

Interest Statement for Karen Pennesi

I am a Ph.D. candidate in Linguistic Anthropology at the University of Arizona. My dissertation research explores aspects of language and culture that influence how climate predictions generated by traditional and scientific methods are interpreted in rural communities in Ceará, Northeast Brazil. One goal of my project is to determine the bases of criticisms aimed at meteorologists from the Ceará Foundation for Meteorology and Hydrological Resources (FUNCEME) and at "rain prophets" (older farmers who use traditional environmental knowledge to predict weather). What I am finding is that each group has different objectives and different ways of communicating environmental knowledge. It is not simply a question of whose predictions are correct because both scientists and rain prophets can legitimately claim to be right when evaluated on their own terms. Problems arise when the prediction of one group is interpreted according to the model of the other. My research indicates that an important factor is a lack common communicative practices and systems of interpretation among meteorologists, rain prophets and farmers. For fifteen months, I observed the generation and interpretation of both traditional and scientific forecasts. Analysis is based on both qualitative and quantitative methods such as interviews, focus group discussions and a formal survey of 189 farmers. Thus far, I have reached two important conclusions: 1) Distinctions made by meteorologists are not salient in the experience of the general public, making a shared understanding difficult to achieve; 2) Differences in meaning for the same words create confusion and lead to negative judgements of the forecasters.

I can make a valuable contribution to WAS-IS objectives related to communication among knowledge producers, users, decision-makers and media, as well as to the integration of social science and meteorology/climatology. My commitment to making my work useful has led me to minor in applied anthropology. Under the guidance of professors from the Bureau of Applied Research in Anthropology at the University of Arizona, I have learned how to work with stakeholders, community members, funding agencies and other sectors of the public to find solutions to real world problems. My training in linguistic anthropology has provided me with tools and strategies for identifying communication problems along with an approach that is useful in creating shared understandings among diverse groups. For example, as a result of my involvement with FUNCEME, the development of a new communication plan for the institute is benefitting from an anthropological perspective. They are paying more attention to language as they strive to improve understanding of their scientific forecasts by the media who disseminate them, and also to make the information they produce more relevant to different sectors of the public. My experience as an English-as-a-Second-Language teacher is also an asset with regard to finding better ways to communicate while respecting differences.

What attracts me to the WAS-IS workshop is the opportunity to see how what I have learned in the Brazilian context relates to situations in other areas. I am especially interested in learning how weather knowledge is produced, interpreted and evaluated differently by different social groups, including scientists. The diversity of the WAS-IS participants is intriguing in this respect. I am also interested in the role of media in communicating forecasts and in forming public opinion of the forecasters. It would be very helpful for me to discuss ideas related to the implications and applications of "weather products" as I begin to write my dissertation on the same topics which are the focus of this unique workshop. Ultimately, I want to help bridge the gap between meteorologists and both current and potential users of their forecasts. Participation in the workshop would help me better understand how decisions are made, enabling me to see possibilities for the application of social scientific research. In the longer term, I could draw on the experience (and perhaps the contacts made) in my career as a researcher dedicated to facilitating communication of specialized knowledge to various sectors of the public. This workshop is exactly the kind of work I would like to pursue in my career so my enthusiasm is second to none.