

49. Lilly, John C. 1957. Review of book by Donald A. Scholl. 1956. The Organization of the Cerebral Cortex. Methuen and Co., Ltd., London and John Wiley and Sons, Inc., New York. Science. 125:1205

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**The Organization of the Cerebral Cortex.** D. A. Sholl. Methuen, London; Wiley, New York, 1956. 125 pp. Illus. \$4.25.

*The Organization of the Cerebral Cortex* is a summary of some interesting anatomical studies on the cerebral cortex. The point of view is that of quantitative cytological neuroanatomy. D. A. Sholl has some interesting data, from extensive silver preparations, on the distribution and extent of dendritic branchings. He attempts to relate these data to a theory of cortical activity based on connectivity and critical thresholds for excitation.

This theory has succeeded in mimicking one kind of cortical activity—that is, the slow spread of certain spontaneous figures of electric activity under deep Nembutal anesthesia. Such kinds of cortical activity may be confined to states of anesthesia, sleep, toxicity, and epileptic seizures. However, it may be that such mechanisms exist, operate, and are masked in the case of unanesthetized cortex that is bombarded by nonsynchronized activities.

The illustrations are excellent, and the bibliography is useful.

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