

## A Multidimensional Framework for Analysing Collaborative Design: Emergence and Balance of Roles

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**Abstract.** In this talk we will present and discuss a framework based on forms of participation in collaborative design through the concept of “role”, that considers the participants’ activities on a collective level. We consider roles as phenomena that emerge from the interaction between design stakeholders rather than institutionally given.

In our various studies (Baker et al. 2007; Barcellini et al. 2006; D’Astous et al. 2001; Détienne, 2006; Détienne et al. 2003; Sack et al. 2006) we have examined roles along several dimensions: epistemic and cognitive, discursive and interactional, social and institutional. We have analysed role emergence in the dynamic of design. We will illustrate our framework by studies in architectural design and software design conducted in various spatio-temporal settings (co-located meetings and distant asynchronous technology-mediated situations) and in various socio-organisational settings (traditional software organisation and open-source software communities).

We will discuss our framework of « role emerging design » with respect to the more traditional framework of « participatory design », and with respect to the quality and efficiency of collaboration. We will also discuss about socio-technical environments enabling role emergence and role balance, constituting this way “enabling environments” (Falzon, 2005) for participants.

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