Using different methods for collecting and analysing social network data with a single software tool

The Future of Historical Network Research

Hamburg, 2013

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Outline

• What is VennMaker?
  – Origins
  – Ideas behind VennMaker
• VennMaker for historian
• Discussion
VennMaker

Trier University
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http://www.vennmaker.com
Origins
Origins
What VennMaker is...

A tool for...

- **Visual data** collection
- Additional data collection
- Connect network data with sources
- Combines aspects of **quantitative** and **qualitative** network analysis.
- **Visual, audio** and **statistic** data
- **Export** of data to Excel, Pajek, R ...
- **Calculating** statistic measures
Origin: Constructivist approach / Mental Models

- Asking informants to interpret or fill in visual stimuli, complete sentences, or tell, what associations particular words bring to mind.
- Mental maps are maps which reflect individual's perceptions of physical locations or social categories in the shape of a physical map.
Origin: The “Social-Convoy-Model“ (egocentric network map)

- Life spanning dynamic social networks beyond role models (Kahn/Antonucci 1988)
- Emotional importance: very strong, strong, less („method of concentric circles“, „network maps“ Hollstein/Straus 2006)
- Popular (but not uncontested) instrument in upcoming „qualitative“ social network analysis - still growing
## Visualization

<table>
<thead>
<tr>
<th>Visual variable</th>
<th>Visualization with VennMaker</th>
<th>Variables</th>
<th>Visualization Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>Actor size</td>
<td>Importance, availability of Alter</td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>Actor symbol</td>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Color saturation, color shade</td>
<td>Actor symbol</td>
<td>Role (e.g. friend, family)</td>
<td></td>
</tr>
<tr>
<td>Texture</td>
<td>Actor symbol</td>
<td>Position (z.B. Doctor, Boss)</td>
<td></td>
</tr>
<tr>
<td>Color saturation, color shade</td>
<td>„actor pie“</td>
<td>Role (multiple attributes)</td>
<td></td>
</tr>
<tr>
<td>Size of relation</td>
<td>line thickness of Relations</td>
<td>Strength of relationship</td>
<td></td>
</tr>
<tr>
<td>texture relationship</td>
<td>texture relationship of relations</td>
<td>Strength of relationship</td>
<td></td>
</tr>
<tr>
<td>Color saturation, color shade</td>
<td>Line color of relations</td>
<td>Different kind of relations (e.g. love, hate)</td>
<td></td>
</tr>
<tr>
<td>direction of relation</td>
<td>Directed relation</td>
<td>Direction of Relation (e.g. money flow)</td>
<td></td>
</tr>
<tr>
<td>Position of the persons, Distance between persons</td>
<td>concentric circles</td>
<td>emotional closeness, proximity</td>
<td></td>
</tr>
<tr>
<td>Position of the persons</td>
<td>Sectors</td>
<td>Nationality, gender (nominal)</td>
<td></td>
</tr>
</tbody>
</table>
Visualization → data
VennMaker for historian?
VennMaker for historian

Example: Ego-networks of Jews in hiding: A systematic comparison

Düring; Bixler; Kronenwett; Stark: VennMaker for Historians: Sources, Social Networks and Software. In: Redes. Revista hispana para el análisis de redes sociales (Vol. 21, #8, Diciembre 2011)
Combining visual and non visual data (e.g. sources, quantitative / qualitative data)
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VennMaker

Demo...
Discussion

How to collect network data?
→ reduce complexity?
→ minimize input error?
→ how to handle missing data?
→ how to handle fuzzy data?
→ connecting with databases?

→ …?

A toolbox for historical network analysis?
Thank you!

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