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Comparative Spatial Analysis of a Re-Arranged Hospital Building

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Abstract : Analyzing the relation networks between the hospital buildings which have complex structure and distinctive spatial relationships is quite difficult. The hospital buildings which require specialty in spatial relationship solutions during design and self-innovation through the developing technology should survive and keep giving service even after the disasters such as earthquakes. In this study, a hospital building where the load-bearing system was strengthened because of the insufficient earthquake performance and the construction of an additional building was required to meet the increasing need for space was discussed and a comparative spatial evaluation of the hospital building was made with regard to its status before the change and after the change. For this reason, spatial organizations of the building before change and after the change were analyzed by means of Space Syntax method and the effects of the change on space organization parameters were searched by applying an analytical procedure. Using Depthmap UCL software, connectivity, visual mean depth, beta and visual integration analyses were conducted. Based on the data obtained after the analyses, it was seen that the relationships between spaces of the building increased after the change and the building has become more explicit and understandable for the occupants. Furthermore, it was determined according to findings of the analysis that the increase in depth causes difficulty in perceiving the spaces and the changes considering this problem generally ease spatial use.

Keywords : architecture, hospital building, space syntax, strengthening
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