Review of “SQL Extensions for Spatial Data”
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Definition:
The Definition section for this paper does a good job of stating the problem and why it’s important.

Historical Background:
- At the end of the 1st paragraph you state the SQL is considered the most widely used database query language. This definitely true, but you should find a reference for this statement (should be easy).
- In the 2nd paragraph it attributes the widespread use of GIS to the growing use of UNIX and PCs. I can guess why PCs were important, but what was different about UNIX that made it have such an impact? (open source, an application, cost???)

Scientific Fundamentals:
- Because SQL is a relational query language and you use relational examples in the Spatial sections, it might be nice to show a simple SQL query that uses at least 2 relations.
- I don’t think the last paragraph of the SQL is needed. I would move the “Relation database systems were…” sentence to the first paragraph and get rid of the transition sentence (the section titles are transition enough).
- Explain figure 1 better. Also, is the 3rd image a region? Intuitively, I would think that a region could not have ‘holes’ in it. They make similar assumptions in graphics programming and it seems like the algorithms would be much more complex if ‘holes’ were allowed.
- Figure 2 is explained nicely.
- In the 1st paragraph of Spatial Data Types, in order to delineate this section from the query section, it might be better to move the last sentence (“A query of this type…” to the next section.
- I understand what the spatial queries are doing, but because it’s an encyclopedia article (and anyone could be reading it), you might want to include the table definitions of ‘state’ and ‘river’.
- It seems like the paragraph starting “Extending SQL for spatial data…” should be the beginning of a new section on Query Result Presentation (better title probably needed…something that includes input).
- I think the term should be ‘pick-and-choose’.
- Is the pick-and-choose functionality a seriously considered feature? It just seems too far on the application side.
- In the Standards for SQL Spatial Extensions it says “Spatial Objects are discussed in the following sections”. Is this referring to the standard or the encyclopedia article? If it’s the encyclopedia article, it shouldn’t be there as spatial objects were discussed in the previous sections.
- For Key Applications you should probably add some details of specific applications.
In the Future Directions section, are there any other SQL alternatives that the research community is considering? Or are they still discussing whether SQL is sufficient for spatial data?