Stony Brook University
The Graduate School

Doctoral Defense Announcement

Abstract

Feature Assignment in Perception of Auditory Figure and Ground

By

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Listeners must deal with auditory sensory information from many sources in any given auditory scene. Vast numbers of auditory features, including frequency components and their intensities, must be sorted out so that the features that belong to one object are correctly grouped together and features that belong to other objects are correctly excluded from objects of interest. Though auditory research has provided some important guiding principles for how feature analysis is accomplished (see Bregman, 1990), the process of auditory feature analysis is complicated by recent findings of non-veridical representation of an auditory scene. The auditory system has been shown to prefer efficient processing over detailed processing of all of the information available in a scene (e.g., Shinn-Cunningham, Lee, & Oxenham, 2007). If we do not perceive all of the information in a scene, what guides the part that we do perceive? The purpose of this project is to shed light on this issue by addressing how auditory features are combined to form auditory objects of attention and to examine what happens to features that remain in the unattended background.

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Place: Psychology B, Room 112

Program: Experimental Psychology
Dissertation Advisor: Arthur Samuel