Socializing with Artificial Intelligence (AI) on Spatial Development in Sub-Saharan Africa

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SUMMARY

Visualization and imaging allude to visual thinking and image reflections, which contribute to the development of visual communication and graphical representation. The function of visualization image creation in the land sector cuts across geography, cartography, planning, geoinformation, remote sensing and photogrammetry (to mention a few). In spatial planning and development, the emergence of approaches based on geographic information systems (GIS) has significantly influenced visualization in spatial planning. However, the emergence of Artificial Intelligence has yet to have a similar influence. This paper focuses on the use of applications of artificial intelligence to "see" spatial planning and development. It presents the results of one-on-one interactions with Bing Image Creator on spatial planning and development in sub-Saharan Africa (SSA). The procedure involved identifying critical spatial planning and development (and associated) concepts and contexts, identifying their description or definition in literature, and converting the definitions into text prompts used to interact with Image Creator. The interaction involved giving a text prompt to the Image Creator for the AI to generate a set of images matching that prompt. In all cases, the AI produced more than 2-4 images subjectively aligned to the prompt. The prompter (in this case, the researcher) objectively selected the most matching image for the given prompt. The image chosen was then interpreted in text and discussed within the context of spatial planning and development in SSA.

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