

# MyNetworkMap

An online tool for social network analysis

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<https://mynetworkmap.com>

# MyNetworkMap

Why?

👉 One place for your network data

👉 Save time

# MyNetworkmap

A tool for:

☞ Collecting and managing network data

☞ Visualizing network data

☞ Analysing network data

☞ No installation required

# 👉 Collecting and managing network data

- Import data
- Data table
- Draw your network(s)
- Online questionnaire

Edit actors

Input mask

All...

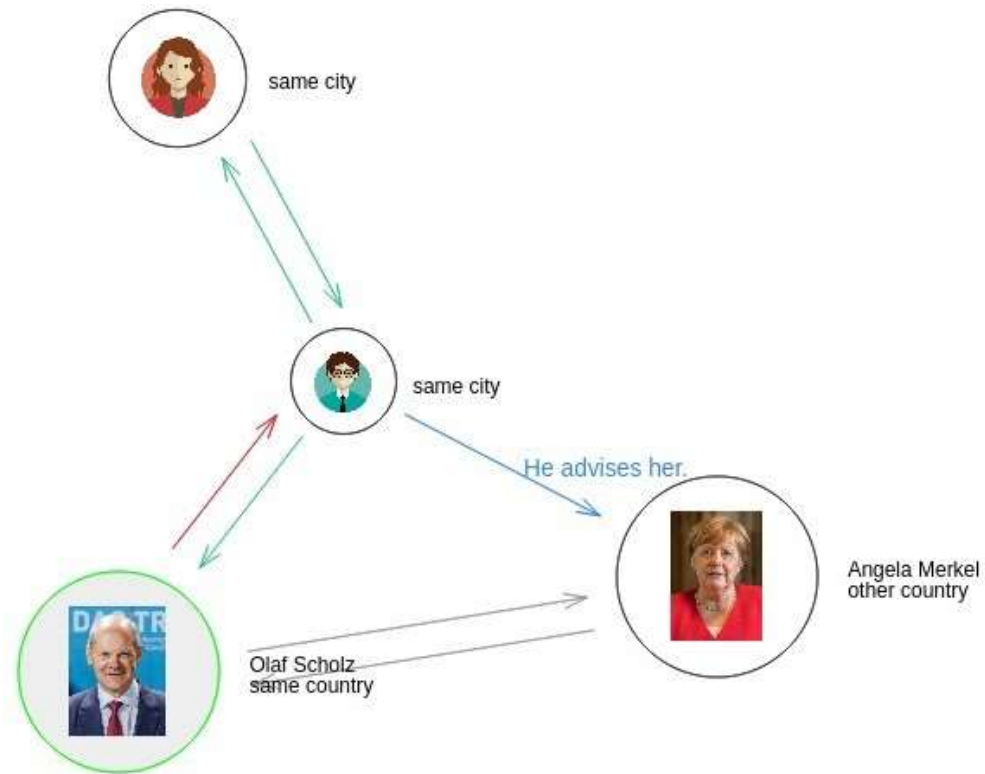
Input search string...

Show **10** entries

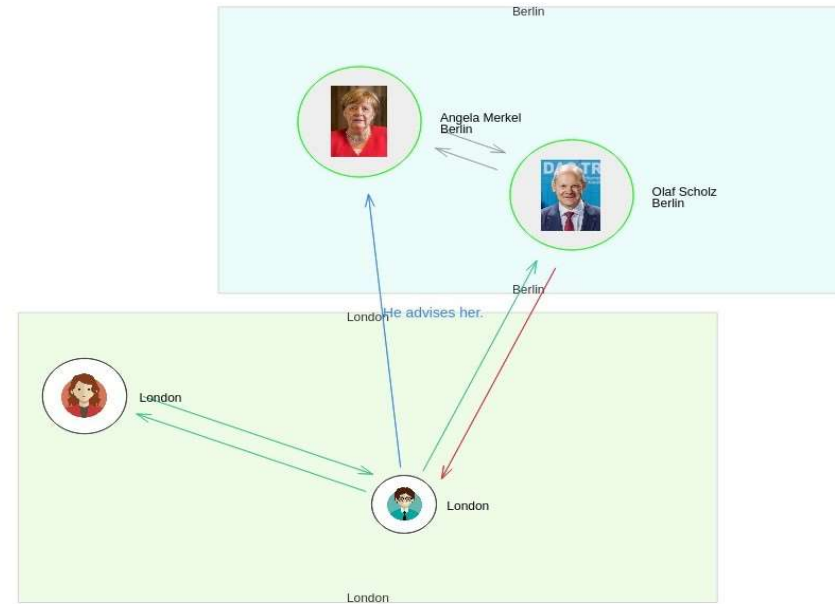
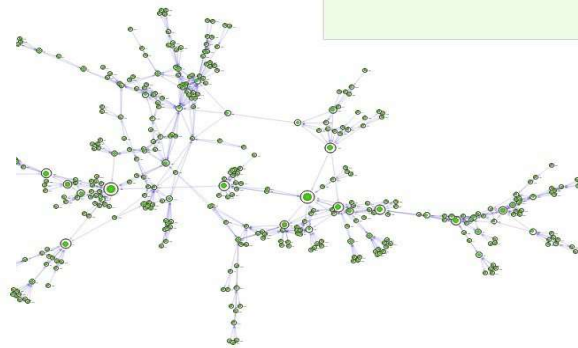
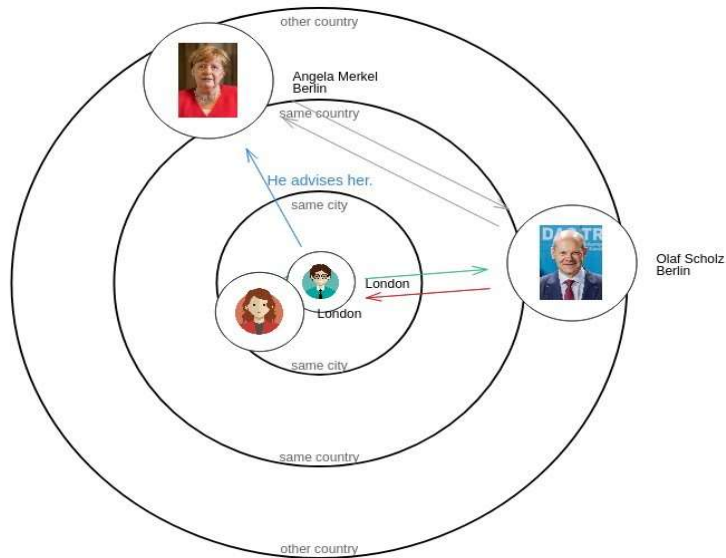
<input type="checkbox"/>	Actor id	Attributes and values		
<input type="checkbox"/>	99899	15186	Gender	male
		15185	survey_myFirstInterview	2021-03-17T13:41:52+01:00
		15191	UserBrowser_20	Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:86.0) Gecko/20100101 Firefox/86.0
		15194	UserEnd_20	1615985097
		15193	UserStart_20	1615984913
	15190	UserURLParameter_20	/index.php?node=egossurvey&o=920094713&qid=vEFMsfG5x1615983666	
<input type="checkbox"/>	99902	15186	Gender	female
		15168	name	Anna
		15188	namegenerator burt	yes
		15185	survey_myFirstInterview	2021-03-17T13:43:38+01:00
<input type="checkbox"/>	99903	15186	Gender	female
		15168	name	Paula
		15188	namegenerator burt	yes
		15185	survey_myFirstInterview	2021-03-17T13:43:41+01:00
<input type="checkbox"/>	99904	15186	Gender	male
		15168	name	Werner
		15188	namegenerator burt	yes
		15185	survey_myFirstInterview	2021-03-17T13:43:44+01:00

Showing 1 to 4 of 4 entries

# 👉 Visualizing network data



# 👉 Visualizing network data



## Analysing network data

- Density
- Degree
- Betweenness

# 👉 Collecting network data: Online questionnaire

- Ego network data

- Ego questions
- Namegenerator
- Nameinterpretator
- Alter-alter relations
- Visualization

From time to time, most people discuss important matters with other people. Looking back over the last 6 days who are the people with whom you discuss matters important to you? Just tell me their first names or initials.

Name...  +

Anna  Paula  Werner

What is the gender of the person?

Name	male	female	divers
Anna	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Paula	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Werner	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

back next

A network survey tool from MyNetworkmap



# Example

Collect network data (eg. with an online questionnaire)



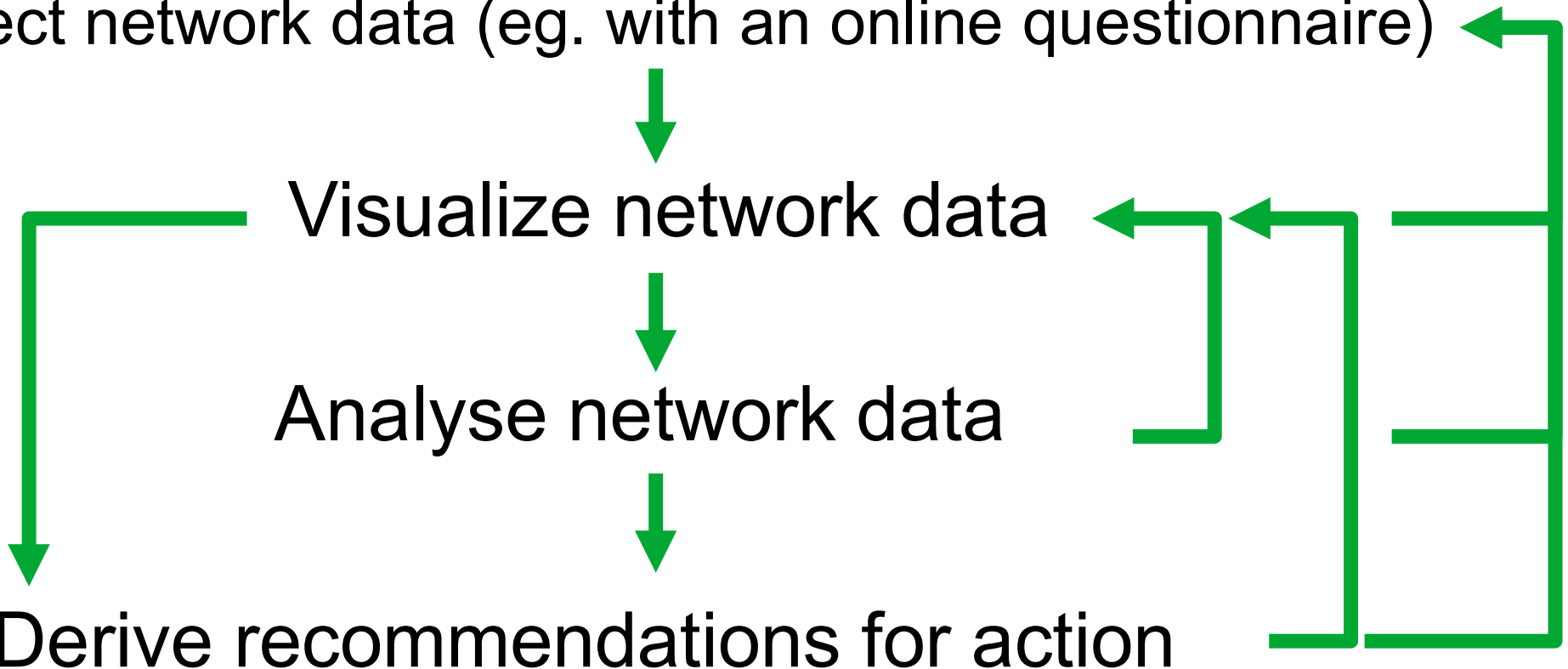
Visualize network data



Analyse network data



Derive recommendations for action



# The next steps...

A practical introduction to the following topics:

- Network visualization
- Online survey
- Data export

# MyNetworkmap

Please, login...

<https://mynetworkmap.com>

# Name generator

## Definition:

„The name generator identifies individuals for study in the respondent's interpersonal environment [...]“  
(Burt 1984, p. 296)

## Example:

„From time to time, most people discuss important personal matters with other people. Looking back over the last six months – that would be back to last August – who are the people with whom you discussed an important personale matter?“

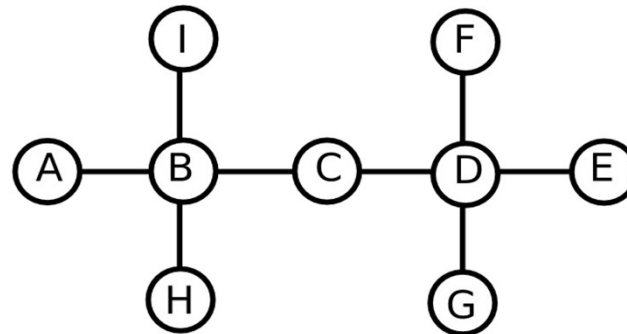
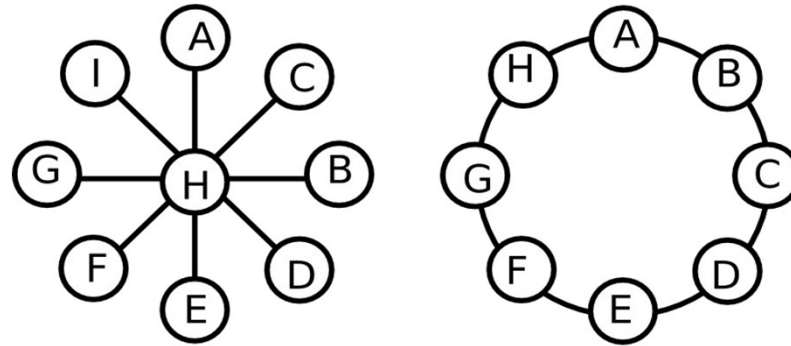
*Please just tell me their first names or initials. (Record names in the order listed by respondent and record total number of pople names. If fewer than five names are given, probe: Anyone else?)*  
(p. 331)

# Name generator

Approaches	Explanation	Example
Affective approach	„asks about the most important people in a person's life“ (p. 192)	Antonucci (1986)
Interaction approach	„to ask about a person's more or less frequent contacts with other people“ (p. 192)	Bernard et al. (1982)
Exchange approach	„We might also be interested in persons with whom people exchange different things or services (e.g., different types of social support, as in this paper),“ (p. 192)	Burt (1984); McCallister and Fischer (1983); van der Poel (1993)

Valentina Hlebec, Tina Kogovšek (2011) How (not) to Measure Social Support Networks.

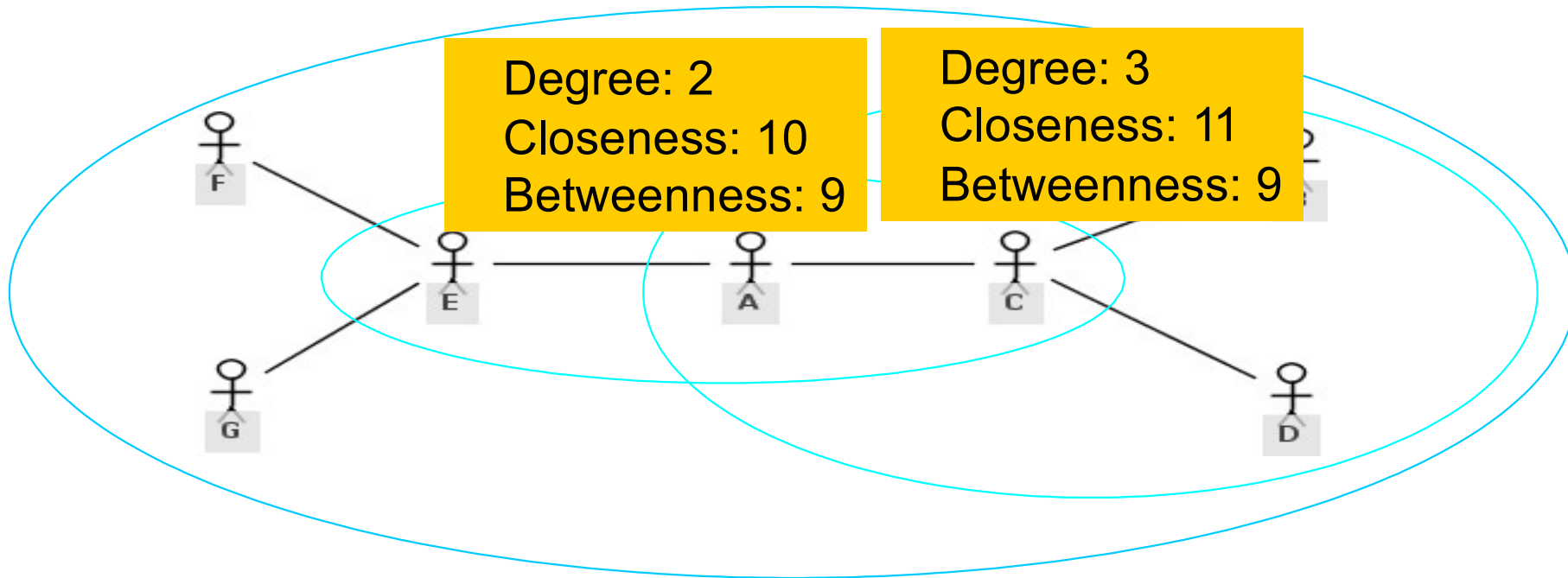
# Who is central?



# Centrality

Name	Description	Interpretation
Degree	Degree centrality measures <b>how many <u>direct relations</u> an actor have.</b>	Central actors must be the most active in the sense that they have the most relations to other actors in the network.
Closeness	Closeness centrality measures <b>how close an actor is to <u>all to the other actors</u></b> in the network.	<p>The idea is that an actor is central if it can quickly interact with all others.</p> <p>Such actors need no rely on others actors for the relaying of information.</p>
Betweenness	Betweenness is an index of the potential of an actor for control of communication	<p>A central actor lies on the paths between two actors. These actor might have control over the interactions between the two other (nonadjacent) actors.</p> <p>(Freeman, 1979; Wasserman and Faust, 1994)</p>

# Centrality



Different results!

Actor A:

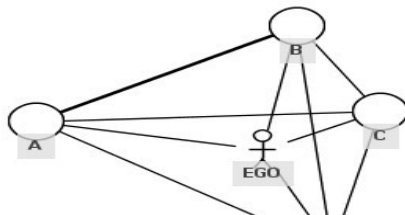
$$\text{Degree} = (E-A) + (A-C) = 1 + 1 = 2$$

$$\text{Closeness} = (F-A) + (G-A) + (E-A) + (B-A) + (D-A) + (C-A) = 2+2+1+2+2+1 = 10$$

$$\text{Betweenness} = (F-C)+(F-B)+(F-D)+(G-C)+(G-B)+(G-D)+(E-C)+(E-B)+(E-D) = 9$$



# Density

Name	Description	Interpretation
<p><b>Density</b></p>	<p>Density is a measure related to the <b>entire social network</b>.</p> <p>The density specifies <b>the ratio between the amount of drawn relations and the amount of potential relations</b>.</p> <p>Density can reach a value between 0 and 1.</p> <p>0 signifies that no relations are compounded. 1 signifies that all actors are totally networked.</p> 	<p>Eg.: If the the density is high, then the social control in the network is also high.</p> <p>(Scott, 1991)</p>

Example: Density = 1

Scott, J. (1991) Social network analysis: a handbook, London, SAGE Publication.

# Literatur

- Burt, R. (1982): Toward a structural theory of action: Network models of a social structure, perceptions and action. New York.
- Fischer, C. (1982): To Dwell Among Friends. Personal Networks in Town and City: Chicago.
- Freeman, L. C. (1979): Centrality in Social Networks. Conceptual Clarification, Social Networks 1. p. 215-239.
- Jansen, D. (2006): Einführung in die Netzerkanalyse, Wiesbaden. VS Verlag.
- Wasserman, S. / Faust, K. (1994): Social network analysis. Cambridge, MA, Cambridge University Press.
- Wellman, B. (1979): The Community Question: The Intimate Networks of East Yorkers. American Journal of Sociology 84. p. 1201-1231.