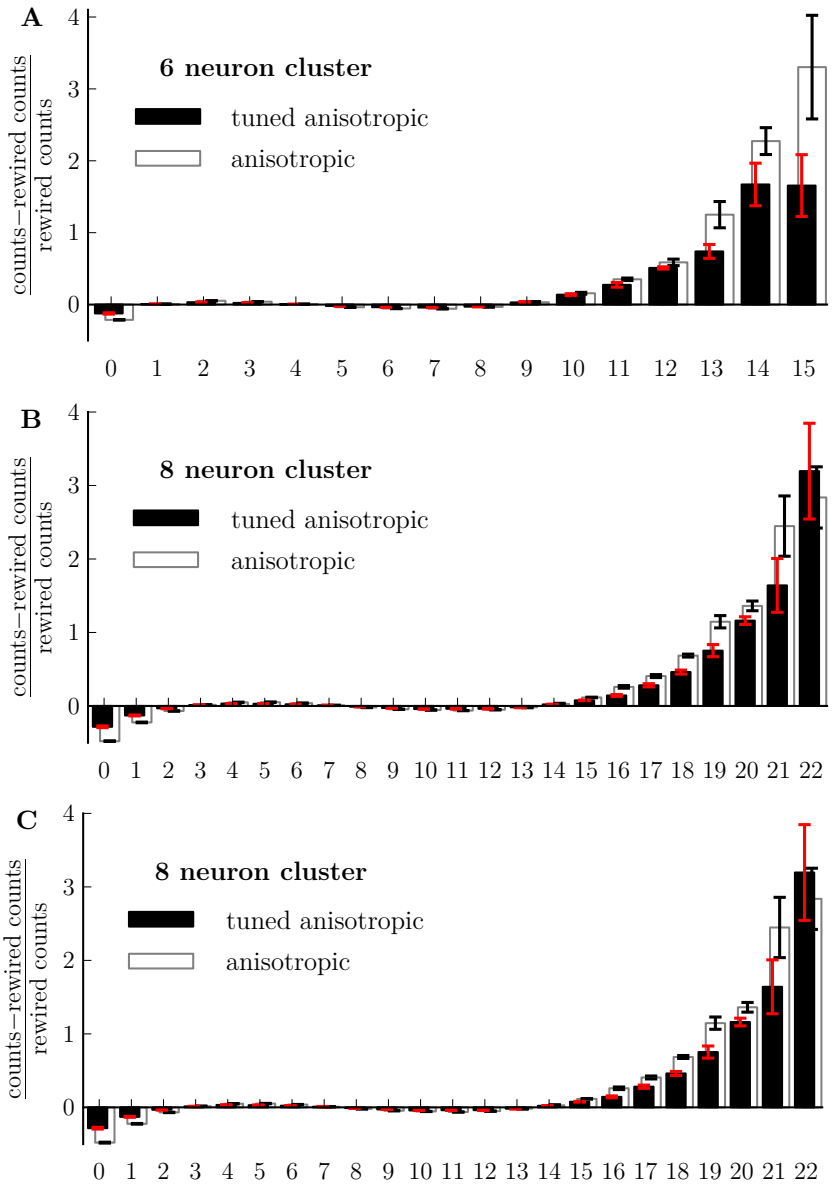

Figure 1.1: Increased occurrence of high edge counts in neuron clusters in anisotropic networks Showing the quotient of the difference Extracting the counts of three-node motifs in anisotropic (filled bars) an (`4839ce41`)

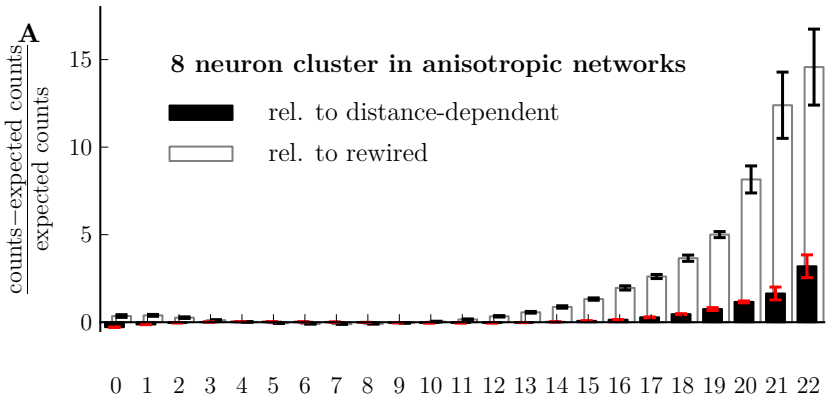

Figure 1.2: Increased occurrence of high edge counts in neuron clusters in anisotropic networks Showing the quotient of the difference Extracting the counts of three-node motifs in anisotropic (filled bars) an (7c826e10)

In their study, Perin et al. follow the observation of increased edge counts in neuron clusters with a common neighbor rule. Hebb ("fire together, wire together"). Here we also investigate our networks for the existence of a common neighbor relationship.