

Using episodic knowledge in design

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My communication will focus on the use of episodic knowledge in design. This use refers to what is called "reuse" of problem-solving elements in design, but also to the use of other types of episodic knowledge. The empirical data central in this communication come from a study based on the analysis of a problem-solving protocol of a mechanical designer working individually during a 2-hours experimental design session. The subject's task was to design a device for carrying and fastening a backpack on a mountainbike.

The main results concern

- the contribution of different types and different aspects of episodic knowledge to the construction of problem representations and the development and evaluation of solutions;
- the types of information sources consulted and their consultation mode.

Based on this study, various questions are raised concerning the distinction between the "use" and "reuse" of problem-solving elements and other types of knowledge, episodic and general; and concerning differences and distances between knowledge "domains", and necessary or "only" relevant knowledge used in design.

There will be an effort to establish links with software-design and software-reuse related questions.