4:00PM – 4:45PM  ALLISON BURKETTE, UNIVERSITY OF MISSISSIPPI

THE BURIAL GROUND: A BRIDGE BETWEEN LANGUAGE AND CULTURE

This paper will explore the cultural and historical forces that created variation in terms for 'cemetery', including links between language and material culture, using terms found within two Linguistic Atlas Project datasets to demonstrate how colonial influence, cultural changes, and physical locations contribute to language variation. This project has found that the religious and social climates of the seventeenth and eighteenth centuries linger in the vocabularies of speakers from the 1930s, as northern and southern colonial trends were still influencing regional language use several hundred years later. Furthermore, for the Linguistic Atlas of New England data, we find that the physical proximity to historic cemeteries has an effect on speakers' use of specific 'cemetery' vocabulary items.

4:45PM – 5:30PM  WILLIAM A. KRETZSCHMAR, JR., UNIVERSITY OF GEORGIA

COMPUTER SIMULATION OF THE LINGUISTIC ATLAS: NEW SUGGESTIONS ABOUT THE PROCESS OF LANGUAGE CHANGE

The crucial issue for space and time in language and cultural study is modeling diffusion, how characteristics spread spatially over time. The process of diffusion certainly occurs as a result of cultural interaction--to use language as prime example, massive numbers of people talking (and more recently writing) to each other. The new science of "complex systems" shows that order emerges from such systems by means of self-organization: particular variants come to be more or less frequent among different groups of people or types of discourse (the same nonlinear curve has a different order of variants at every scale of analysis), and variant frequency comes to mark identity of the different regional and social groups. Computer simulation is the only practical way to model linguistic diffusion. We have successfully simulated diffusion with a cellular automaton, which uses update rules with respect to the status of its neighboring locations to determine the status (whether a linguistic feature is used or not) at a given location. After substantial experience with the computer simulation, we have observed a number of characteristics that are highly suggestive for how the complex system of speech may operate in actual human populations of speakers, and in this paper I will report on six key findings. Our use of a simple cellular automaton in a successful simulation suggests how we might better understand the survey and other data we have already collected, and also suggests how we might do a better job of collecting additional empirical data about language in future.