The Organization of the Middle Temporal (MT) Visual Area in Owl Monkeys Revealed by Optical Imaging

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1. Introduction

To determine retinotopic relationships, gratings were presented at two orientations inside circular windows at 40 eccentricity along horizontal meridian. Area MT has been studied in a variety of primates since its discovery in the early 1970s (Allman & Kaas, 1971). There is general agreement that MT is part of the hierarchy of dorsal visual areas and is important in processing complex visual features. Despite the publication of several studies, the representation of visual space in MT remains controversial. Some investigators, such as Albright & Desimone (1987), have suggested that MT contains a linear-to-nonsinusoidal transformation of visual space. Others, such as Kaas & Shleifer (1985), have proposed an isomorphy hypothesis, suggesting that MT is a direct copy of visual space. To resolve these controversies, we examined MT using optical imaging of intrinsic signals.

2. Methods and Materials (cont.)

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3. Results

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