

# The Distortion of the City in the Perceptual Space of Children

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Our country has made the cities that established an important point for the childcare support as declining birthrate measures. However, there are few places where children play in city space. The current city planning does not become the child-based measures. Thus, it is necessary to plan a city after having grasped the relationship between a children and the town.

In this study, the authors analyze a relationship between the cognitive space of the children and reality space. In previous studies, the authors analyzed the element that gave a distortion on a map by grasping a difference of the cognitive space and reality space as a distortion. As a result, the authors found the distortion of the cognitive space on distance, orientation and angle.

A purpose of this study is to grasp spaces and factors that children feel attractive by analyzing relationship between the cognitive space of the children and reality space. The authors grasp a distortion of the cognitive space from a psychology side and physical aspect. In the research method, the authors perform the questionnaires' survey to confirm the cognitive space of the children, in three elementary schools. The relationship between the shape of town and reality space are analyzed by Geographic Information System. The authors measure the distance between the elements in the cities as the network distance. The difference of the perceptual height is also find by the statistical analysis.

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