Looking at patterns:

An architecture firm examines circulation and interaction in their recent laboratory building designs

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Abstract

This paper and poster describe an effort by an architectural firm to use theories of space syntax (Hillier & Hanson, 1984) and distance (Allen, 1977, 1997) to investigate the effectiveness of various design solutions in terms of their ability to support informal interaction. The paper and poster will include the preliminary findings of a research project on patterns of informal communication among scientists at three recently constructed research buildings designed by the investigating architects.

The three facilities were selected in part because they differed in their overall circulation patterns. A previous study in similar settings found that circulation in research buildings generally follows one of two major pattern types - grid or linear - each with variations, and that classifying plans by circulation type also ordered them by integration value (Serrato and Wineman, 2001). The same previous study had also found that the majority of unscheduled interactions among scientists occurred in offices linked to highly integrated corridors, and that the farther away people where from each other, the more important the strength of the integration value became in predicting frequency of interaction.

With these facts in mind, a new study was conceived to examine informal communication patterns at three laboratory buildings with different layouts and different average distances between scientists. A simplified method for collecting data using brief questionnaires was developed and distributed to 16-18 subjects selected randomly at each research organization. Distances and integration values were calculated and correlated with interaction frequency. Follow-up interviews to discuss to the results and beliefs about the role of informal communication were held with members of each organization. The information is now in the process of being formatted into a "best practices" document for use by other members of the design firm with specific attention to the relationship between circulation type and potential for informal interaction.