LLCd Symposium.
SPEAKERS AND PRESENTATIONS.

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Brief Bio: Dr. Ramesh Kumar Mishra currently is an assistant professor in Cognitive Science at the Centre of Behavioral and Cognitive Sciences, Allahabad University, India. He earned his MA, M.Phil and PhD degrees in Linguistics from University of Delhi. His research interests are in Psycholinguistics, Language-Vision interaction and cognition in illiterates. He has been a visiting scientist at the Max Planck Institute for Psycholinguistics, Dalhousie University, Canada and has given invited talks at many Indian and European Universities over the years. He was instrumental in founding the International Journal of Mind, Brain and Cognition where he currently serves as Associate Editor. He also serves on the editorial boards of the Journal of Experimental and Theoretical Artificial Intelligence and Indian Journal of Applied Linguistics.

Theme: Morphology, semantics & syntax

Title of Presentation: On the role of morphosyntactic events during probabilistic language processing

Abstract: Language processing in all its manifestations i.e. reading, speaking and listening is a thoroughly probabilistic and anticipatory process. These processes often involve dynamic interactions between purely linguistic events and other cognitive processes such as attention and memory. For example, morphological markers in inflectional languages can trigger anticipatory processing leading to lower fixation durations or reading times on upcoming constituents in eye tracking studies. Similarly these bound morphemes can also lead to rapid activations of lexical knowledge during spoken sentence processing. Eye tracking studies, with both reading and spoken language processing, show immediate use of morpho-syntactic knowledge in shifts of visual attention as well as memory retrieval in languages that are inflectional. Thus, phonological knowledge dynamically interacts with morpho-syntactic processes during parsing. Studies with Hindi speaking literate and illiterate subjects, using eye movement monitoring, show that probabilistic processing in Hindi is dependent on morpho-syntactic knowledge to a significant extent. Morphosyntactic markers that indicate different case structures or ergativity are basically realized through phonology. Thus, rapid sequencing of sounds plays an equally important role in parsing morphosyntactic information, such as gender related information. I will present eye tracking data from both reading and spoken sentence processing that demonstrate the causal role that morpho-syntactic processing plays in parsing. The talk will also examine implications of such findings for other populations - those who may show a deficit in probabilistic parsing of morpho-syntactic information.