

## Conclusions

Presenter: Manolis Koubarakis



Dept. of Informatics and Telecommunications  
National and Kapodistrian University of Athens



# What we talked about

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- Introduction
- Background in geospatial data modeling
- Geospatial data in the Semantic Web  
(extensions to RDF, stSPARQL and GeoSPARQL, spatial DLs, rules)
- Implemented systems (RDF stores, spatial DL reasoners, rule-based)

# What we did not talk about: Tools

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- Tools for **translating** GIS data (e.g., shape files or tables from a geospatial DBMS) into the geospatial extensions of RDF that we presented.

# What we did not talk about:

## Representational issues

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- What are appropriate vocabularies and ontologies for representing geospatial information? (GeoSPARQL only)
- Is the GeoSPARQL vocabularies/ontologies always appropriate?
- Is using the WKT/GML encoding of a spatial object always a good idea?

# What we did not talk about: Theory

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- **Semantics:** How do we extend the semantics of SPARQL, to give semantics to stSPARQL and GeoSPARQL?
- **Computational complexity of query processing:** What is the complexity of stSPARQL or GeoSPARQL querying?
- Same questions for DLs, OWL and rules.

# Some open research questions

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- More efficient geospatial RDF stores (can you beat Strabon?)
- Federations of geospatial RDF stores
- More expressive/efficient spatial DL reasoners
- Theory (extensions of SPARQL, extensions of DLs, extensions of SWRL)
- OWL 2 and geospatial (e.g., new data types)
- More efficient SWRL+spatial implementations

# Thank you for Attending!

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- Questions?
- Feedback?