Propositions accompanying the thesis

Higher-dimensional modelling of geographic information

by

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1. Using higher-dimensional topological data structures, many difficult problems can be flattened to equivalent—but conceptually simpler—problems on graphs. [*This thesis*]
2. Two representations will come to dominate geographic information of any dimension: point clouds and space subdivisions. [*This thesis*]
3. Computational methods will replace geoscientific methods in almost every GIS application: *fast reasonable approximations* on large noisy datasets will increasingly trump *slow optimal solutions* on a few carefully acquired data points.
4. A lack of concern for geometric and topological correctness is the main reason behind the lack of successful applications for general-purpose 3D models.
5. In computer science, it is almost always better to speak of research objectives than research questions.
6. There is no such thing as a predatory publisher, only predatory metrics used to gauge the value of a scientist.
7. In the future, peer review will be conducted post publication.
8. Good academic writing advice encourages clarity and expressiveness as much as it discourages formulaic constructions.
9. Innovation in internet services will occur in countries that enshrine net neutrality in law.
10. The results of research performed at public universities or using public funds ought to be released into the public domain.

These propositions are regarded as opposable and defendable, and have been approved as such by the promotor Prof. dr. J. Stoter and the copromotor Dr. H. Ledoux.