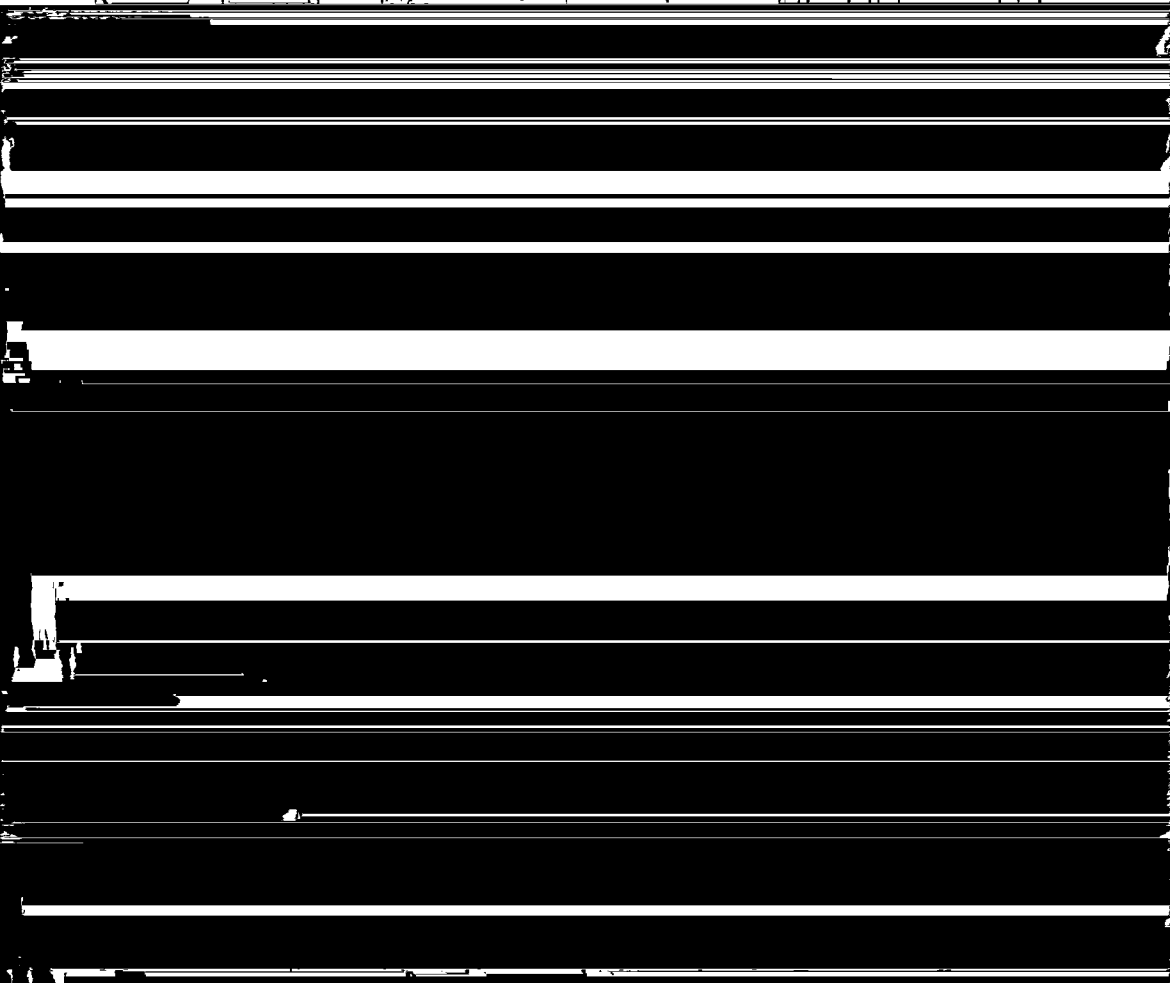


Lateralization of the perception of communicative vocalizations in Japanese macaques

H. E. HEFFNER, R. S. HEFFNER

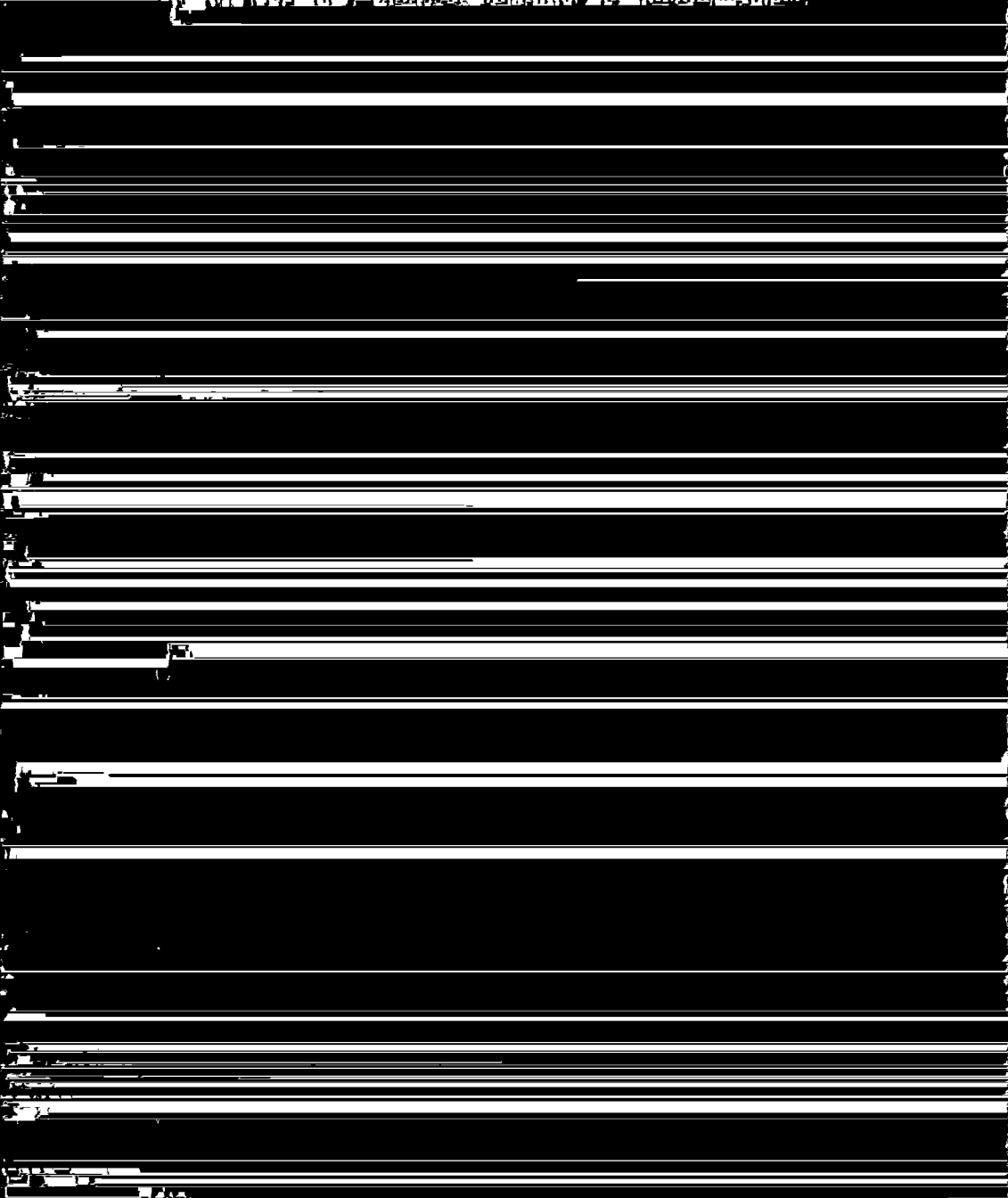
University of Toledo, Toledo, USA

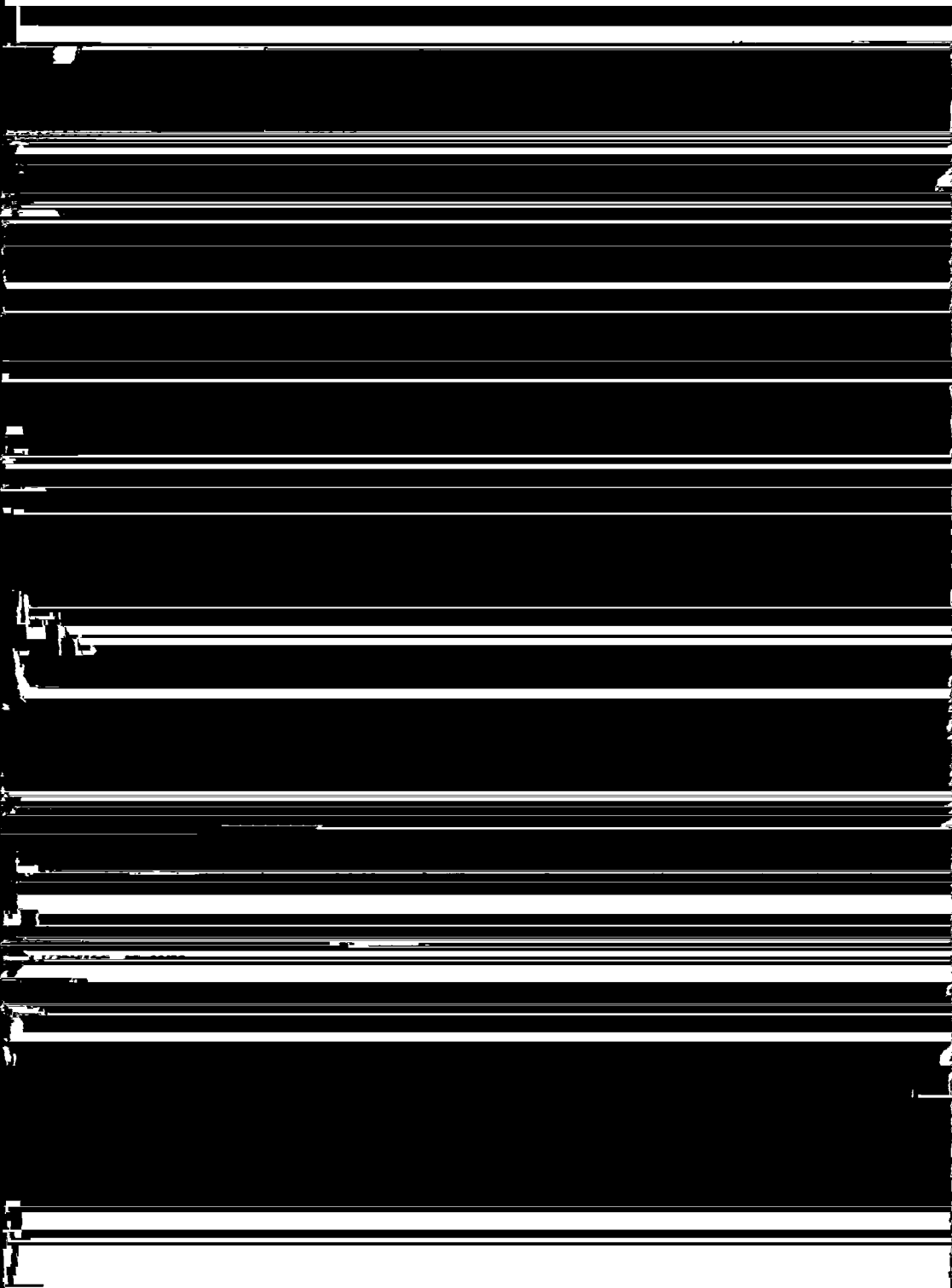
The most prominent evidence for lateralization in the human nervous system is the location of the speech areas in the left hemisphere. In particular, the cortical area involved in the recognition of speech appears to be located in



reporting verbal information received by the right ear in a dichotic listening task.

The presence of a right-ear advantage in language-processing tasks



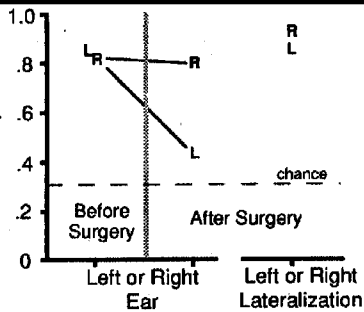
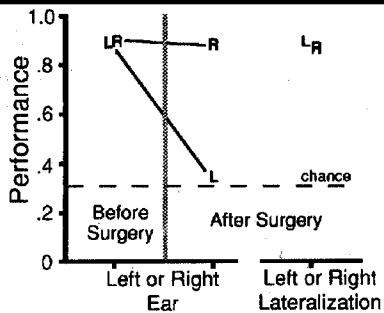


Green (1975) and had been used to demonstrate a right ear advantage in Japanese monosyllables

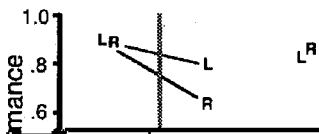
(for details of the coos, see Beecher et al., 1979). They consist of seven "smooth early high" (SE) and eight "smooth late high" (SL) coos. The coos are distinguished by the timing

M-291: Right Lesion

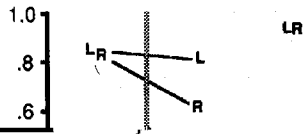
M-252: Right Lesion



M-294: Left Lesion



M-395: Left Lesion



extensive training (over 100 training occasions) and consistently scored 80 or

better for each ear. Because the right-ear advantage for this task is apparent only during the initial acquisition of the discrimination (Mason et al., 1999)

Indeed, given the large number of auditory decussations, it is quite possible for input to cross back and forth before reaching the cortex.

(*Macaca fuscata*): A field study. In Rosenblum, L.A. (ed.), *Primate behavior*, Vol. 4, Academic Press, New York, pp. 1-102.

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on the discrimination of vocalizations by Japanese macaques. *J. Neurophysiol.* 56: 683-701.

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