

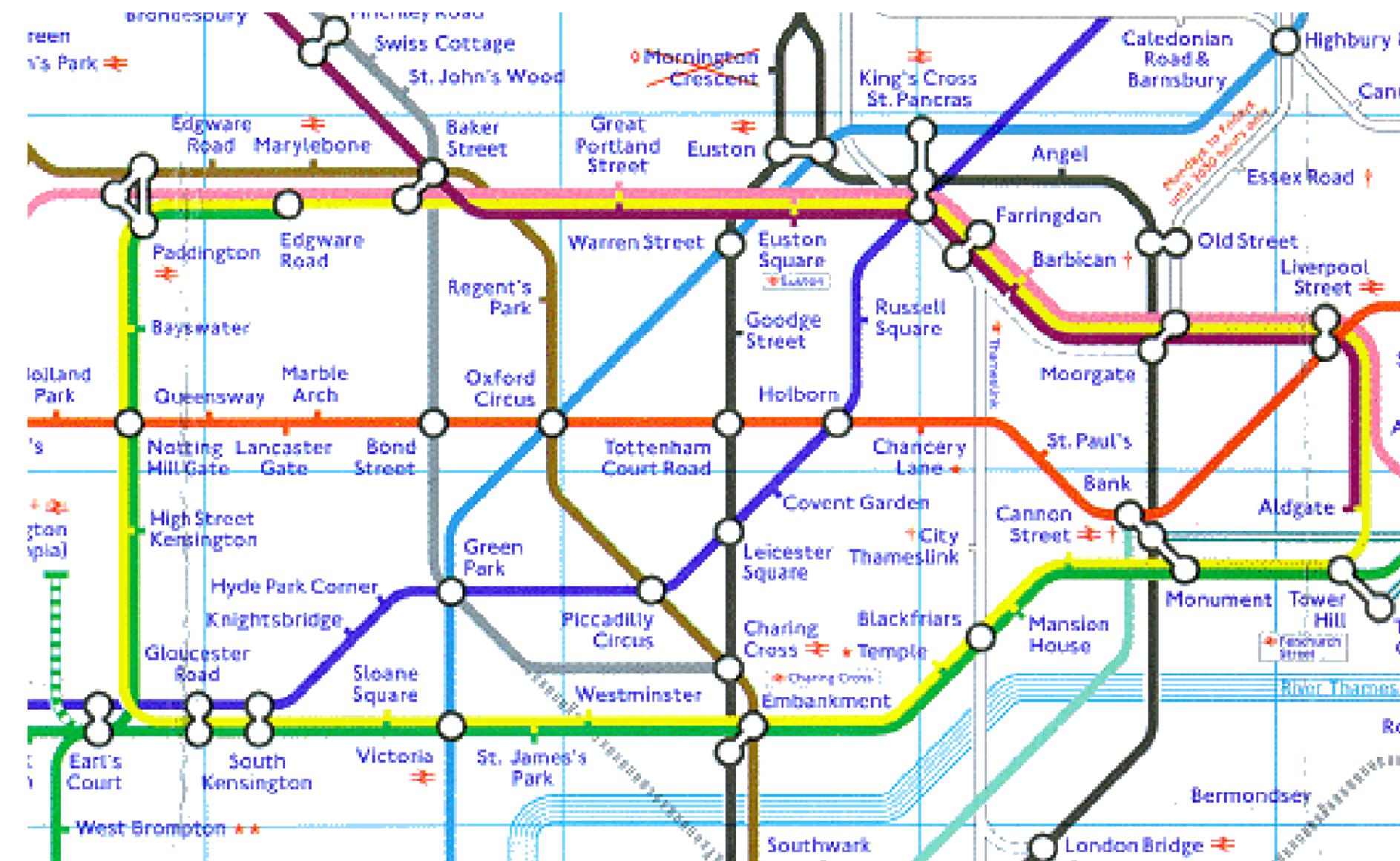
What the Quest for Tactile Maps Can Teach Us about Making Interactive Maps

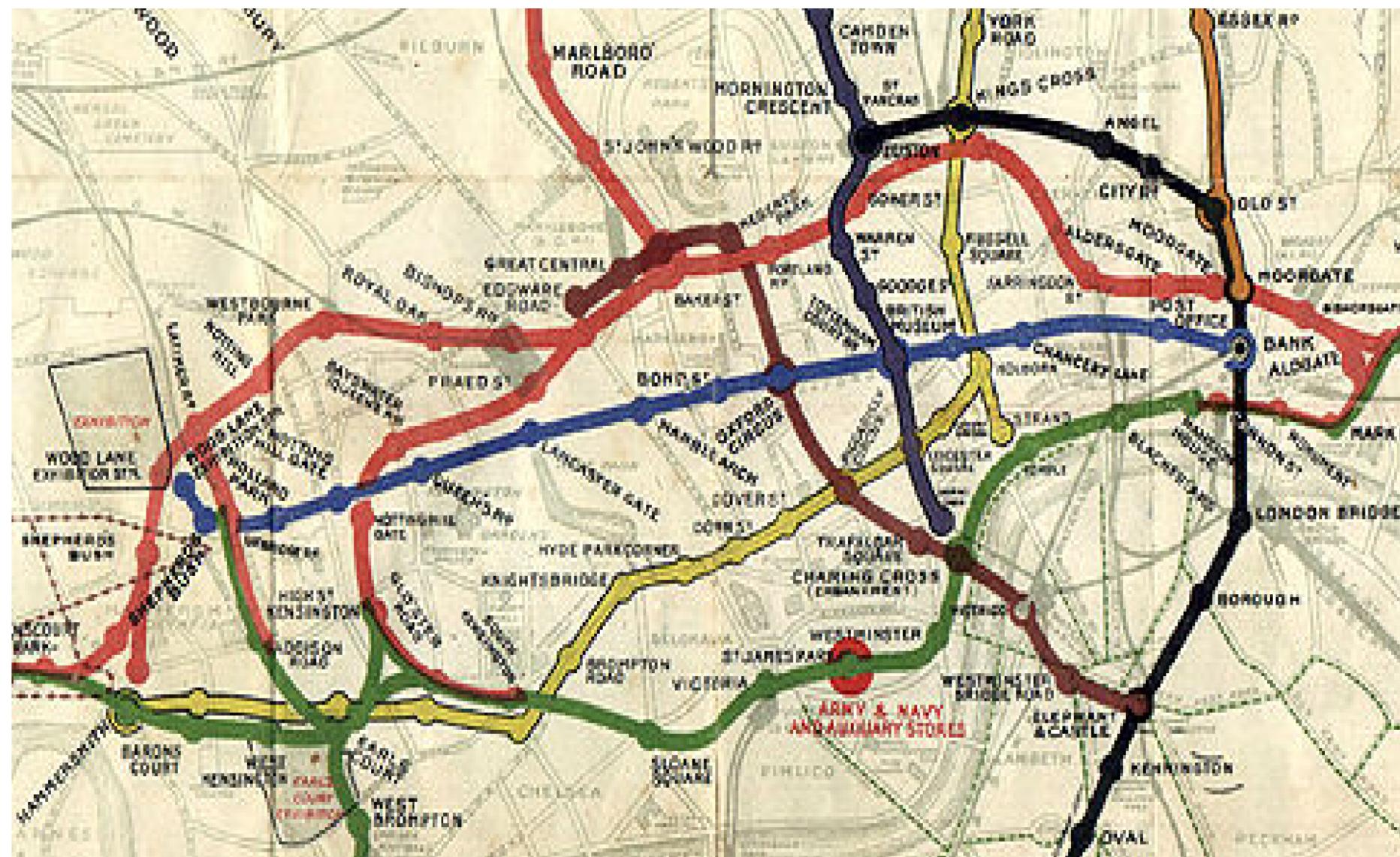
Schematization in Tactile and Interactive Maps

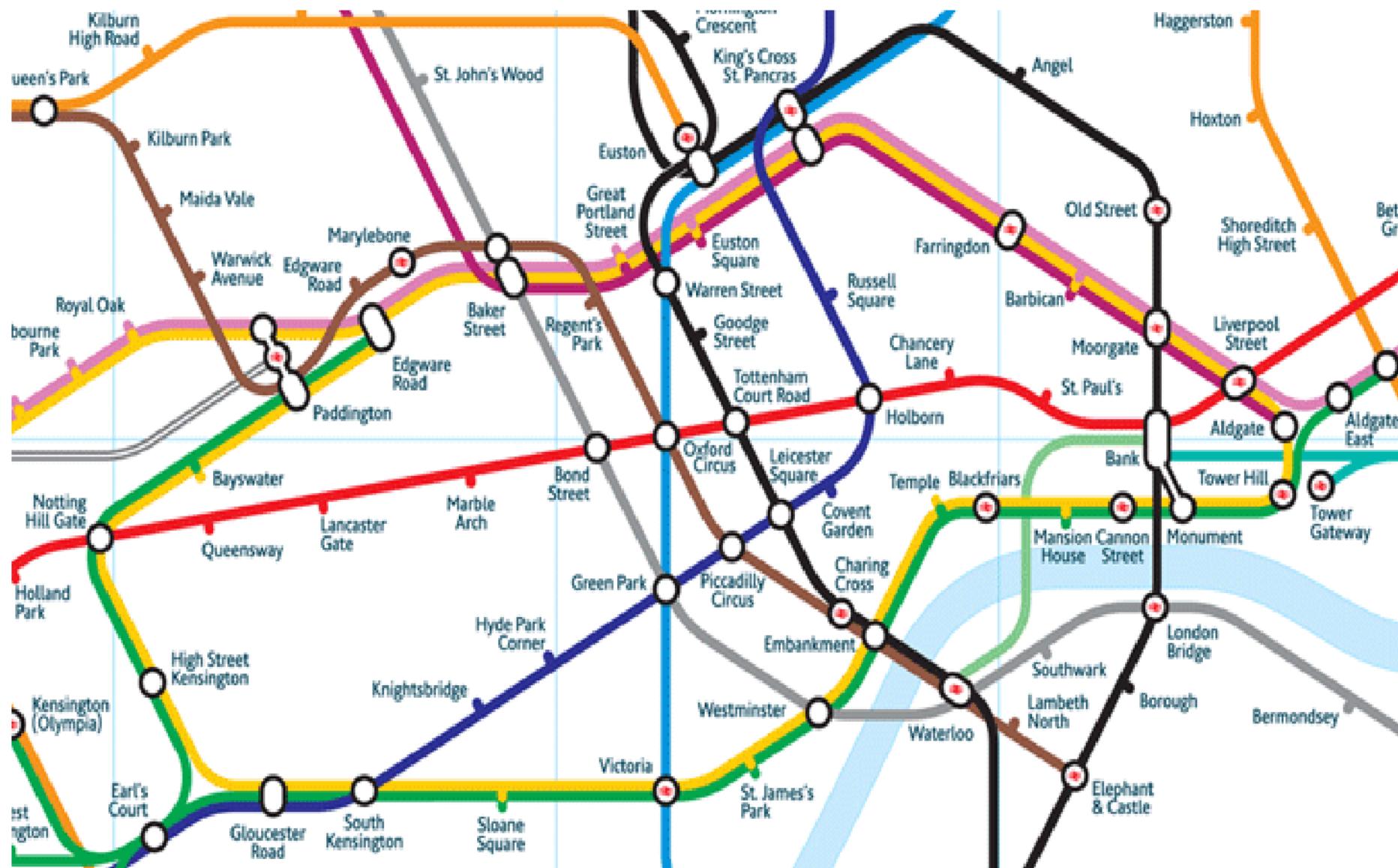


Christian Graf

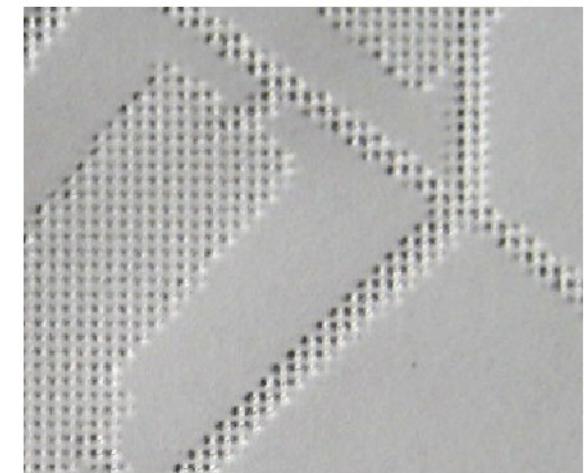
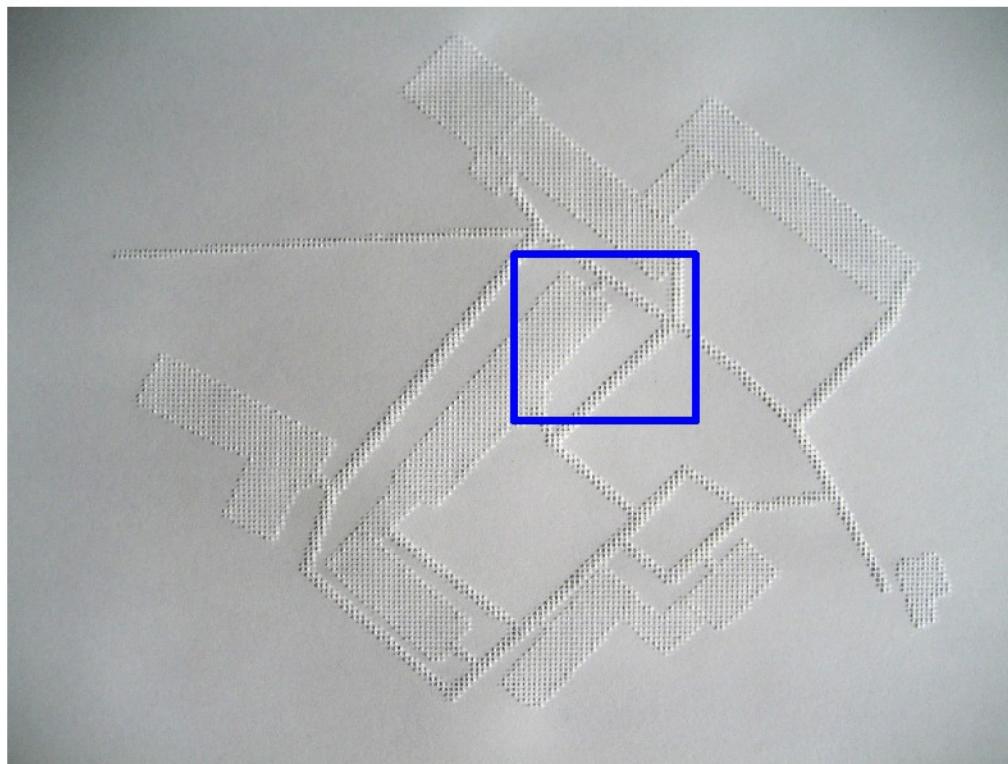
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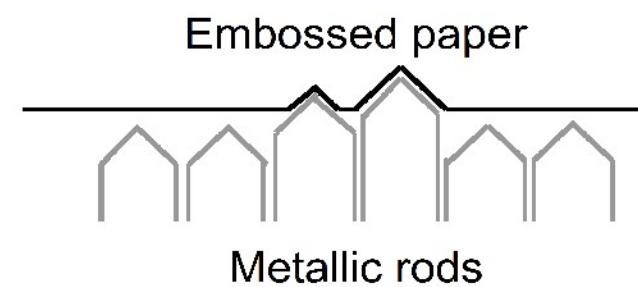


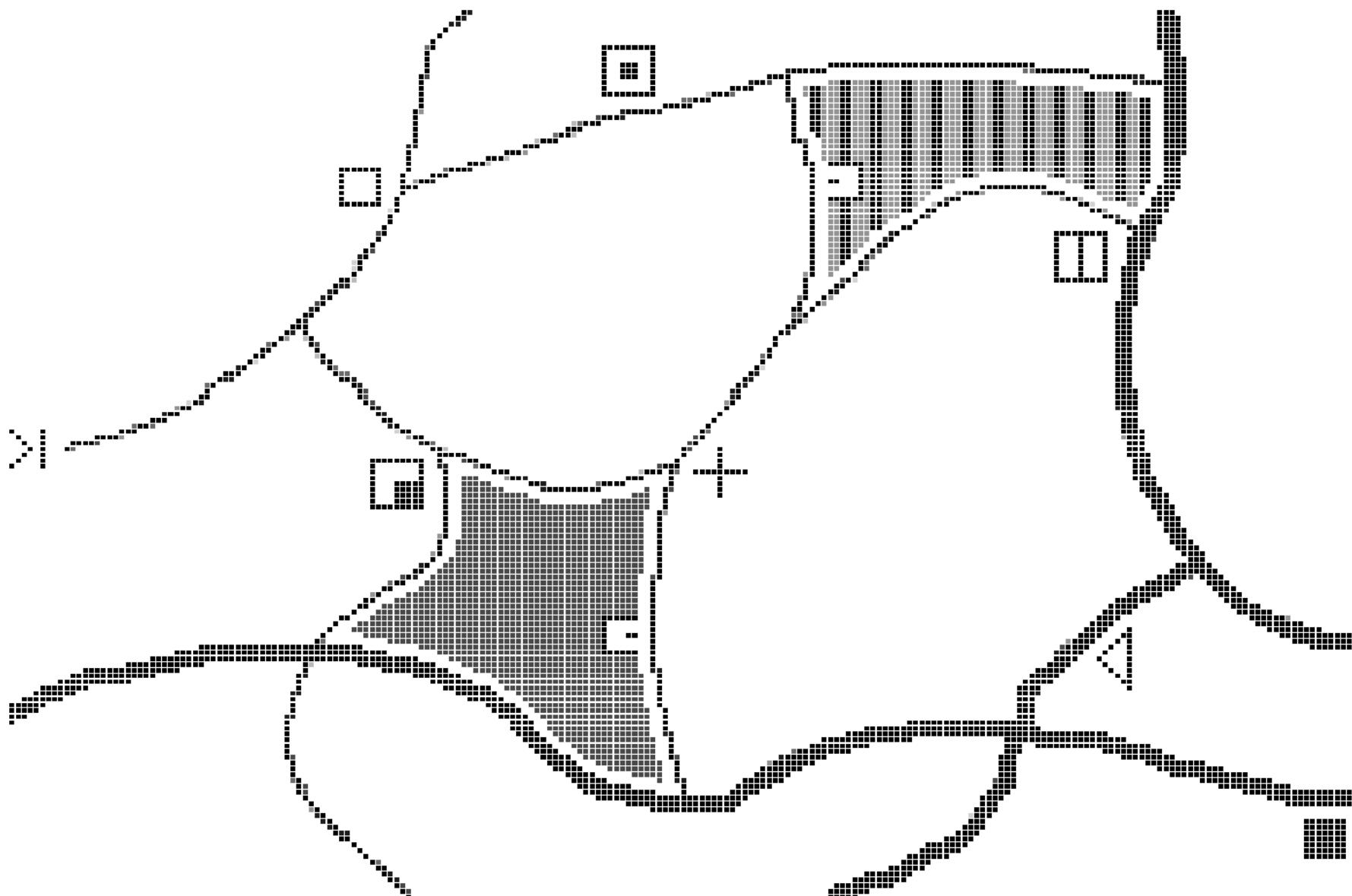


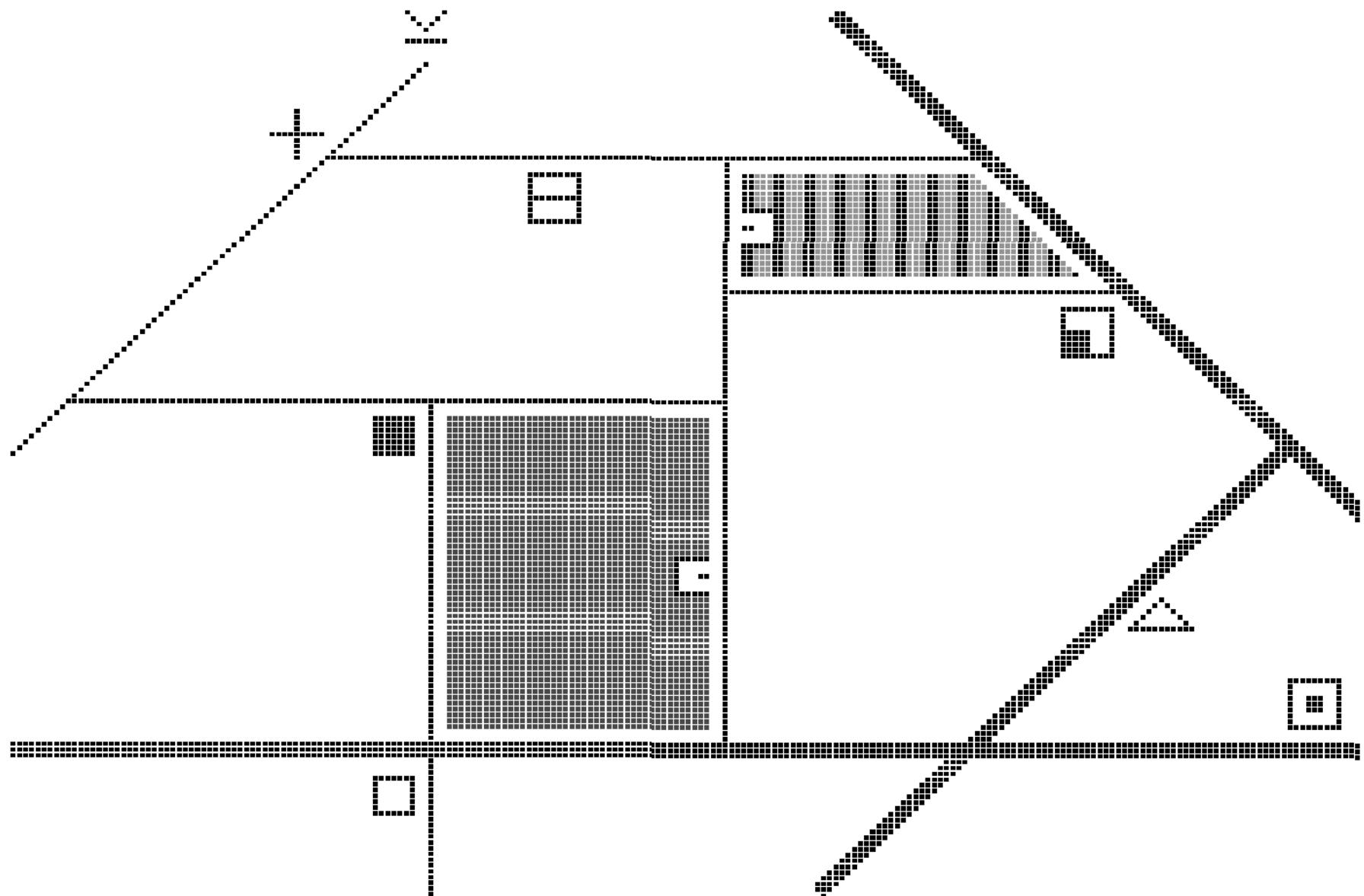


Tactile Orientation Maps: Survey Knowledge for the Blind







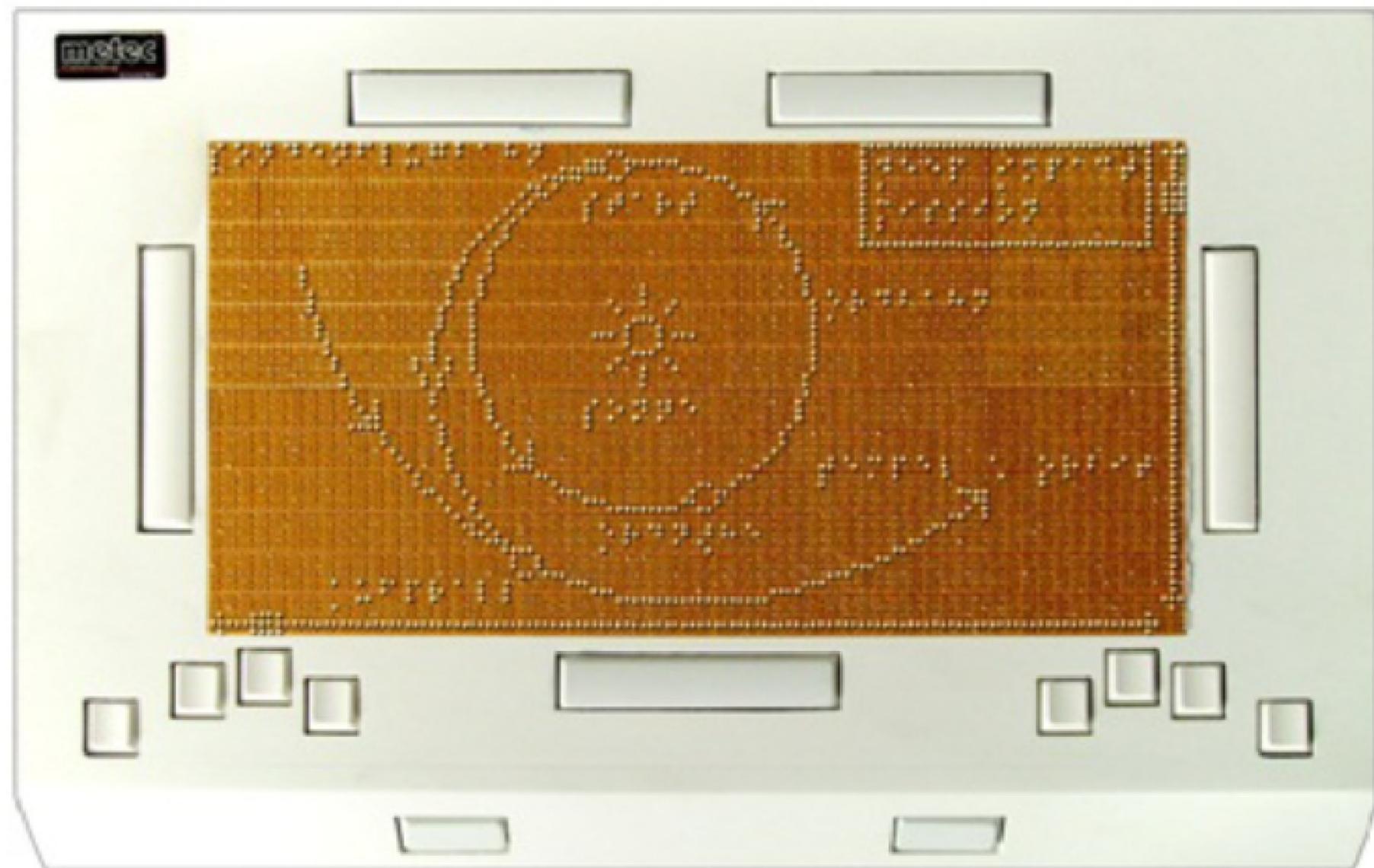


Results

- Printing of comprehensible tactile (orientation) maps becomes possible
- Different sources of constraints: technological, sensory & cognitive
- Topology, relevant landmarks and readable symbols essential for survey maps, metric properties are not
- Schematization as approach to cope with constraints → usable and comprehensible maps

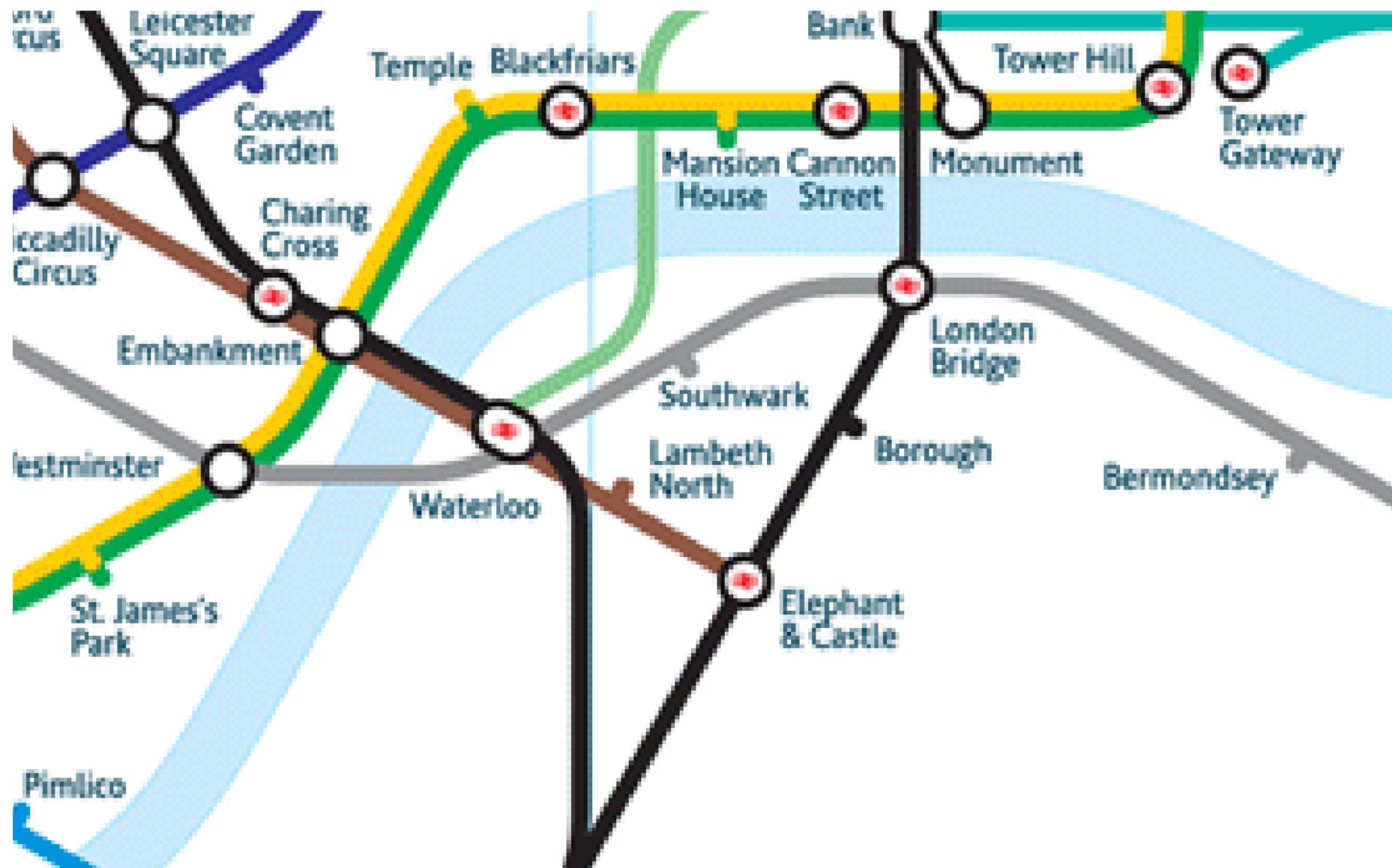
Transfer from Hardcopy Tactile Maps to Interactive Tactile Maps





Transfer from Tactile Maps to Interactive Visual Maps

- For usable maps → use special purpose maps!
- Special purpose maps
 - Display only most relevant spatial concepts & some limited context
 - Schematize point, line, and shape geometries







Discussion

- Interaction with sets of schematized tactile maps
 - showing different aspects
 - showing different scales
 - showing adjacent areas
- Problem of correspondence
- Parametric description of comprehensible schematized maps? → (Semi-)Automatic construction of schematic maps

Thank you for your attention.

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Image Sources

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