Toward the characterization of the interactional and socio-cognitive context of creativity: collaboration formats and cognitive processes in the design of a musical video game by professionals

Mots clés :

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- **Domaine scientifique principal**: Divers

Résumé du projet de recherche (Langue 1)

This PhD thesis concerns group creativity in a musical video game design. Our aim is to identify and characterize collaborative design processes, i.e. collaborative formats and socio-cognitive design processes, and more specifically those involved in creative solutions. Furthermore, our aim is to characterize the specificities of creative solutions. During an immersion in a game studio, meetings –formal or informal– were video-recorded and interviews were conducted. We adopted an original approach that crosses a third person perspective, i.e. our analyses of video, with a first person perspective, i.e. perspective of designers themselves. Based on interactions between designers, the third person perspective combines content, interactional and longitudinal analyses of design meetings to identify and characterize collaboration design processes. The first person perspective consists in an assessment of the solutions produced –in the video excerpts– and of the design cognitive processes through semi-directive interviews with two designers to characterize the creative solutions. Regarding the third person perspective, we identified and characterized three collaboration formats and their sub-categories: (1) the directive format, i.e. specific forms of collaborative design activities serving to trigger evolution and definition of the design spaces –problems and solutions–; (2) the relational format, i.e. construction of relations between a design idea under discussion with other ones –reified or not– within or outside the design project; (3) the representational format, i.e. co-construction of representations of a design idea under discussion in order to develop it through multiple points of view. Additionally, we identified six socio-cognitive design processes: combination, composition, analogical reasoning, re-interpretation, co-evolution of problem-solution and problem framing. Regarding the first person perspective, creative solutions were characterized by appropriateness and novelty (e.g. surprise, novelty based on the market and ownership). In addition, the designers characterized creative solutions by creative cognitive design processes, i.e. combination and composition. The crossing of these perspectives underlined specific collaboration formats that are involved in creative solutions that is to say the two sub-categories of both the relational format and the representational format. One sub-category of this latter collaboration format is highly linked with player experience and especially with conducted play-testing sessions. Moreover, all the identified socio-cognitive design processes are involved creative solutions.