Paper Reading and Critique #2

20131329 신선우

Zhicheng Liu and John T. Stasko, "Mental Models, Visual Reasoning and Interaction in Information Visualization: A Top-down Perspective", IEEE Transactions on Visualization and Computer Graphics, (Paper presented at InfoVis '10), Vol. 16, No. 6, November/December 2010, pp. 999-1008.

In this paper, they identify and illustrate a specific kind of internal representation, mental models, and outline the high-level relationship between mental models and external visualization. The reason is there was a lack of study in detailing the nature of internal representations, the relationship between internal and external representations and how interaction is related to these representations. Also, it re-defines blur definition of 'internal representation' by researching mental-model and external representation. After re-definition, this work approach how the mental model works. Also, it introduces how to evaluate internal representation.

in this paper, they identify mental models as internal, structural, behavioral and functional analogs of external visualization systems.