

Analysing Spatial Systems for Office Activities

Jesper Steen, Magnus Blombergsson, Johanna Wiklander

KTH Arkitekturskolan, Sweden

jesper.steen@arch.kth.se

Abstract

The aim is to develop descriptive methods and define new categories of office buildings based on possible usage concerning the patterns of interaction and individual work. This knowledge will facilitate for property developers to define the usability of office buildings towards their clients. It will also help office tenants to specify their needs of the built space. The developed analytic tools will make it possible to appraise the potential for usability for office buildings in new ways.

The starting point for the analysis is that communication between co-workers is of vital importance for the progress and prosperity of the organisation. Concurring with Space Syntax-theories, the spatial configuration defines the playground for this important interaction. This potential grows or diminishes depending on the location of different generators as common functions of different kind. An interesting point is to look for interactions within groups on one hand and between groups on the other. The first kind is claimed to have a more reproductive function where as the former is supposed to be more productive.

Our study of office buildings is focused on how social and spatial systems interact. In the project we have studied four cases, on one hand similar spatial configurations used by different organisations, on the other hand different spatial configurations used by similar organisations. In this way we try to understand to which degree similarities and differences depend on spatial or social properties respectively.

The social data in the comparative case studies has been gathered with observations, interviews, questionnaires and individual logbooks. The spatial systems have been analysed with different space syntax tools as Axman and Depthmap. The project has focused on common office workers, so called handling officers.

In using different space syntax-methods we have found some describing the spatial properties in a way that correspond to people's behaviour in, and use of, office buildings. The pattern of spatial behaviour is quite similar in our different cases. Differences in the amount of movements and the relation between movements and actual interaction can to some extent be explained by spatial values. The amount of movements outside the area of one's group is small but the potential for whom meeting whom will be influenced by spatial properties. Also the physical interface of the individual workstations to other workstations and common areas play a role if movements will result in interaction.