

# 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

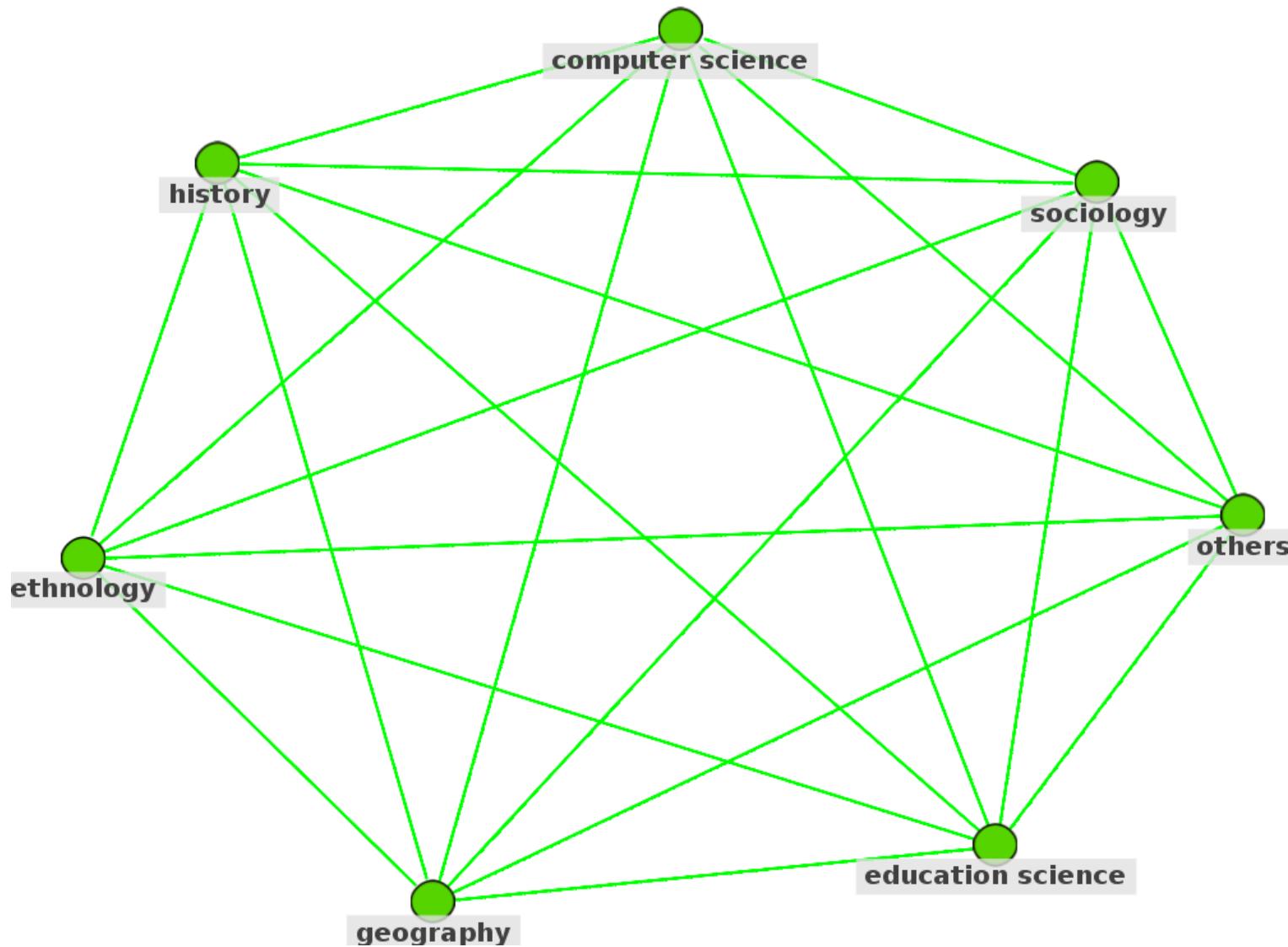
- What is VennMaker?
  - Origins
  - Ideas behind VennMaker
- VennMaker for historian
- Discussion

# VennMaker

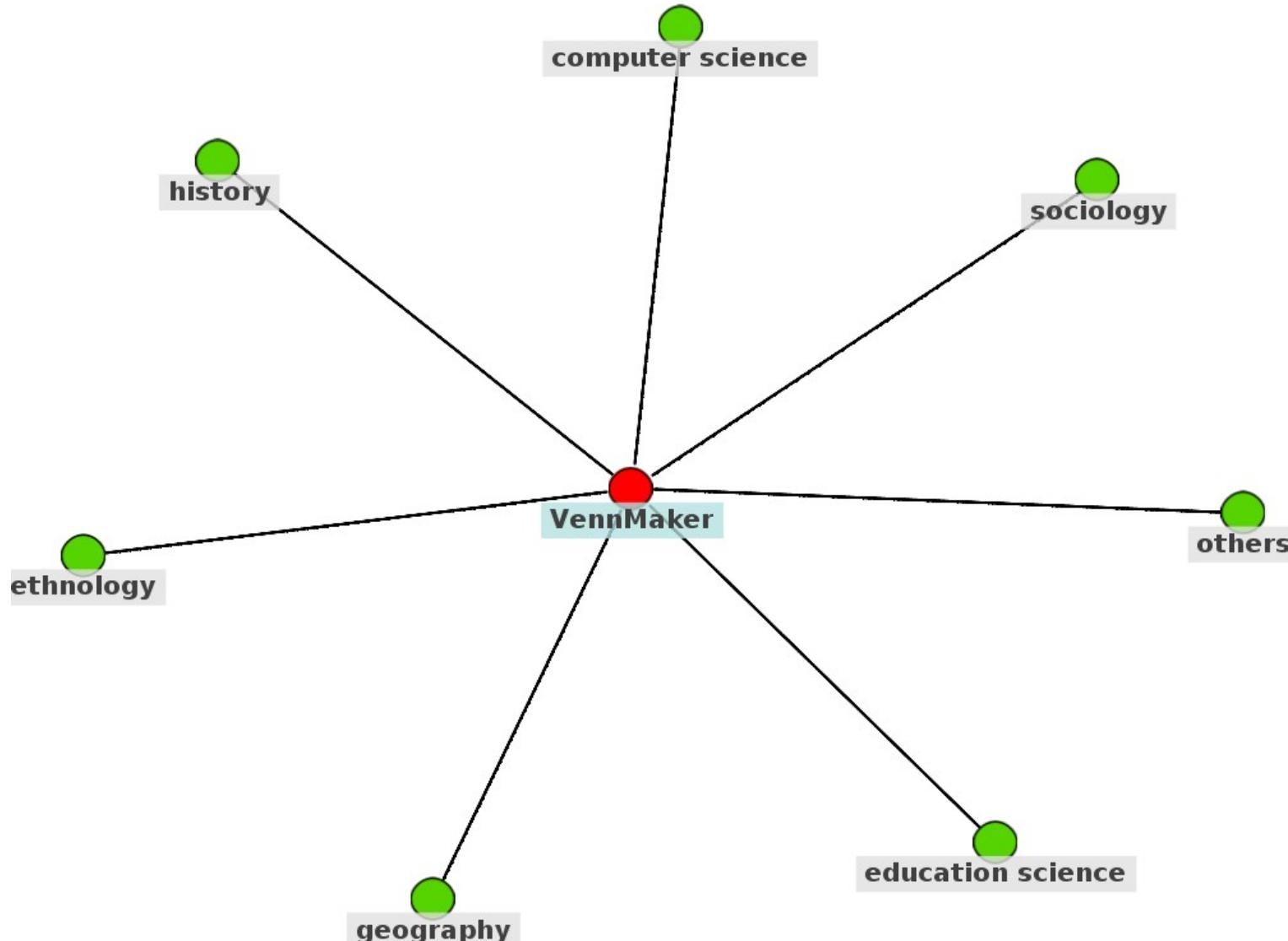
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Research Cluster Social Networks

<http://www.vennmaker.com>

# Origins



# Origins



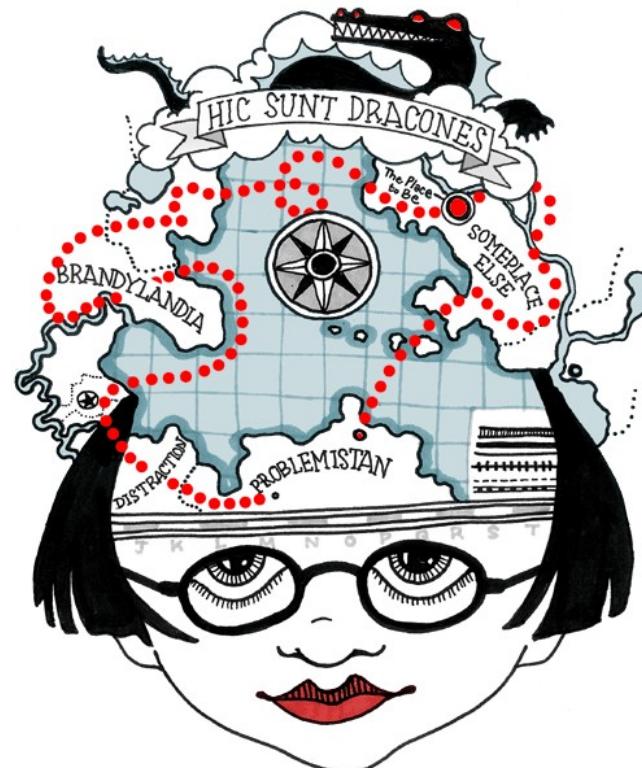
# What VennMaker is...

## A tool for...

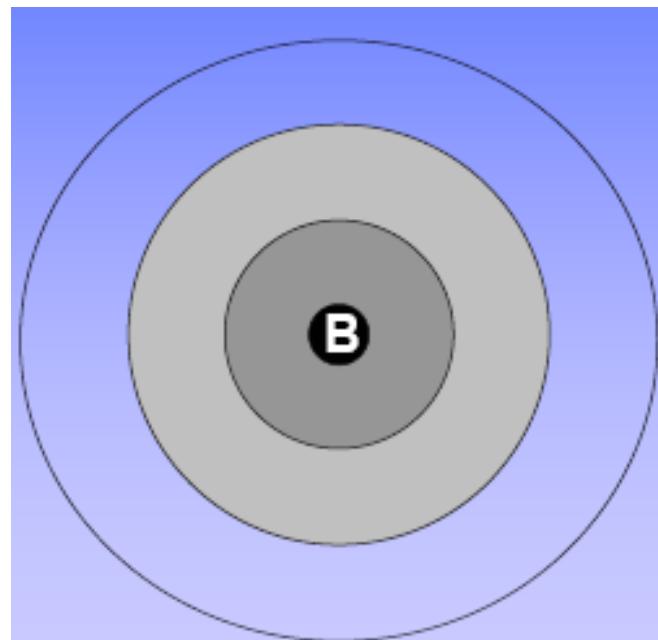
- **Visual data** collection
- Additional data collection
- Connect network data with sources
- Combines aspects of **quantitative** and **qualitative** network analysis.
- **Visual, audio** and **statistic** data
- **Export** of data to Excel, Pajek, R ...
- **Calculating** statistic measures

# 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

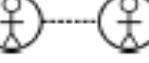


# Origin: The “Social-Convoy-Model“ (egocentric network map)



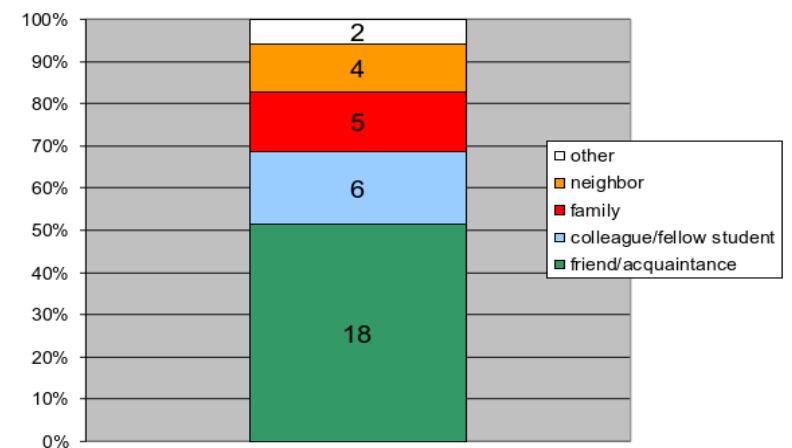
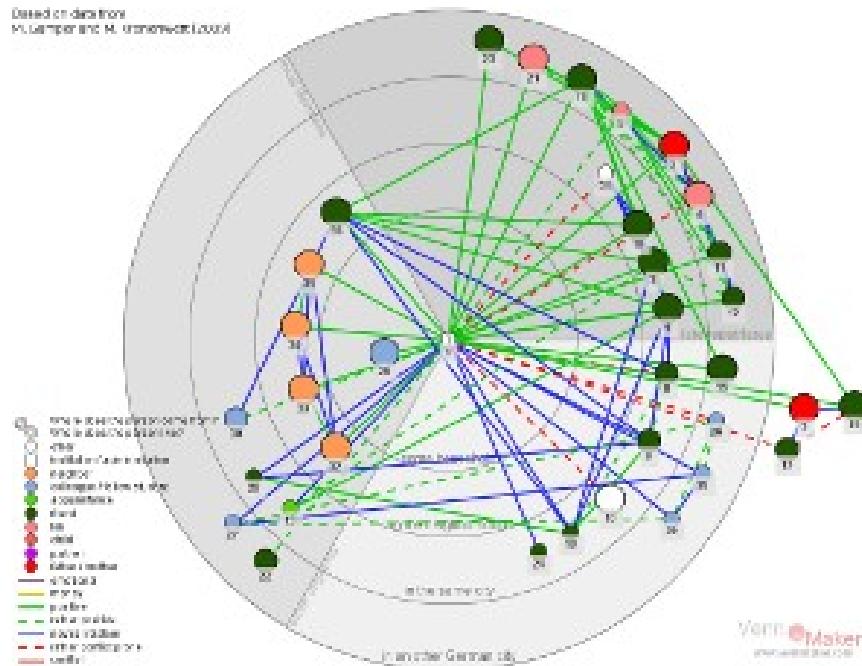
- Life spanning dynamic social networks beyond role models (Kahn/Antonucci 1988)
- emotional importance: very strong, strong, less („method of concentric circles“, „network maps“ Hollstein/Straus 2006)
- popular (but not uncontested) instrument in upcoming „qualitative“ social network analysis - still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

# Visualization

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

Gamper/  
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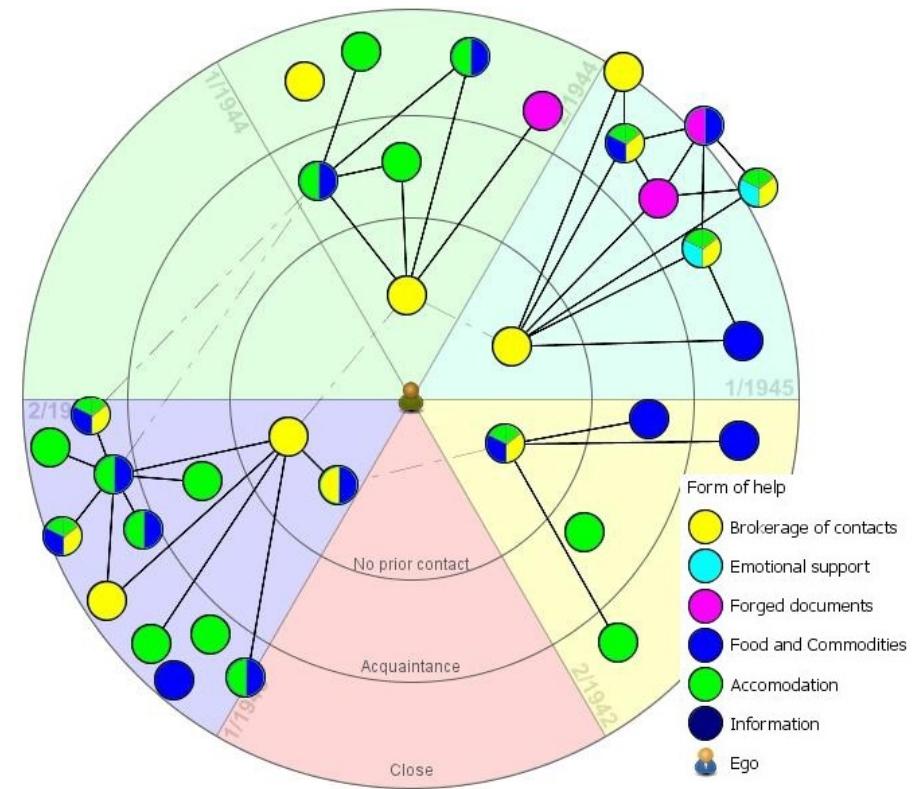
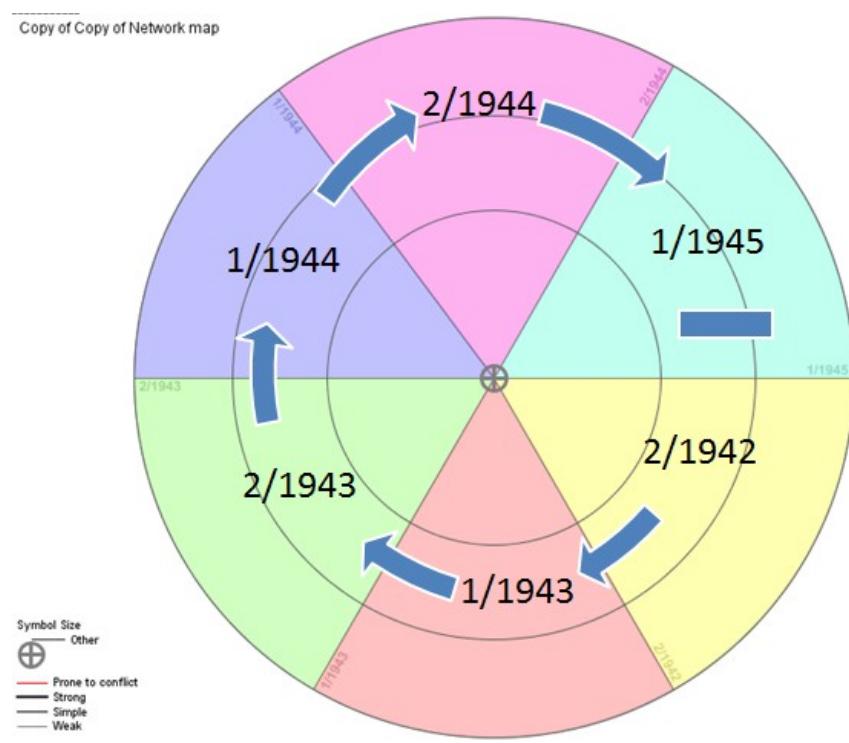
# Visualization → data



# VennMaker for historian?

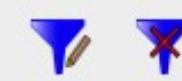
# VennMaker for historian

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)

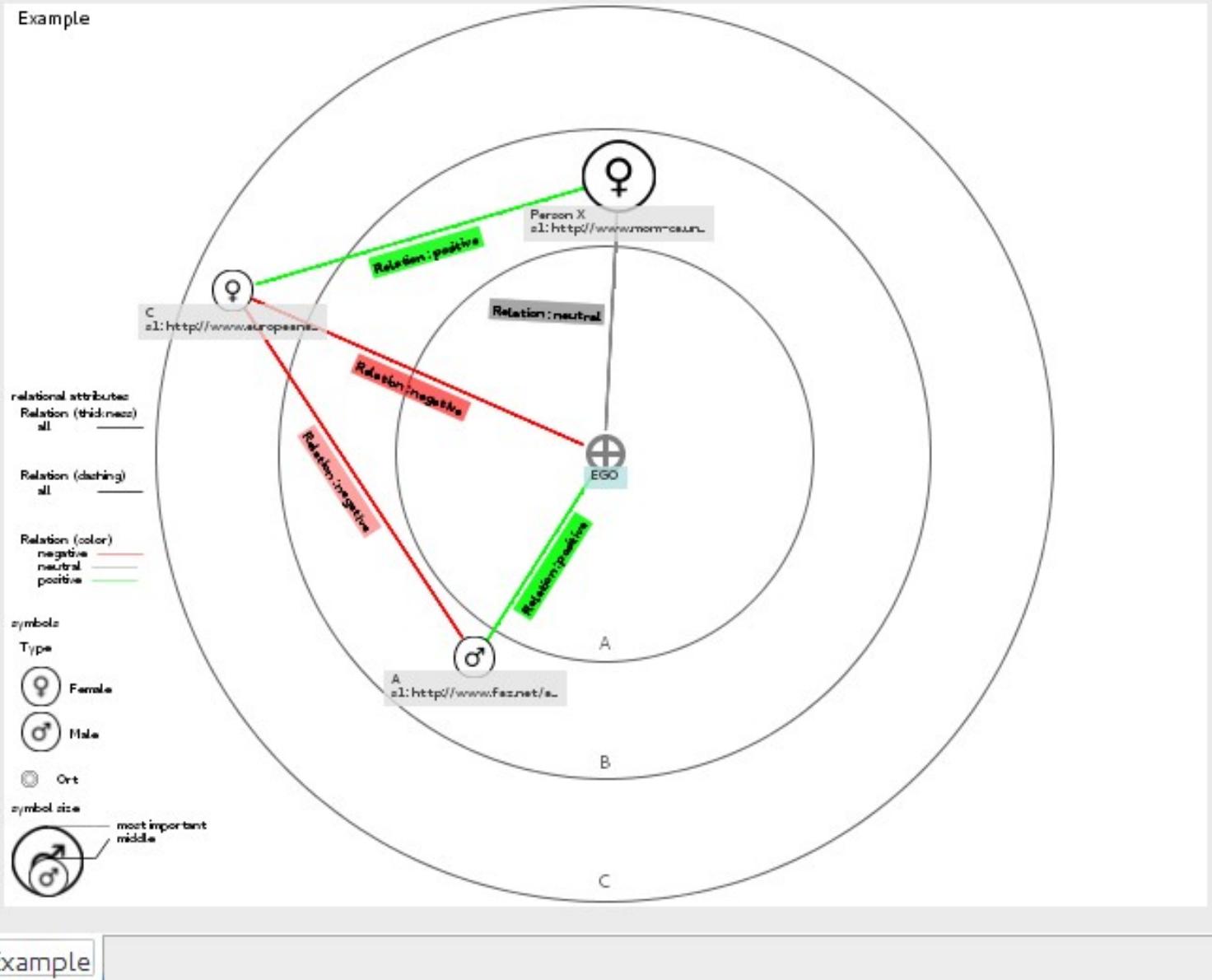
File Edit Analyze Config Audio Interview Filter About

**Action****Undo** **Redo****Type**

- Male
- Female

**Relation (Stan...**

- positive
- neutral
- negative

**Example**

# Combining visual and non visual data (e.g. sources, quantitative / qualitative data)

VennMaker 1.3.5 [/home/nexus/uni-trier/Workshop/HNR-Conference\_Hamburg\_2013/beispiel.vmp – kartel.venn] (minimize) (close)

File Edit Analyze Config Audio Interview Filter About

Icons: File, Save, Print, Database, Settings, Person, Group, Pie Chart, Filter, Delete.

**Action**

Undo, Redo.

**Type**

Male (Male icon), Female (Female icon).

**Relation (Stan...)**

positive (highlighted in green).

**Relational attributes**

- Relation (thickness) all
- Relation (dashing) all
- Relation (color)
  - negative (red)
  - neutral (grey)
  - positive (green)

**Example**

EGO

Person X  
s1: http://www.mom-ca.uni-koeln.de

C  
s1: http://www.europeana.eu

Relation: positive

Relation: negative

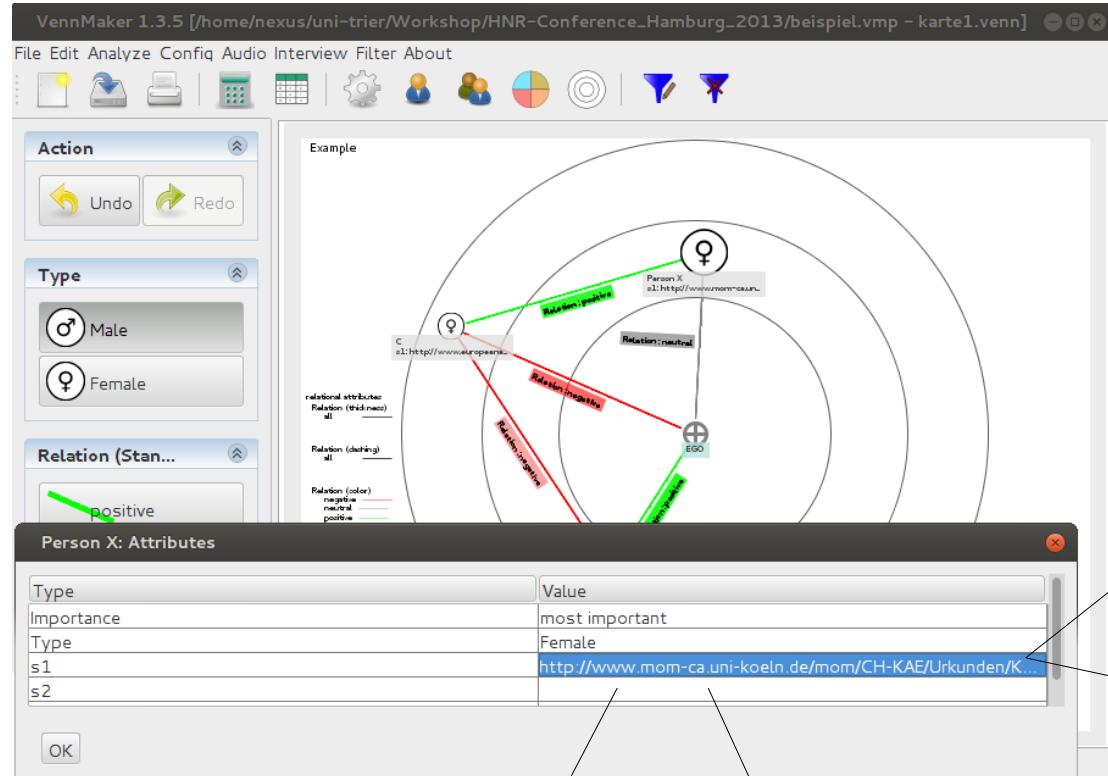
Relation: neutral

**Person X: Attributes**

Type	Value
Importance	most important
Type	Female
s1	<a href="http://www.mom-ca.uni-koeln.de/mom/CH-KAE/Urkunden/K...">http://www.mom-ca.uni-koeln.de/mom/CH-KAE/Urkunden/K...</a>
s2	

OK

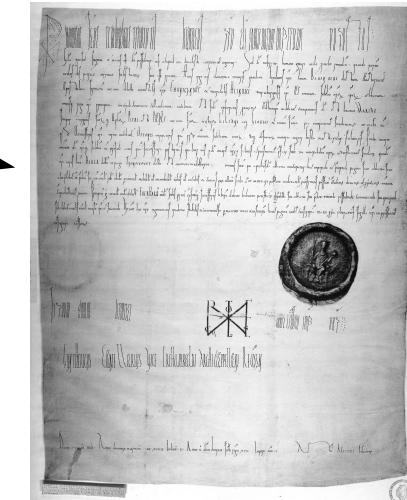
# Combining visual and non visual data (e.g. sources, quantitative / qualitative data)



quantitative data

qualitative data

sources



# 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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