Modeling of Nightscape in Inner City

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Recently, with the rapid modernization in Japan, the nightscape has become a familiar landscape, due to the changes in lifestyle such as the increase of living hours during the night. Especially in the inner city, there are a lot of projects to light up buildings, bridges, trees, and so on. Therefore, the modern nightscape has recognized as not only familiar landscape but also urban assets for people. On the other hand, the large urban model can have been expressed conveniently and realistically, due to the rapid development of geo-information technology in recent years. We are using those technology for urban and landscape design at present. However, most of them are 3-dimensional urban models in the daytime, there are few models in the nighttime. It is important to create 3-dimensional urban model in the nighttime at present because of the growing interest in nightscape. In this study, the authors are aiming to model a nightscape, which is useful for urban design and landscape design. As the concrete method, the authors are going to use GIS and CAD/CG in fusion to model the nightscape in the inner city of Osaka. As a result, they could create the nightscape model with high probability and convenient in consideration of landscape engineering. They will create the nightscape model in other sites and verify the versatility of the modeling method in this study.

Keywords: nightscape, division of visual distance, modeling