



Participatory Appraisal of a Personal Network with

VennMaker

A research project of the Cluster of Excellence
Societal Dependencies & Social Networks
University of Trier
supervised by
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Michael Schoenhuth

What VennMaker is

- VennMaker is a new softwaretool for participative visualization and analysis of social networks.
- The programme allows for comparing of different individual perspectives and for visualizing changes within a network through time. Every step is stored electronically and can be tracked up afterwards.
- Vennmaker for the first time combines aspects of quantitative and qualitative network analysis.
- learn more about features and development stage:
- → www.vennmaker.com

Appraisal of a personal migrant's network with VennMaker (a beta-test tutorial)

VennMaker is applicable for:

1. communicative visualization and validation of ego-networks (personal networks from the point of view of one actor)
2. Participative stakeholder mapping /strategic actor mapping (organizational network, project, or conflict constellation viewed by stakeholders, actors, experts or whole groups)
3. user friendly visualization of network analysis results collected with other methods

→ In this tutorial we chose the first alternative



Research field: Migration

strategic focus (with expected results/hypotheses):

reviewing the following dimensions:

- „family centrality“ (expected: „high“)
- „locality/transnationality “ (expected: „distinct“)
- „ethnic homophily“; (expected: „very high“)
- „occupational and private patterns of integration in Germany “ (expected: „quite low“)

Survey partner (ego):

female migrant from the Caucasus; 30 years old,
engaged (German partner); in Germany since 2001

Configure VennMaker

VennMaker has got an

- administrator level to create a questionnaire via interface, to define items and the interview process
- interview level for generating actors, placing actors within the network map, visualizing network ties, discussion of the qualities of relationships and audio recording
- analysis level for analyzing the formation process, analysis of audio-recording; *[and for export and statistical analysis (Excel /SPSS → not yet implemented)]*



→ we start with the administrator level
(„configure interview“) →

Configure interview (administrator)

Configure Interview

Ego | Name Generator | Name Interpreter | Time Sequence | Common options

Indirect Name Generator
Ego questions
Alteri questions (start)
Social Support Network default
Alteri questions (end)
Save and exit

New text wizard
Edit text wizard

Up
Down

Save and start interview | Save and exit | Load

Interview Style: self reflective or communicative

- VennMaker can be configured with text wizards to guide the interviewee through every step of the interview (preferable for any forms of self guided interview)
- VennMaker can also be configured, to serve as a visual layer for participative and communicative forms of interviews

→ In this tutorial we chose the second alternative



Decision on the operationalization of dimensions

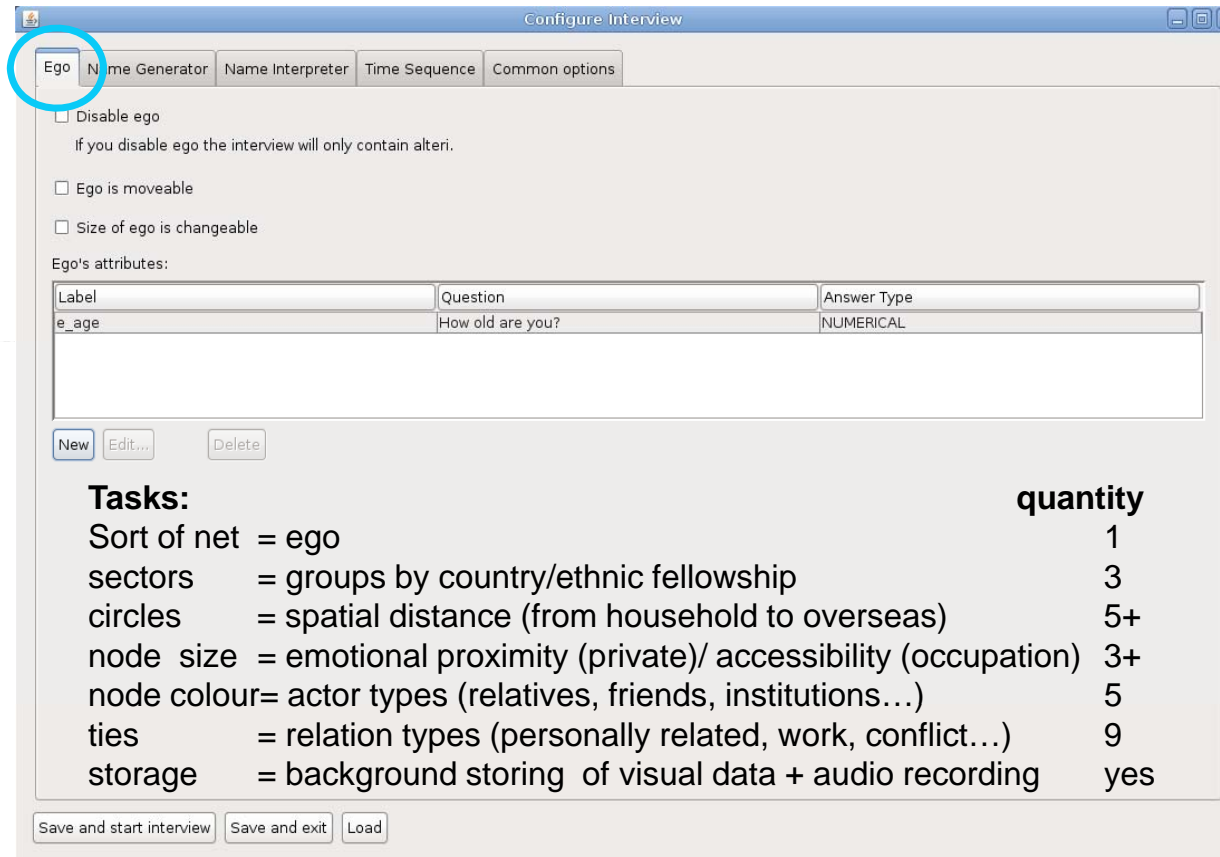
VennMaker has got a number of variables that can be visualized and have to be adjusted according to the research question.

To capture our research dimensions in a migrant situation we needed options for depicting:

- different actor types
- different forms of relationship
- spatial distance
- emotional proximity /professional accessibility
- national/ethnic grouping

→ *In this tutorial we opted for the following* ➡

Configuration level (administrator)



Configure Interview

Ego Name Generator Name Interpreter Time Sequence Common options

☐ Disable ego
If you disable ego the interview will only contain alteri.

☐ Ego is moveable

☐ Size of ego is changeable

Ego's attributes:

Label	Question	Answer Type
e_age	How old are you?	NUMERICAL

New Edit... Delete

Tasks:

Sort of net	= ego	quantity	1
sectors	= groups by country/ethnic fellowship		3
circles	= spatial distance (from household to overseas)		5+
node size	= emotional proximity (private)/ accessibility (occupation)		3+
node colour	= actor types (relatives, friends, institutions...)		5
ties	= relation types (personally related, work, conflict...)		9
storage	= background storing of visual data + audio recording		yes

Save and start interview Save and exit Load

....and ended up with the following preconfiguration on the „interview level“



Preconfigured VennMaker

The screenshot shows the VennMaker 0.6c software interface. The main window displays a circular diagram with a central stick figure labeled 'EGO'. The diagram is divided into three sectors: 'DeutschLokal- -Ort/Regio- Lokal', 'DeutschLokal- -Ort/Regio- Lokal', and 'DeutschLokal- -Ort/Regio- Lokal'. The diagram is also divided into five concentric circles, representing spatial distance from ego. The interface includes a menu bar (File, Create, Config, About), a toolbar, and several panels: 'Relation types' (listing afterlife, friendship, undef. relationship, kin, reportable relationship, working contact, conflict prone, couple, parent-child), 'Actor types' (listing Familie/..., Freunde/..., Beruflic..., Vereine/..., Nachbarn, Institut...), 'Actor properties' (with Type and Comments fields), and an 'Audirecorder' window (with Rec, Play, Stop buttons and a timer). A legend at the bottom left shows line styles for various relationship types: parent-child (solid blue), couple (dashed blue), conflict prone (solid red), working contact (solid black), reportable relationship (dashed black), kin (solid black), undef. relationship (dashed black), friendship (solid green), and afterlife (dashed green). Annotations with arrows point to various features: '9 relation types' points to the 'Relation types' panel; '6 actor types' points to the 'Actor types' panel; '3 sectors (fellow countrymen; local Germans; other migrants)' points to the three sectors of the circular diagram; '5 concentric circles (=spatial distance from ego)' points to the concentric circles of the diagram; 'audiorecorder (real time recording)' points to the 'Audirecorder' window; and 'actor properties (free comments)' points to the 'Actor properties' panel.

9 relation types

6 actor types

3 sectors (fellow countrymen; local Germans; other migrants)

5 concentric circles (=spatial distance from ego)

audiorecorder (real time recording)

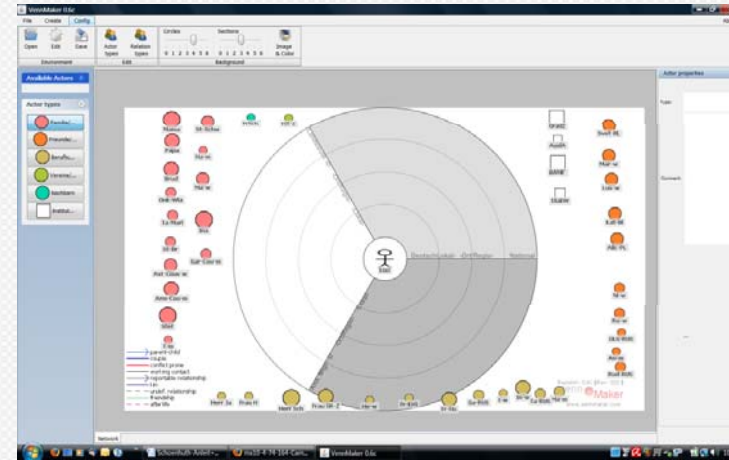
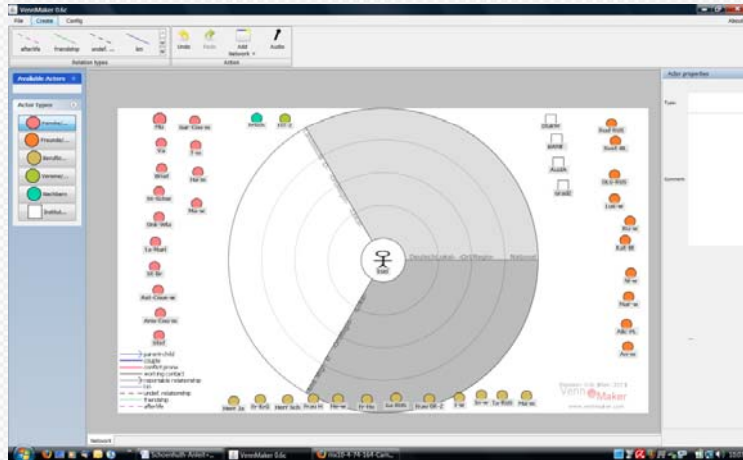
actor properties (free comments)

Revision: 0.6c \$Rev: 322 \$
VennMaker
www.vennmaker.com

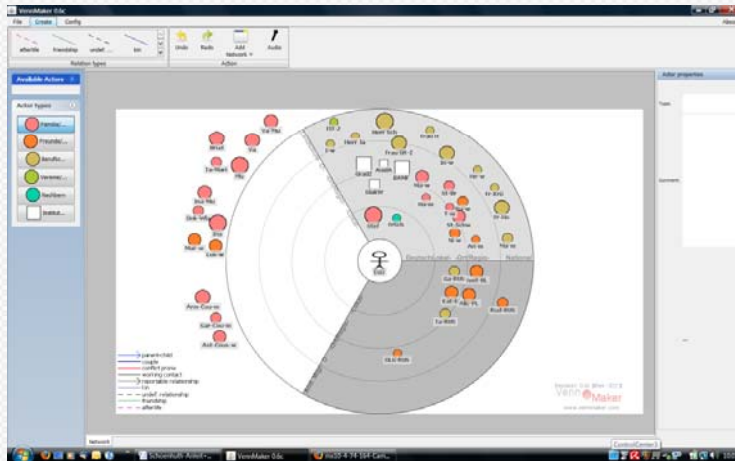
Interview process



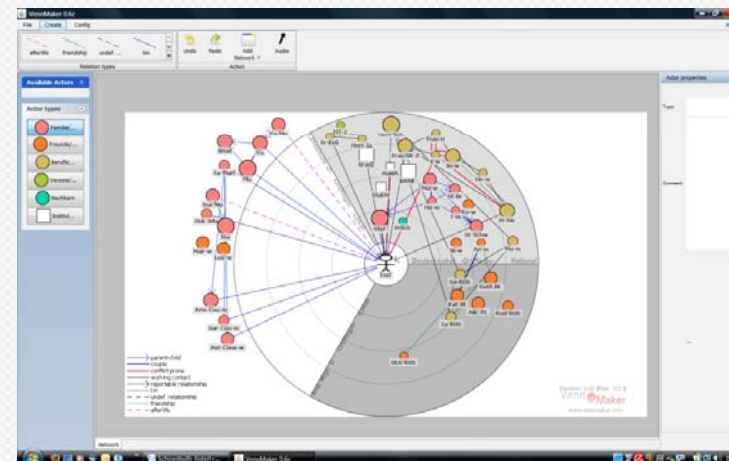
- 1) Name generator (seperately for every actor type)
- 2) weighing of actors (changing node size)



- 3) placing of actors (within sectors / circles)



- 4) drawing ties (ego and alter to alter)

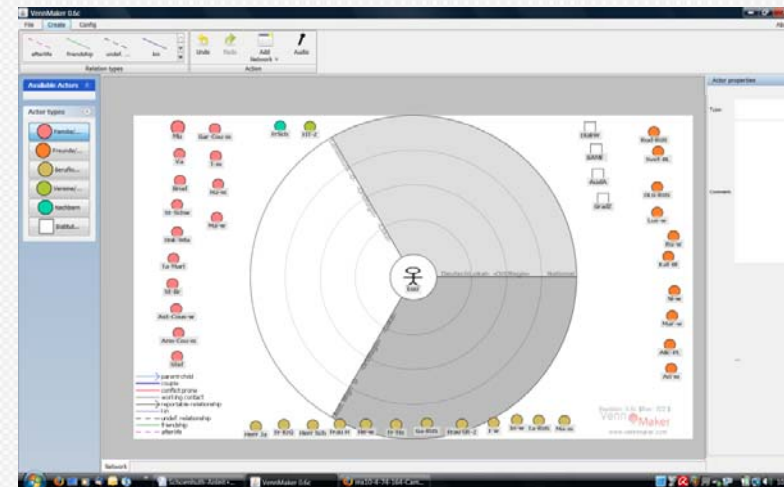


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name generator

- Who is „family“ ?
- with whom of the following actor categories did ego interact in the last six months more than once or twice: relatives, friends, neighbours?
- closer occupational contacts
- active memberships in local associations;
- supporting and controlling institutions in the last six months

→ Questions can be posed, using typical name generator questions for each actor category



6 actor types (nodes)

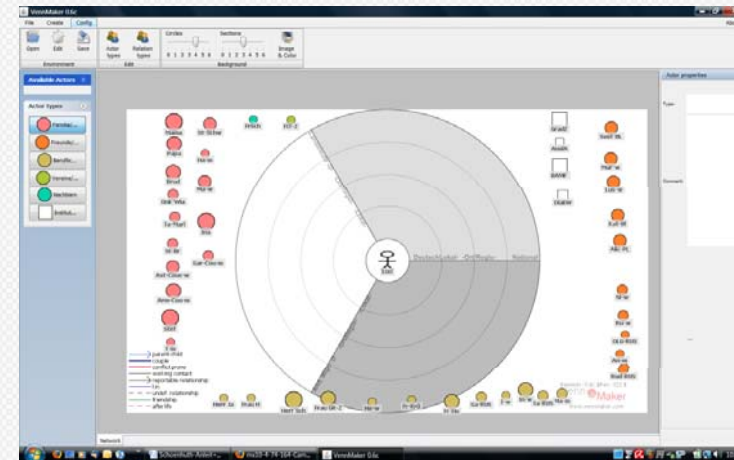
- red = family/relatives
- orange = friends/acquaintance
- yellow = working contacts
- green = associations
- blue = neighbours
- white = institutions

Weighing of actors

The person in question plays following role in my respective sub-network :

- central role („*blow up*“);
- a mid-important role („*default*“);
- is part of my sub-network; but wouldn't be critical for its functioning if missing („*downsize*“)

-
- „if assignments are difficult, think how much energy / time you would invest, to maintain this contact...”
 - alternative: „concerning emotional closeness/professional accesibility, who of these persons would you say stands closest to you, who the least...”



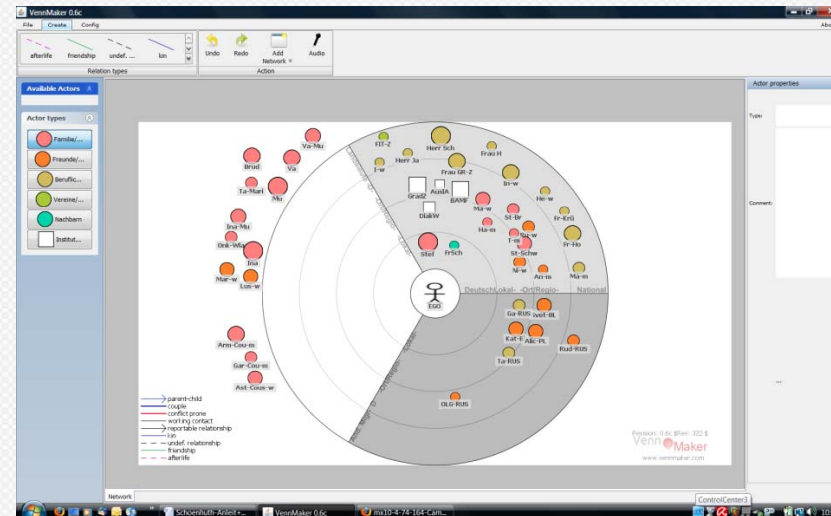
3 +n node sizes

- size concerning private contacts means „emotional closeness“ (the closer the contact ,the bigger the node will be)
- Size concerning occupational/institutional contact means „accessibility“ (the more accessible the actor, the bigger the node)

Placing actors

The weighted actors are placed into their respective sector and concentric circle

- actors are lumped together geographically when space allows (this counts especially for the last circle „anywhere in Germany“ and for „abroad“)
- region can be depicted by placing country code besides actor's name

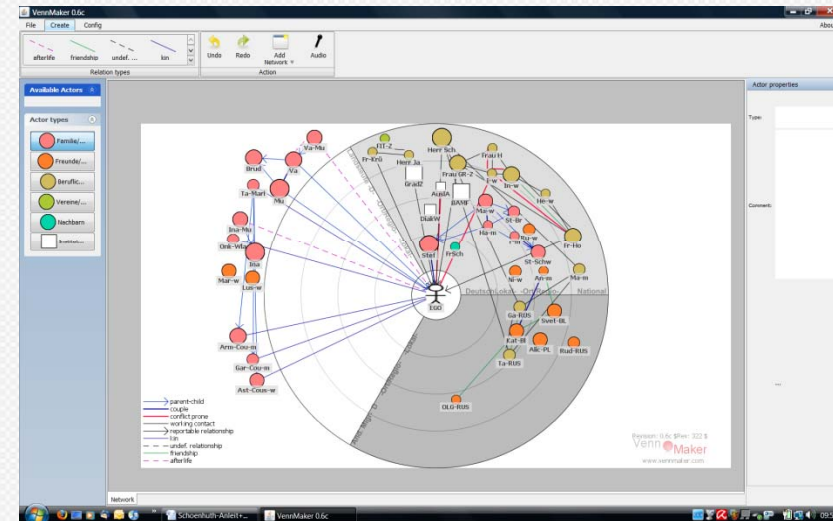


concentric circles

- inner circle overlapping= own household
- 2nd circle = neighbourhood
- 3rd circle = locally
- 4th circle = „region“ (10 – 30 miles)
- 5th circle = „anywhere in Germany“
- beyond the circles = „abroad “

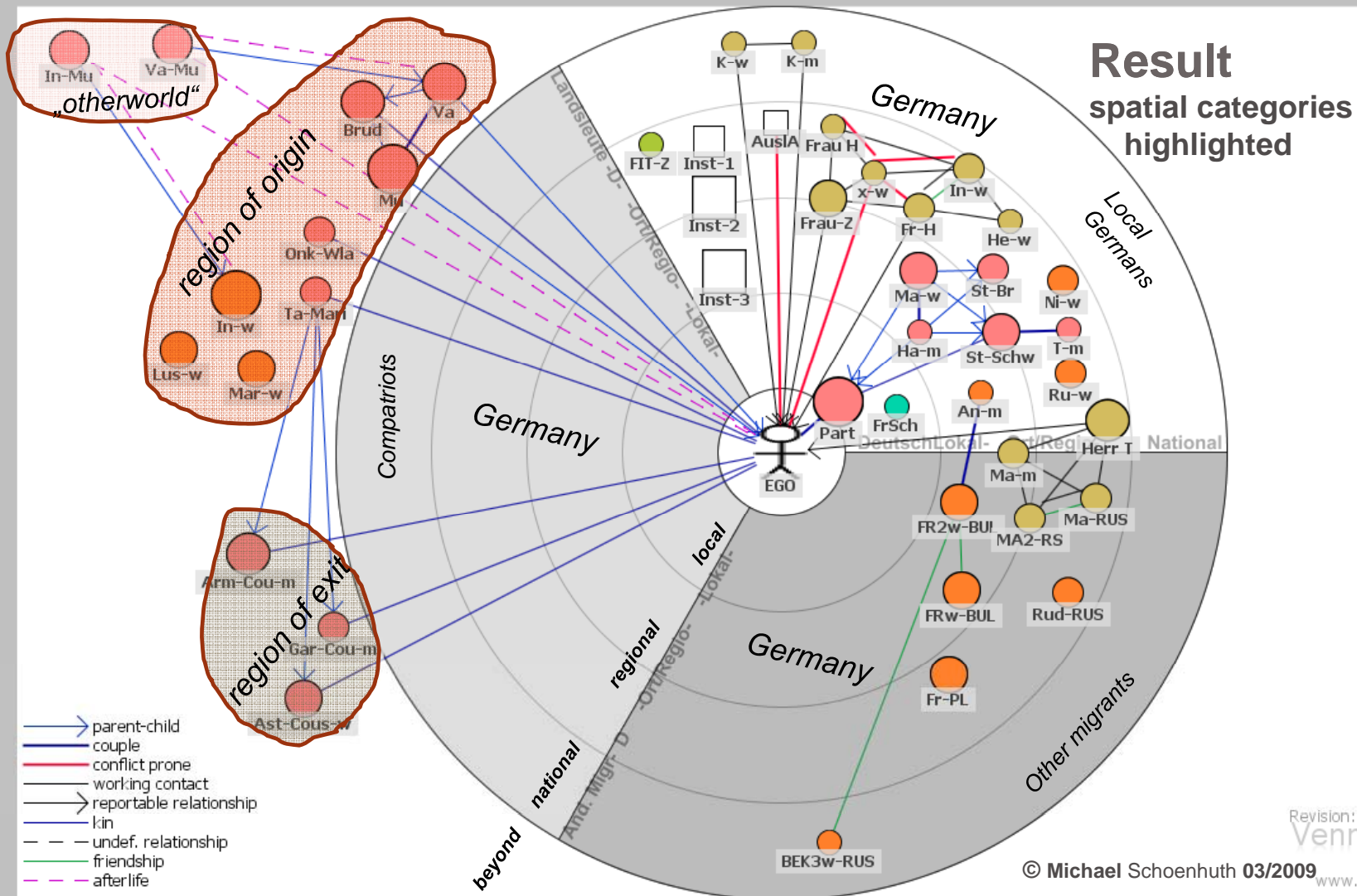
drawing of ties

- „for simplicity's sake we begin with your relatives (three possibilities)“
- „and now your working ties“ (two possibilities)
- „are any of these ties conflict prone for you?; then please indicate“
- „at last we would be interested to know more about the interconnection of your network partners. You have got a choice out of nine relation types now. We can go through them one by one...”



9 relations types

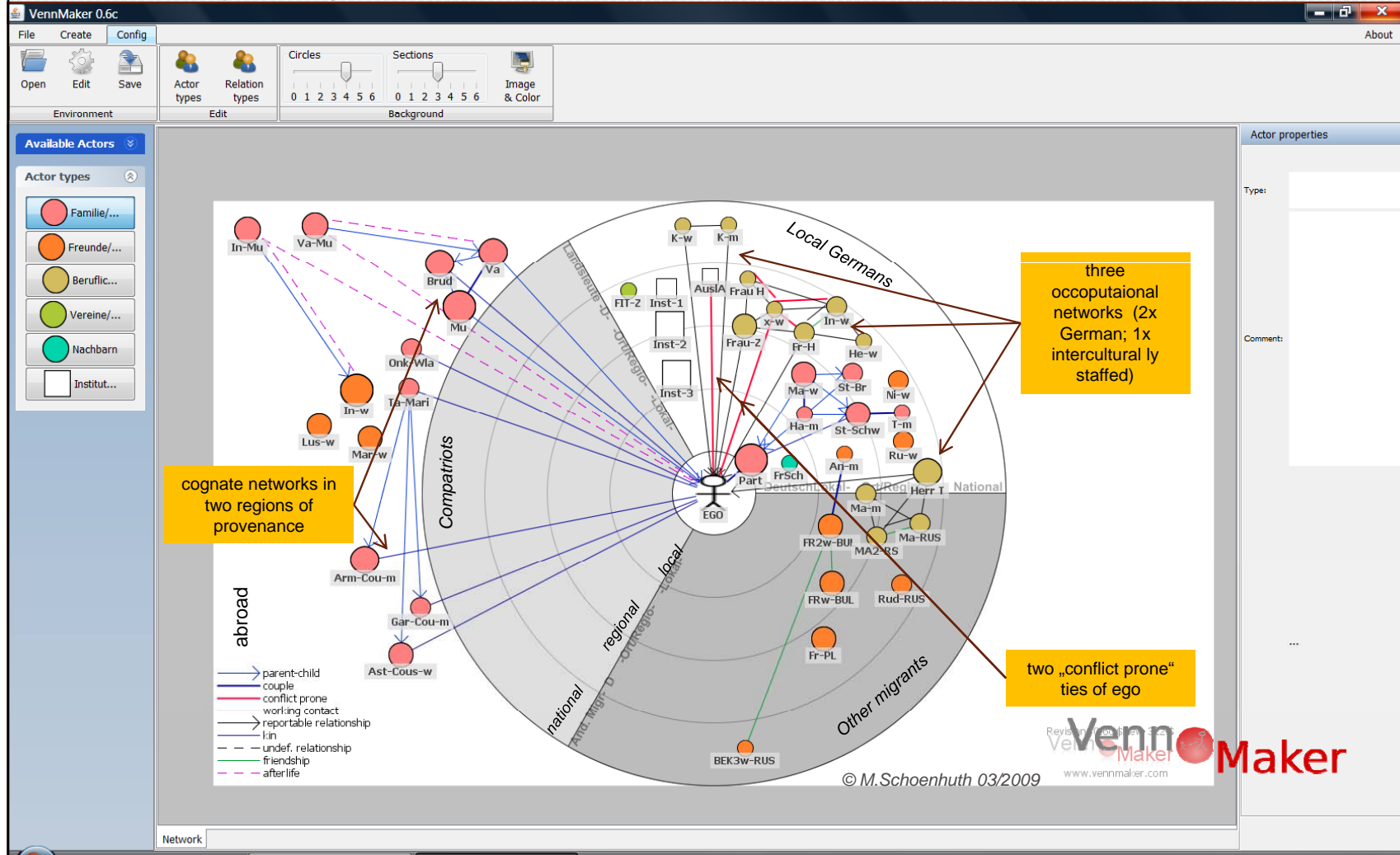
- parent – child (directed tie)
- couple
- kin (not specified)
- working contact (not specified)
- line working relation (directed tie)
- friendship
- emotional ties to deceased persons
- conflict-prone
- existing relationship between alters (not specified)



Quantitative network analysis (short evaluation)

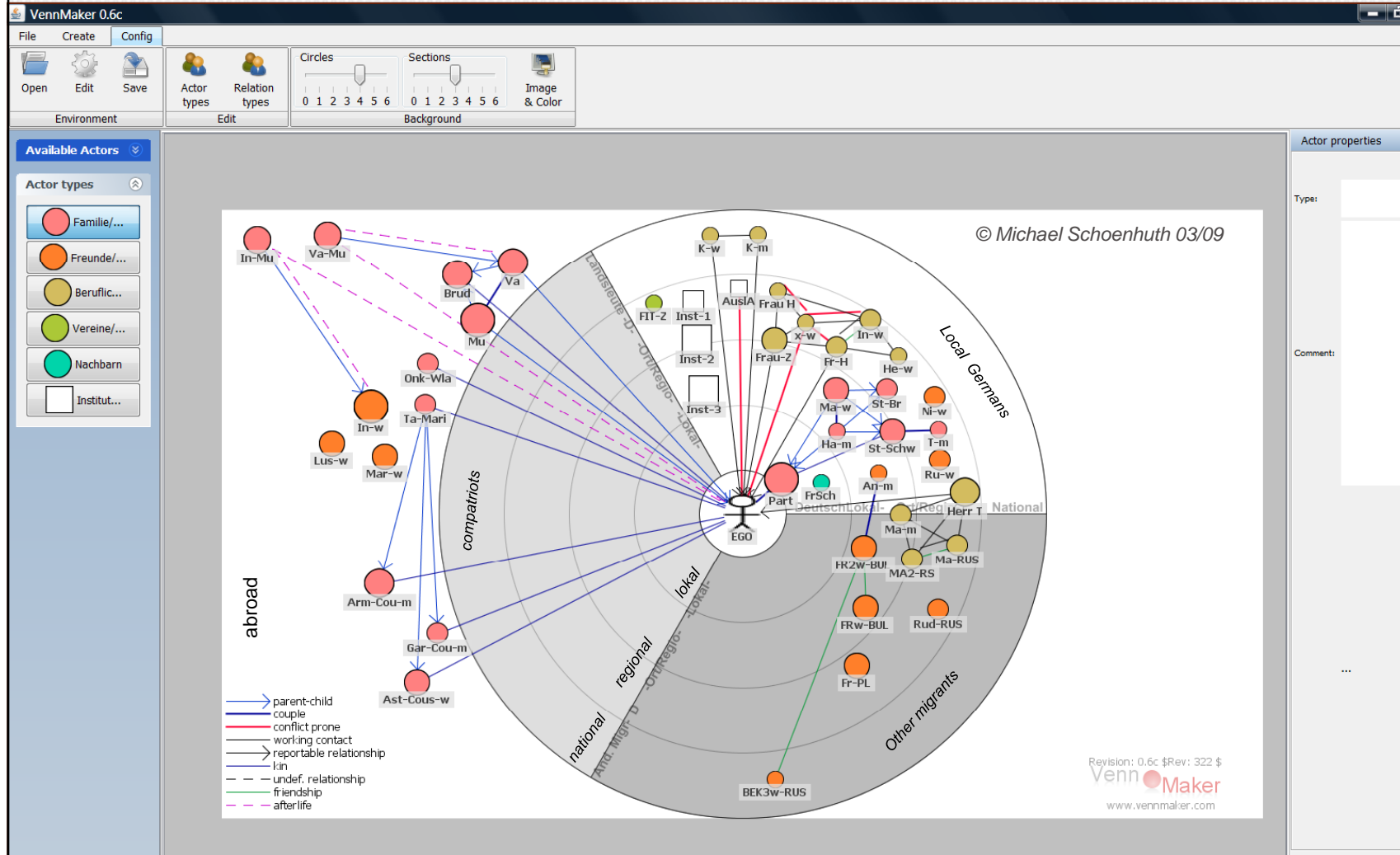
- 50 alteri (network partners) altogether
- 8 cognate kin (country of origin; 2 settlement areas)
- 2 departed alteri
- 0 alteri of the own ethnic group in Germany (!)
- 7 alteri with immigrant background (2 work-related)

- 6 „in-law“ german relatives (within settlement area in Germany)
- 5 close friends (2 in country of origin; 3 Germany with immigr. backgr.)
- 5 friends (3 german; 2 with immigrant background)
- 18 german alteri altogether (10 work-related; 5 „in-laws“)
- 12 work-related (mainly German)
- 3 network partners in Germany beyond settlement area



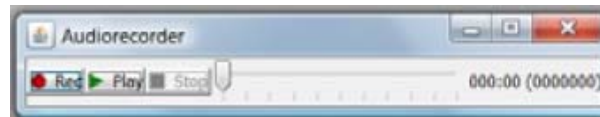
Verifying working hypotheses:

- family centrality: verified → several emotional important network ties (all within the country of origin)
- locality / transnationality: both patterns distinctive → surprising: few network-contacts in-between
- ethnic homophily: not verified → many contacts to local Germans: not alone structural
- precarious integration : not verified → privately as occupationally well integrated; (except legally: aliens-act wise)



Qualitative results

- The whole session took about seventy minutes. A lot of qualitative information was collected on the way (stored with the audiorecorder)
- The qualitative statements can be evaluated by starting the audiorecorder. As the audio function is synchronized with the visual screen, statements and moves on the screen can be followed-up in real time

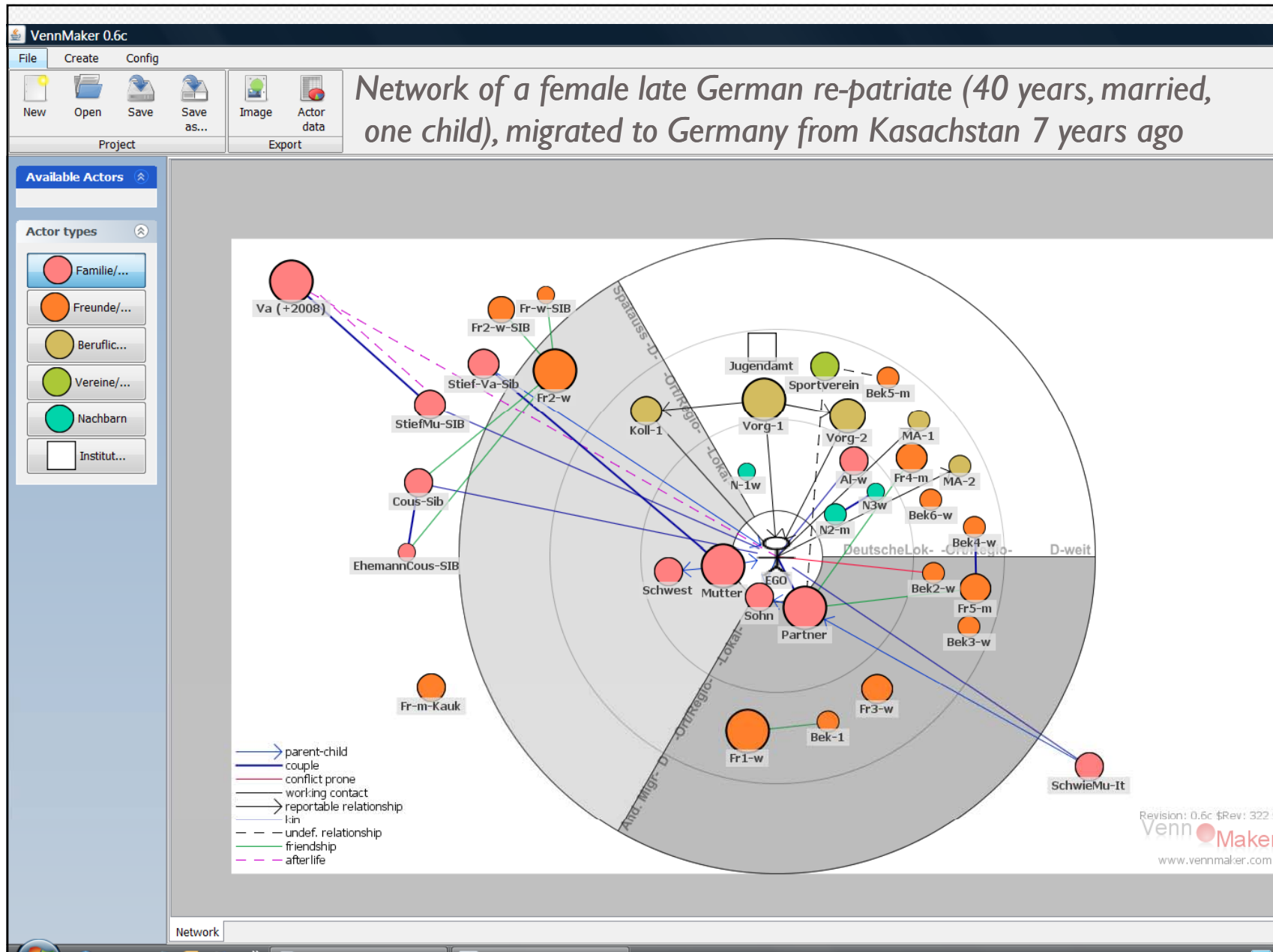


Qualitative results: (extract):

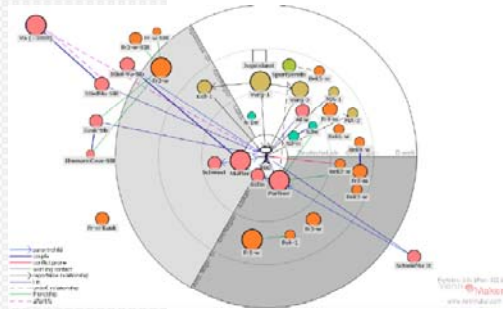
- the interviewee feels quite well integrated in Germany, and seems proud of it.
- the work-related conflict is not of much importance, as everyone in the work place has got a problem with that seemingly troublesome person.
- the other „conflict-prone“ tie connects with the foreign nationals office, which doesn't state a problem with the people working there, but the structural problem of precariousness, being dependent on its renewing ego's residence permit every year.

Improvements

- to still keep the overview for both interviewer and interviewee, concerning nodes and ties, some actors had to be replaced within their sectors and circles manually, at the end of the interview,
→ solution: we will work on an algorithm to automatize „equidistance rearrangements“ of actors within their fields
- deep interviewing the map is time-consuming. Complexity of the dimensions that can be covered, and inclination to work with an electronic device, strongly correlate with the interviewees social and cultural background, as with the „milieu“ where the research is taking place
→ solution: pre-tests and then controlling dimensions and variables already on the „configuration level“
→ cloning the network, working separately with different dimensions

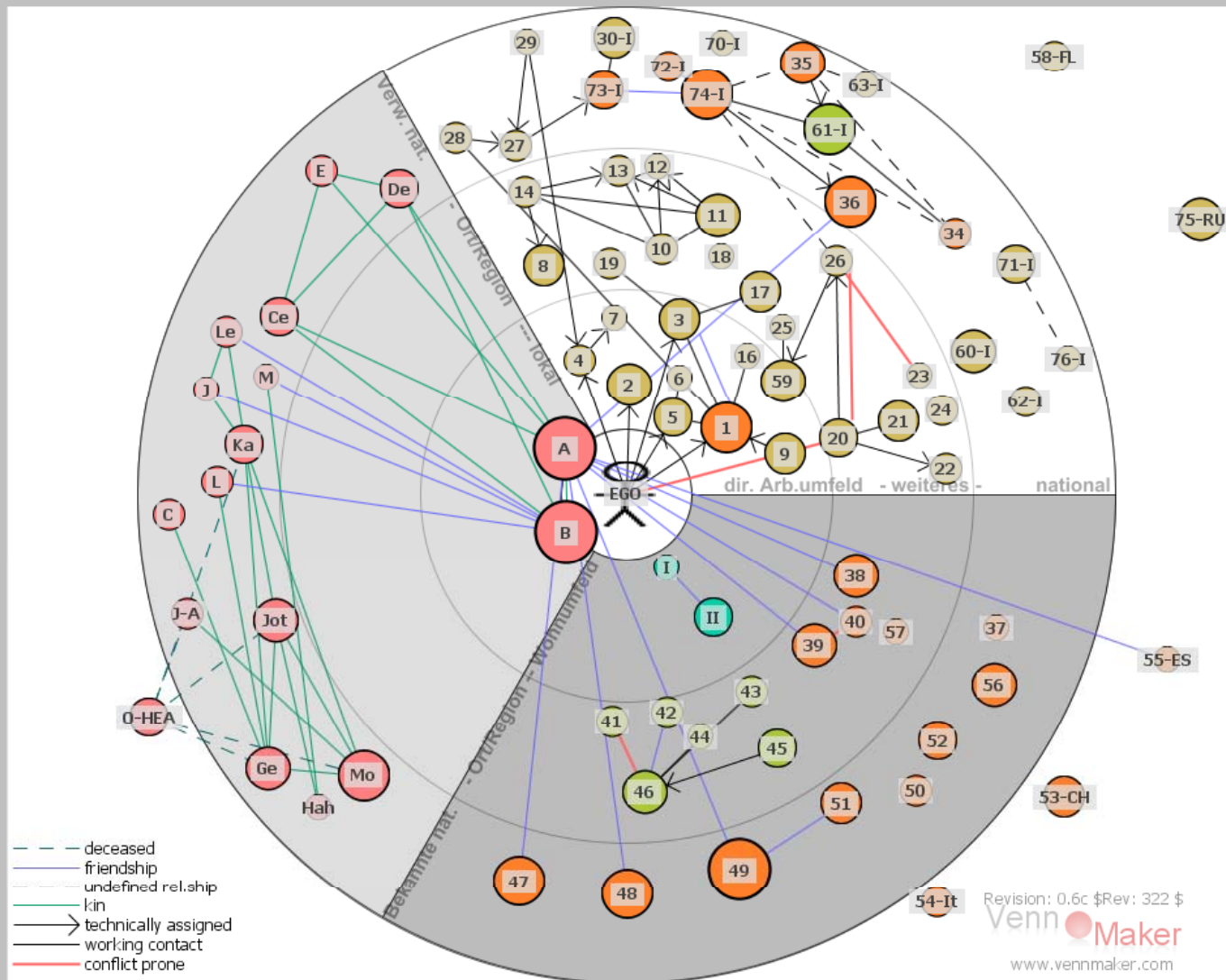


Result late repatriate-Venn



- still after seven years of residence a strong transnational bond can be stated – eight of 33 nodes are situated in Kazakhstan (seven of which are from the home town)
- mother's husband fluctuates regularly between Kasachstan and Germany (professionally successful in Kazakhstan, private occasionally in Germany)
- there is a strong emotional bond with the natural father, who died recently (also to his second wife).
- the husband returned recently from the Netherlands - with the birth of the son. His family is Italian and lives in Italy.
- mother, sister, son and husband now live in the same household with ego.
- the ratio between local German and non-German friends is relatively balanced
- only two female friends have got late repatriate status

Complex network of an ego working within an east German research association

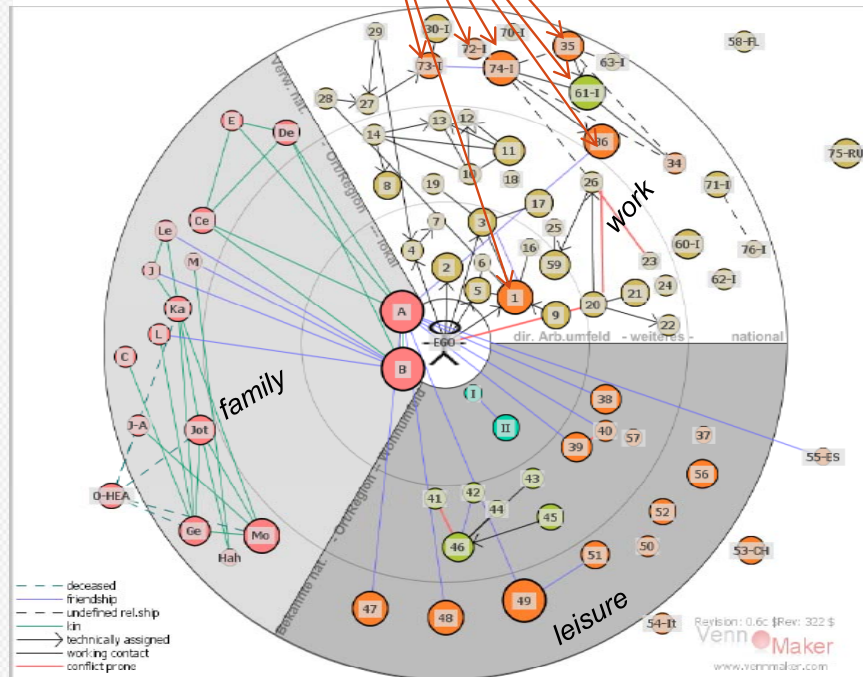


Result of the academic's Venn



- Ego is strongly „networked“ (90 alteri).
- Beyond the local sphere contacts in East Germany prevail.
- There are pronounced contacts with relatives, (13 active in the last six months) all but two lie beyond local reachability.
- The network of friends (21 alteri) is branched. Part of the friends network ego shares with his wife. Only few friends are reachable locally.
- The work-related network contains over 40 alteri. They are allotted all over Germany and beyond.

Multiplexity in academic's Venn



- In this Venn highlighting multiplex private-professional ties was one of the tasks. Having finished the categorizing and placing process of actors within their respective sectors, ego was asked to shift those actors with whom also professional ties do exist from the „private“ sectors to the work sector.
- The number of non-yellow contacts within the work sector (seven „orange“ leisure/friends contacts; one „green“ association) indicate where work-related and private contacts overlap.

Who owns VennMaker and where do I get it?

- VennMaker was invented 2006 and is owned by Michael Schoenhuth, Markus Gamper, Mathias Pohl and Martin Stark
- VennMaker is developed within the Cluster of Excellence of the universities of Trier and Mainz in Germany
- present team members : Michael Schoenhuth (team leader - anthropology), Markus Gamper and Michael Kronenwett (sociology), Ansgar Jonietz (software engineering), Michael Plattner (visual geography), Nina Bender (business education), Martin Stark and Raphael Dorn (history).
- *VennMaker is still in a beta-stage. We hope to release an official version by end of 2009. Meanwhile we co-operate with selected individuals and institutions to improve the tool*
- Contact: schoenhu@uni-trier.de; gamper@uni-trier.de; kronenwett@uni-trier.de.
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