

Generating Meaningful Representations from Multimodal Spatial Data

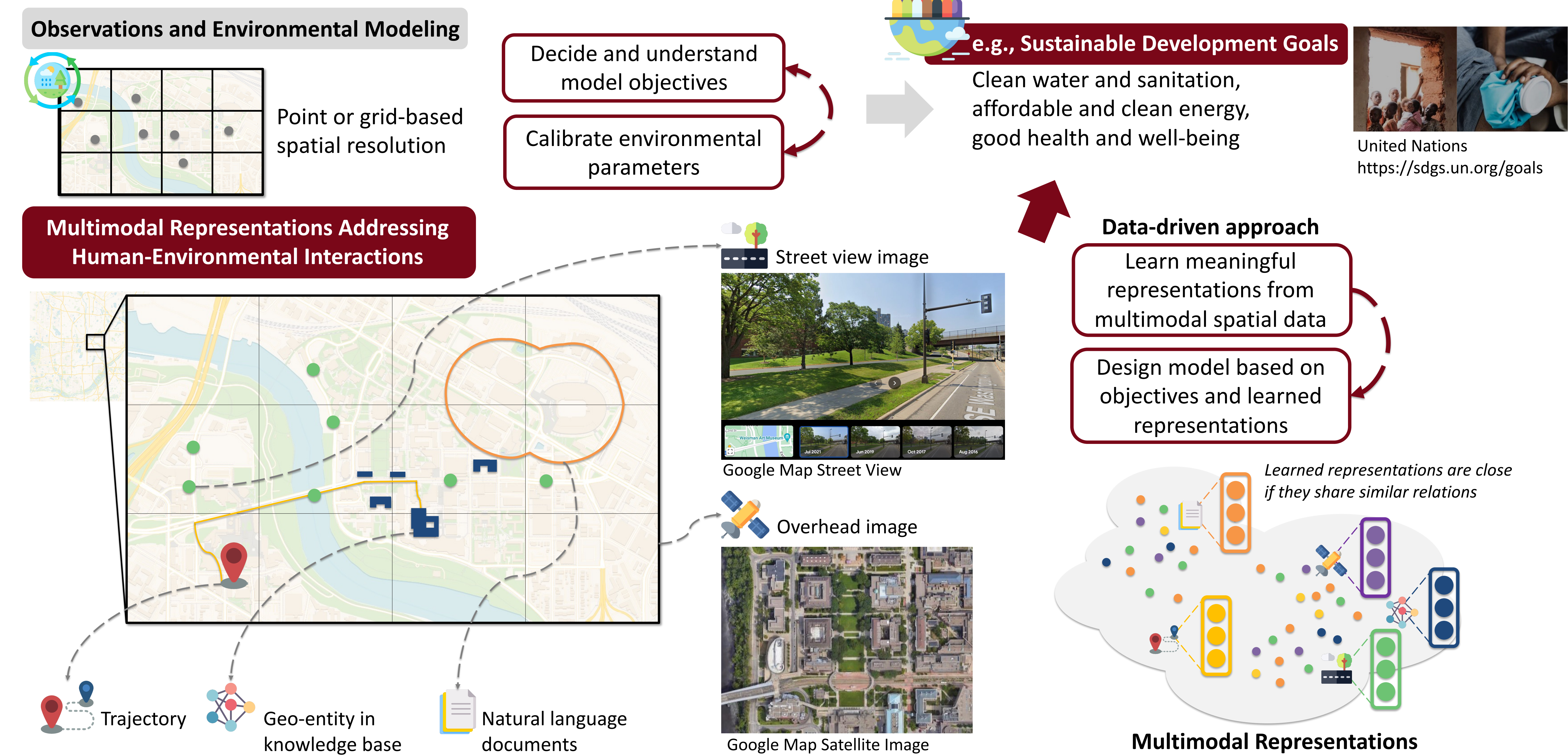
Describing Human-Environmental Interactions

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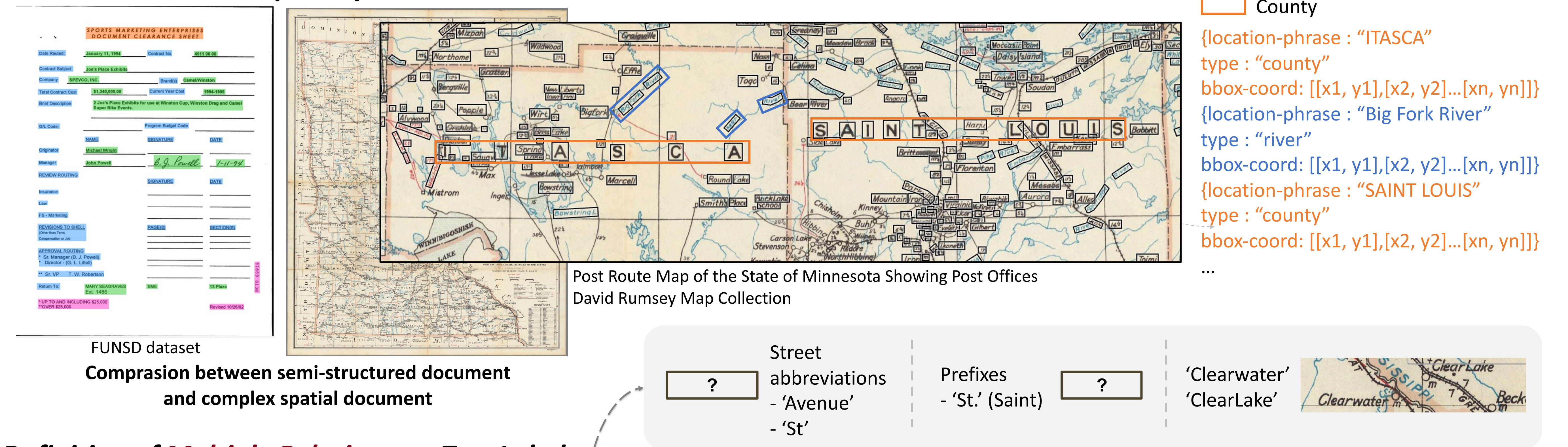
Introduction



Challenge #1. Diverse spatial resolution coverage and data format
Challenge #2. Incorporation of multiple relations

One Line of Work on Capturing Multiple Relations

Understanding Complex Spatial Document



Definition of Multiple Relations on Text Labels

- Text relations - semantic meaning and word order within the location phrase
- Semantic type relations - relationship between semantic types of multiple location phrases
- Visual relations - visual font style (e.g., height, font family) of the location phrase
- Spatial relations - relative positions and orientation of words within the location phrase

