

# GIScience in the Post-Truth Era

2019 AAG Annual Meeting, Washington DC, April 3-7, 2019

The word “post-truth” was named the 2016 Word of the Year by Oxford Dictionary due to its spiking appearance in social media and news coverage of the Brexit referendum and the U.S. presidential election. While the ramifications of post-truth have focused on social, political, and ethical concerns, the issue advocates for a new and critical view of spatial information, especially the fake spatial information in social media (e.g. Facebook check-in, geotagged tweet, location-based review).

The inconsistency between the fake spatial information and the corresponding true location raises a broad set of questions. Can we perceive the inconsistency in the frame of established geographic laws? Are there new laws yet to be explored? As fake spatial information is created intentionally, can the inconsistency be viewed based on our knowledge of error and uncertainty inherent in spatial data, especially so in volunteered geographic information? When the fake spatial information goes viral in social media, how does it disseminate over space and time? Ultimately, must all fake be eliminated? The issue demands a much richer context, such as social, political, cognitive, linguistic, and behavioral perspectives to its understanding. The true-fake dichotomy may not even begin to capture the complexity and rich context of the spatial information in social media. Multi-facet societal implications of fake spatial information are yet to be explored.

Confronted with these new challenges, this call advocates for robust and contextualized approaches to conceptualizing, analyzing, and visualizing the spatial information. We invite GIScientists and other geographers to participate in this timely discussion. Topics might include (but not necessarily restricted to):

- Rethinking of ground truth, spatial data quality, and uncertainty under the context of post-truth.
- Fake location detection, proof of location and/or other countermeasures using innovative GIS methods, including, but not limited to, spatial statistics, spatial network analysis, time geography, spatial-temporal analysis, natural language processing, GeoAI, and etc.
- The spatial dissemination of fake spatial information, and in the context of post-truth.
- Critique of fake locational information (e.g., check-in, geo-tag, location-based review, etc.) and its impacts on geo-privacy, policing, surveillance, and digital governance.
- Case studies of spatial information falsification (e.g., location spoofing, check-in hacking, satellite image forgery, etc.) and its relevance in public health, national security, and everyday life.

If you are interested in presenting a paper in this organized session, please send your name, affiliation, paper title, and abstract (approximately 250 words) to Bo Zhao at [zhao2@oregonstate.edu](mailto:zhao2@oregonstate.edu) by October 25, 2018.

## Organizers:

- Bo Zhao, Oregon State University
- Ling Bian, University at Buffalo