Exploring Multi-touch Gestures for Map Interaction in Mass Casualty Incidents

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Abstract: In mass casualty incidents a common operation picture, which gives an overview about the current situation is critical information for managing the emergency. In order to support the collaboration between different incident commanders a multi-touch table, placed in the incident command post, is used to present the current operation picture on a map. To place as little additional mental load as possible on the users, any interaction with this map interface should be natural and intuitive. Therefore we investigated in a user study several alternative multi-touch gestures, combined to five sets for the tasks of modifying the map view and selecting map objects in an emergency management scenario. The gesture sets contained widely known as well as new promising gestures.

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