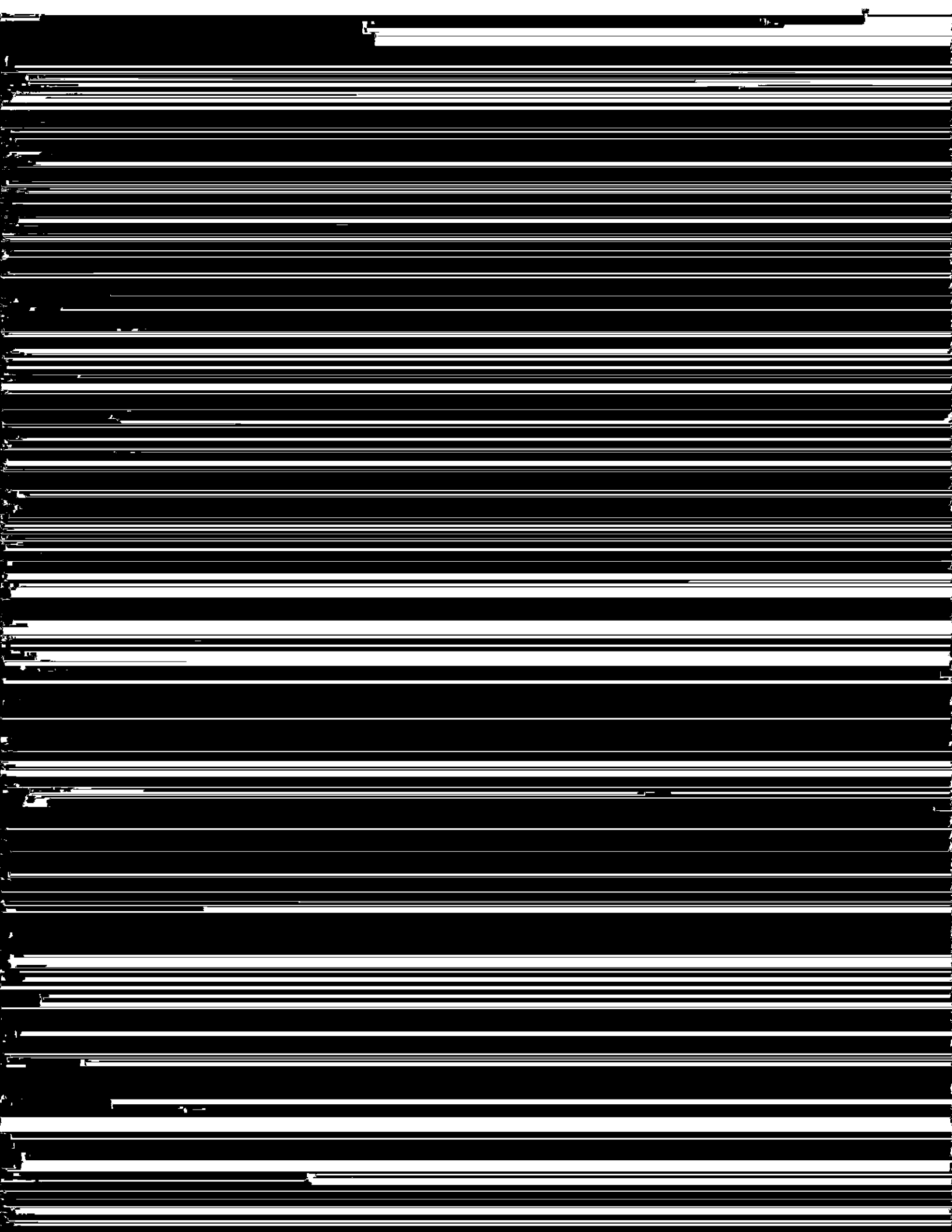
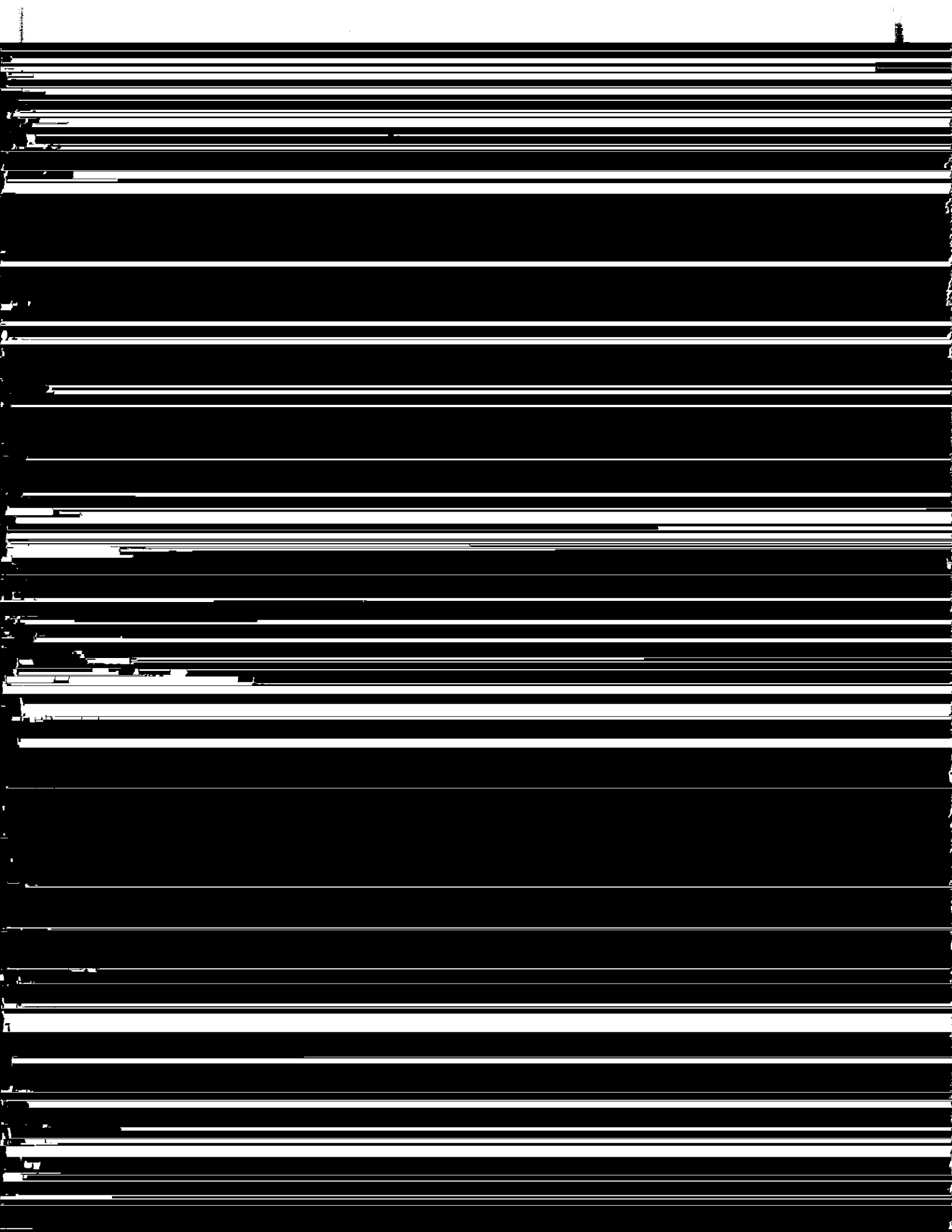


[redacted]



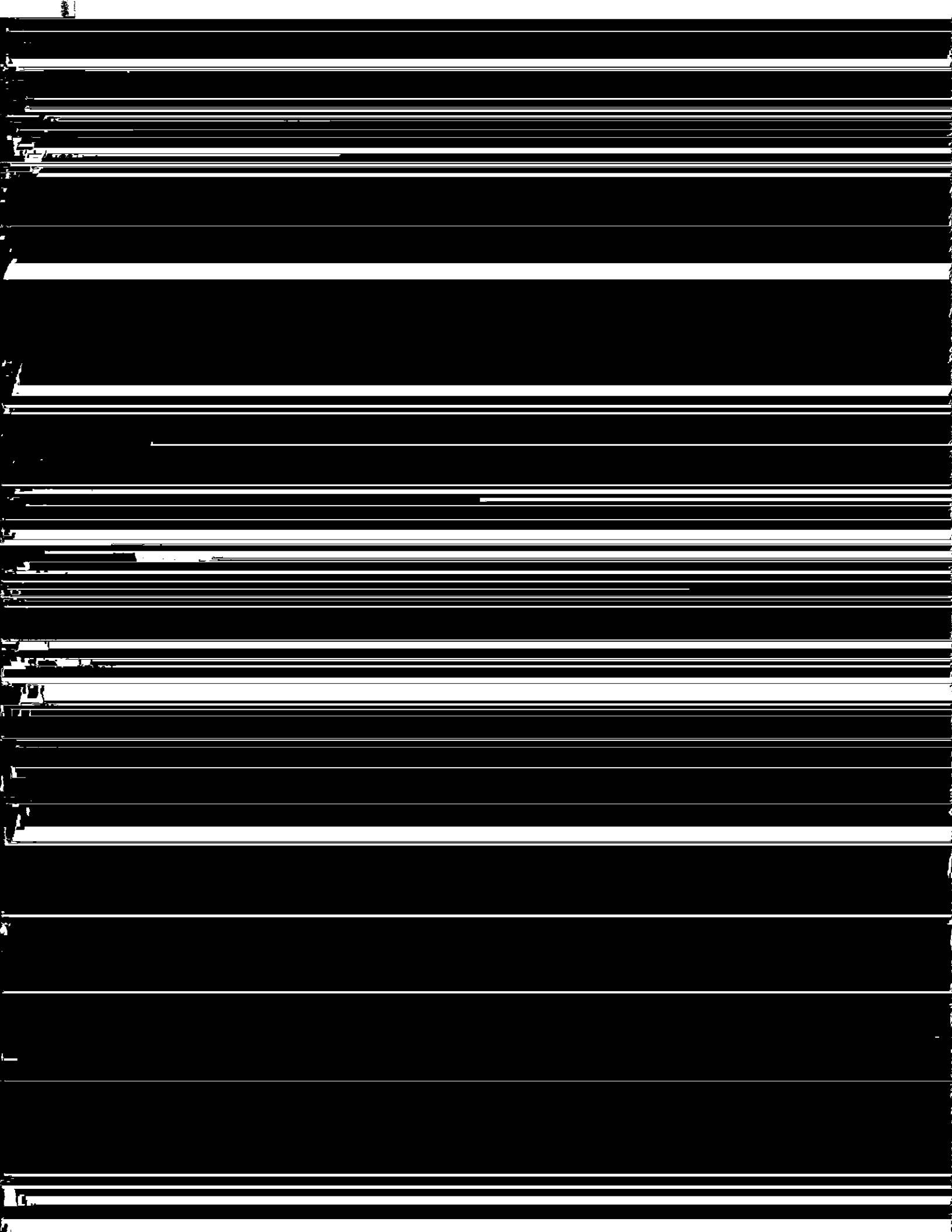
rate × Hit rate) (Heffner and Heffner, 1988a). This performance measure varies from zero (no hits) to unity (100% hit rate with no false alarms). Note that this calculation proportionately reduces the hit rate by the false alarm rate observed under each stimulus condition rather than the false alarm rate averaged for

3. Results

3.1. Noise localization

The ability of three chinchillas to discriminate sound sources centered symmetrically around midline is illus-

[redacted]



tional information provided by the ears. This emphasis on the close relation between auditory localization and visual orientation may provide insight into the heretofore puzzling correlation between the size of nuclei mediating sound localization and those mediating eye movements (Irving and Harrison, 1967). These results underscore the importance of considering hearing in

Hz to near 0.8 at 200 Hz (Fig. 3; Woolf et al., 1981) and results obtained from guinea pigs suggests that it may fall further as frequency decreases (Palmer and Russell, 1986).

4.4. The role of high frequencies in left / right acuity

in chinchillas, III: The contribution of the pinnae and high-frequency hearing, Hear. Res. (in press).

Mooney, S. (1992) Hearing and sound localization in two species of mice, *Acomys cahirinus* and *Phillotis darwinii*. Unpublished Mas-ters Thesis, University of Toledo.