

The cognitive construct of design conversation

Abstract :

The study provides an overview of architectural designers' cognitive behaviour in a conceptual phase of design like studio tutorials. This involves formulating a Cognitive Interaction Matrix that preserves the dialectical and interactional characteristics of design conversation protocol being examined. The matrix facilitates the process of encoding, segmenting, tabulating and analysing design tutorial conversations based on a rich taxonomy of cognitive activities. Through the framework of aggregating 'Formulate', 'Evaluate' and 'Move' activities and relevant cognitive attributes across conversational protocols, the study found certain differences in the patterns, frequency and intensity of Cognitive Actions' distribution recorded between tutors and students who had participated in the observed studio tutorials. Further examination of the 'Formulate', 'Evaluate' and 'Move' actions in terms of Cognitive Organisation and Transformational factors suggests the possibility of deriving and distinguishing the cognitive constructs between tutors and students' design conversations.