

An analysis on the location characteristic of alley spaces in Tokyo

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The number of alley spaces in urban areas is rapidly decreasing due to road transportation plans centered on automobiles and large-scale development. In recent years, however, aspects of the alley as a common space are being reconsidered, and town planning with the alley was also promoted throughout the country. The alley is considered to be an important factor characterizing urban spaces, but it is difficult to grasp its location as special information. So than before, we devised "Alley Estimation Logic" which extracts block areas where the existence of allays is presumed by using GIS, and have checked the accuracy of logic through field survey in Tokyo and Tokushima prefectures.

In this study, we conducted "Alley Estimation Logic" for Tokyo and estimated the alley location. For the analysis, we used "Foundation Geographical Data" (scale level 2500) made by Geographical Survey Institute and "ArcGIS Pro 2.2" by Esri. Furthermore, we calculated "Alley Ratio" from the estimation result and considered the location characteristics of the alley through comparison with the number of wooden buildings and the use district etc. In addition, we estimate the "Alley Ratio" of municipalities in Mie prefecture as a whole, and we will verify regional differences due to differences in prefectures.

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