

## **A STUDY ON DIVERSIFIED ANALYSIS METHOD FOCUSING ON RELATIONSHIP BETWEEN COMMUNICATION ACTIVITY AND SPACE IN OFFICE**

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### **1. Background and Purpose**

Recently, the spatial requirements in the office are complicated. By changes in business environment, the office space is required obscure to respond to various applications rapidly. In such an office space, objectively research of activities of the worker is developing. The methodology about planning has not established yet. In this study we clarify the characteristic of the activity, in particular the communication, from a multidirectional point of view. Therefore, this paper seeks for analysis methods focusing on relationship between communication activity and space in office.

### **2. Leading "how capture the space"**

Focusing on the relation between communication and space, distinctive communications was plotted on a plan in order to search a point of view about categorizing space components. It was used VBA (Visual Basic for Applications) and Processing to load the coordinate data and plot communication on plan. Figure 1 shows the plotting communication on total operation route. From this analysis, four points of view was defined, "information visibility", "distance from entrance", "sense of distance" and "extension of restrictive usage"

### **3. Leading "focus on what kind of activity"**

From the analysis focusing on the relation between communication and space, "sequence" was defined as an index of communication. Then it is

found that communication tends to occur around where communication already happened by 3D communication plotting analysis focusing on the temporal and spatial relation (Fig. 2). In this analysis, it was used VBA to plot communication on Time-Space Cube. From this analysis, "chain of communication reactivity / chain of communication contrary reactivity" were defined as index of communication.

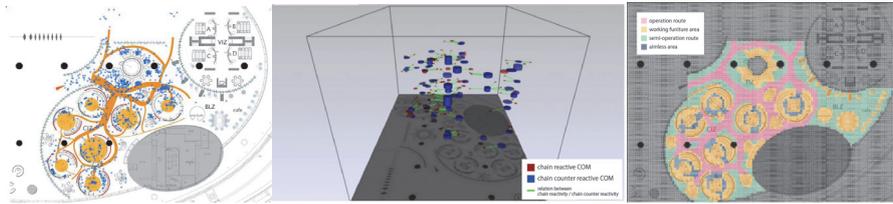


Figure 1

Figure 2

Figure 3

#### 4. Mesh Analysis

From four points of view about space, and two indexes of communication, it is found that it shows the possibility of diversified analysis method by mesh analysis (Fig.3). In this section, "degree to which restrict the use" would be discussed. In order to capture the effect for communication from the flexibility of space, aimless space will be classified into three spaces, "working furniture area", "operation route", "aimless area". From mesh analysis, it is found that this space has a tendency to happen more influential communication than susceptible communication.

#### 5. Conclusion

The first part of this study, we understand these activity by visual analysis that combined the plan with communication features. Then through the above analysis, we derived relationship between communication activity and space by mesh analysis using four terms to classify the space and two indicators of communication. Furthermore we constructed analysis support systems which are indispensable to establish this method.

#### References

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