Abstract

The importance of spatial precision in geographic information science is not limited to quantitative data. As spatial data can also exist in qualitative form, this project showed how modifying a discourse quality index from the field of discourse ethics helped to better understand whether mentioning specific spatial locations changes the quality of spatial narratives. The discourse quality index was modified by incorporating an item into the index that detected the presence and magnitude of a spatial precision construct. The spatial narratives analyzed with this modified index were public comments submitted during a public policy revision process, for a national forest plan revision at the Chugach National Forest in Alaska, U.S.A. One hundred fifty-one public comments submitted during this policy process were analyzed.

Analysis showed when discourse quality values were classed by their magnitude of spatial precision, the discourse quality changed between comments with no spatial precision versus those considered to have spatial precision. The results suggest, preliminarily, that employing spatial precision in narratives changes discourse quality during deliberative activities. This project demonstrated how spatial precision applied to qualitative datasets. Further, the way in which people use spatial precision to communicate during a policy revision process can impact how spatial narratives are understood and valued. Most importantly, this project showed that including spatial thinking into our discourse shapes the way people communicate their landscape values, and that spatial thinking is indeed an influential communicative tool. The results leave room to explore the degree to which incorporating precise spatial thinking into their arguments for policies could empower individuals and/or political groups. Suggestions for further research are provided.