Error Detection through Consistency Checking

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Abstract
Following a brief discussion on various aspects of data quality, possible methods are examined for the detection of errors in a spatial database.   Using examples, we introduce the consistency checking method based on spatial relationships among neighboring objects and attribute relationships among map layers from different sources. Using logical relationships among spatial neighborhoods and among attribute data from different sources, it is desirable to build an error detection mechanism in a spatial database. This mechanism can be automated and has the potential to be one of the powerful tools for error detection and correction suggestion in a spatial database.