Design protocol data and novel design decisions

Eastman was among the first people who conducted and published protocol study of architectural design. His studies of protocol analysis seem very interesting and it is a new approach to design analysis.

One of the questions in protocol analysis is that how different activities control the emergence of design decisions. Is it the drawing activity that produces the most important features of a design or are there verbal-conceptual activities that influence the emergence of design more importantly. Protocol is segmented into three parts:

1- Problem understanding
2- Design
3- Retrospection

During problem understanding the designer familiarized him/herself with the problem, asks questions, and examines documents.

The second stage, which is the most complex, is the drawings activities. It consists of 3 sub-segments:

- Conception
- Development
- Representation

In the conception stage the overall solution is sketched out. By the end of this process designer goes in to representation mode, as it is currently developed.

The final stage is in fact a formal part of the experiment once designer stops, the experimenter starts a session we classify it as restoration section and during this section designer will come up with novel design ideas.

This is very fascinating approach to design study, however, it answers many questions regarding design process. It is not a complete approach to design process, but it helps in development of cognitive science in design studies.