A Study of the Typology of Interrelationships among Social Resources, Spatial Resources, and Personal Relationships in the Living Sphere -A Proposal of Pattern Language for Disaster Prevention

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[Synopsis]

In the current era of frequent disasters, it has been pointed out that to resolve the weakening of mutual aid systems due to the declining birthrate and aging population, it is necessary to create a system for effective coordination and management of social resources such as community center activities, and spatial resources such as parks and vacant land. It is also pointed out that for disaster victims to utilize such resources to protect their lives and provide psychological protection, personal ties and relationships that enable effective transition from the private to the public sphere are complementary, and that it is important to maintain the proximity of the previous residential area and social organizations. In this study, we attempted to propose effective regional planning for disaster prevention by patterning the relationships among spatial, social, and private relational resources, with an awareness of daily activities.

We studied the institutional, humanistic, and spatial mechanisms of communities, the interface between private and public spaces in two areas where neighborhood associations remain in urban areas, and the elderly community in a large suburban housing complex. As a result, we found that the flexible understanding of the activity areas and human networks of the community, which includes silver human resources, NPOs and private organizations, makes it possible to create a sustainable community that matches the actual conditions of residents' lives. We grasped that interaction among people at the vacant area and boundaries create avenues to reveal and solve problems that cannot be addressed within the framework of government organizations. Referring to Christopher Alexander's classification of pattern language and Kevin Lynch's five elements, we categorized our findings and found that the formation of contemporary urban and suburban communities involves frequent fusions between human networks, space, and social institutions beyond the order of local municipality, and that these elements provide a place for people to gather and interact flexibly. We found that the gradation of such places for interaction is scattered throughout the urban area, forming multi-layered places for people to meet and devise ways to help each other, and that new communities can be regenerated, which will make the city resilient for future disasters.