

F.J.M. VAN GASSEL, G.J. MAAS. **Describing collaborative working during meetings in construction.** *Gerontechnology* 2012;11(2):405; doi:10.4017/gt.2012.11.02.282.00 **Purpose** A building assignment is complex and to achieve added values for users and society collaboration is necessary to purposefully facilitate construction processes. Added values are necessary for aging-in-place and play a key role in a number of application domains of gerontechnology: long-life-working, housing, infrastructures, mobility and communications. Today, the problem is that the building object is an accidental design results because collaborative working is not well organized and managed with a lack of insight in relevant process variables. The aim of this research is to identify variables which have a relation with collaborative working during meetings in construction (*Figure 1*). **Method** System thinking is a method to analyze meetings, in particular to identify variables, because it is a 'process of understanding how things influence one another within a whole'. In this research we consider a meeting as a black box with an input and output. We are not interested in the content of the black box but in describing inputs and outputs¹. The central question is: which variables describe collaborative working during meetings in construction? The answer can be found by (i) gathering variables, rules etc. in scientific articles from the perspective of face-to-face meetings and collaborative design; (ii) answering questions by studying the minutes of 37 meetings during the design and production phase of a prototype of an Industrial, Flexible and Demountable (IFD) building system and (iii) describing variables. **Results & Discussion** The following results were obtained: (i) Meetings that aim at 'to develop strategies' result in more (collaborative) actions after the meeting than meetings with the aim 'to control construction processes'. (ii) Meetings that aim at 'to develop strategies' result in more (collaborative) actions during and after the meeting than meetings with the aim 'to control construction processes'. (iii) Meetings with an external facilitator result in more (collaborative) actions during and after the meeting than meetings were one of the participants acts as facilitator. (iv) Meetings were tools were used result in more (collaborative) actions during and after the meeting than meetings were no tools were used. The findings showed that for the considered meetings input variables such as aim, control and tools, could be used to describe collaborative working in a meeting. In the questionnaire the type of professional was not researched. Birkhofer and Jansch² depict that the acting and reacting activities of the designer can be performed in a wide range of languages and can be disturbed by a specific barrier around the designer. Buciarelli³ called this the 'object world'. Designers can have their own language, tools, codes, unwritten rules and scientific paradigm. Therefore it is important to also consider the characteristics of the participant as an input variable. Using systems thinking to describe processes seems to be attractive for the domain of construction management because it has a holistic instead of an analytical approach.

References

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Figure 1. Collaborative working during a meeting