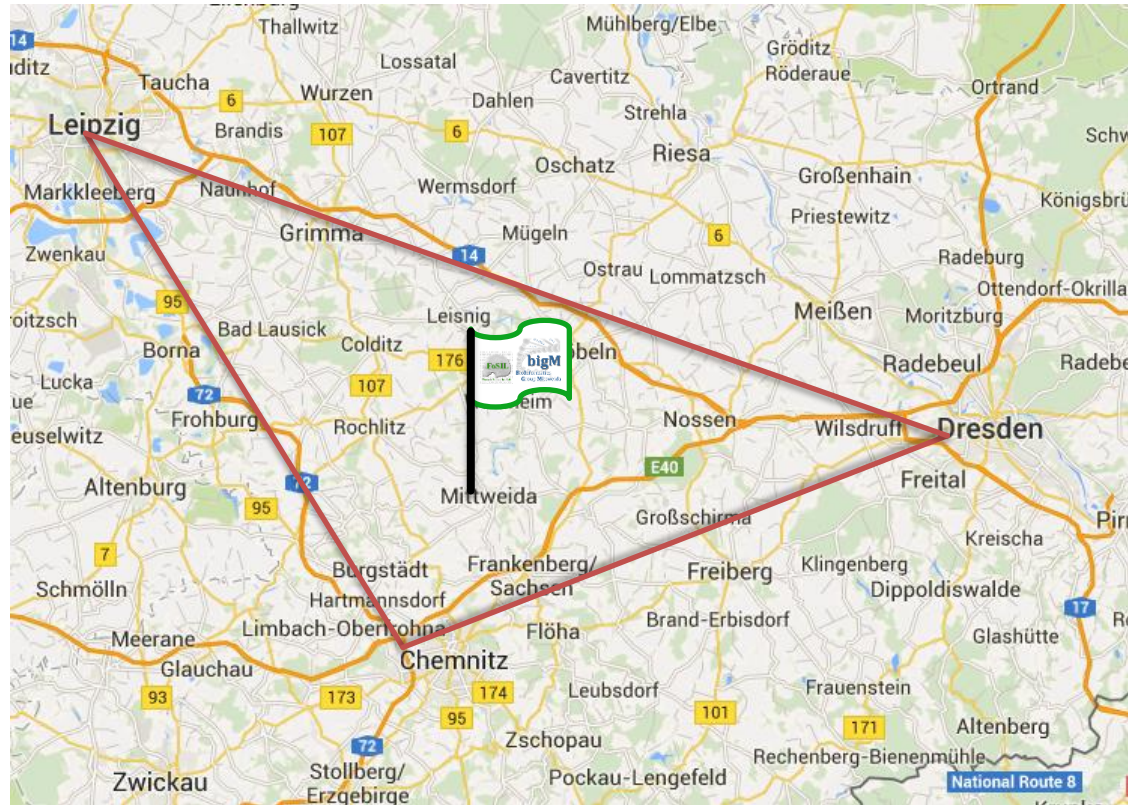


**„Something, that is allegedly secure
is not necessarily secure,
Something, that is allegedly known
might turn out to be unknown.
Appearance can be deceptive,
our senses can deceive us.
Even though experience and knowledge
can limit errors,
reality also limits those.“**

Inspired by Berthold Brecht

Author: unknown



HOCHSCHULE
MITTWEIDA
UNIVERSITY OF
APPLIED SCIENCES

The Communication of Criminal Groups on the Internet

New Approaches in Predictive Policing

Dirk Labudde

Mittwoch, 1. August 2018

FoSIL

Digitization of society

Digitization is in full swing. It affects us all - and makes for a profound change in every area of life. The digital transformation offers great opportunities for a better quality of life, revolutionary business models and more efficient management.



"Automation will reshape entire economies, turmoil labor markets and change the rules of the game in many industries"

Karen Harris, Austin Kimson and Andrew Schwedel (2018)

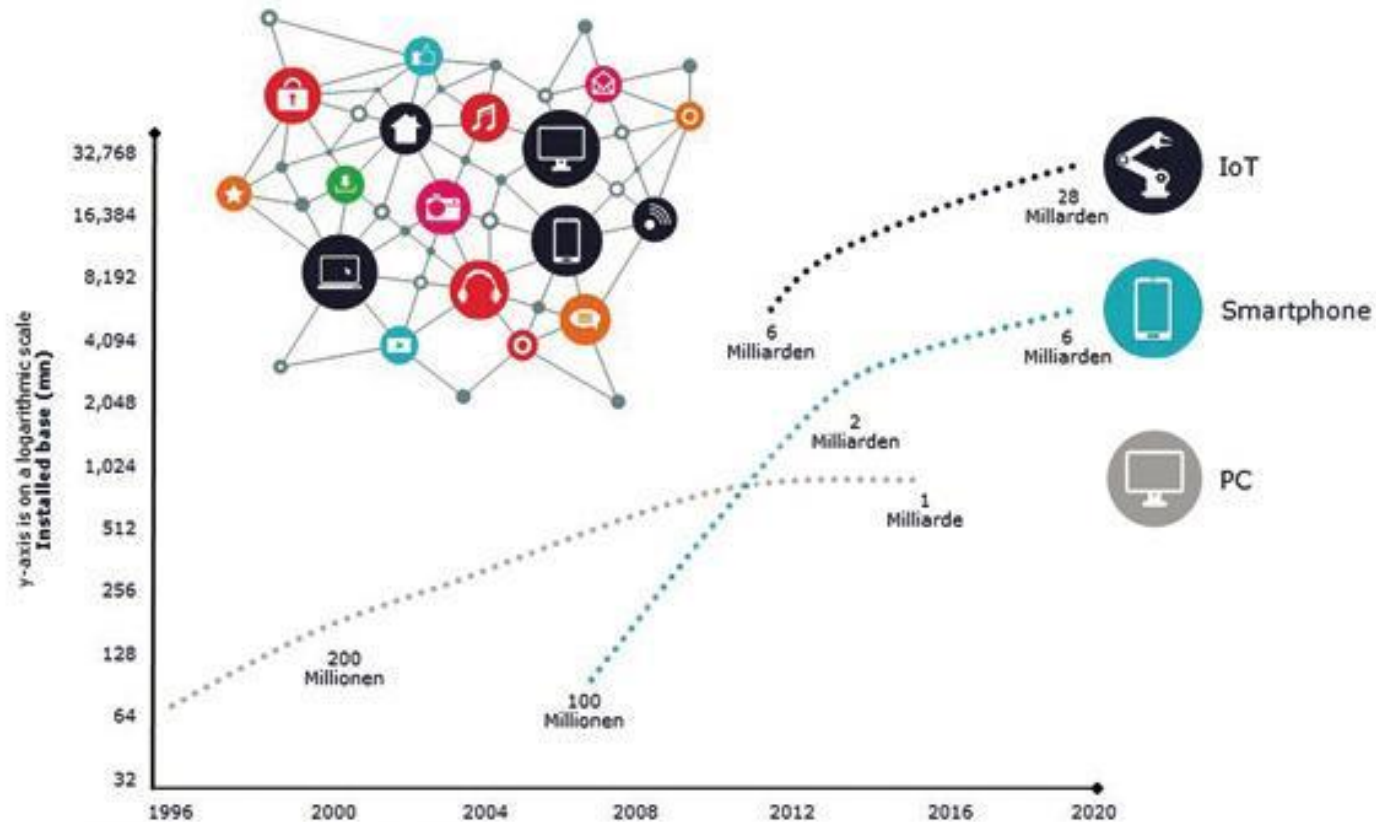
Produktivitätssteigerung durch Automatisierung

Anstieg der Arbeitsproduktivität von 2015 zu 2030 nach Branchen, in Prozent



WELT

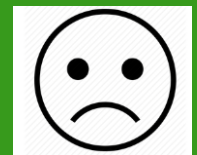
Quelle: Bain & Company



With the proliferation of mobile devices, the networking of our society has grown rapidly. The IoT exponentially increases this tendency.


Modern society is globally networked, we communicate in seconds with friends, acquaintances and business partners worldwide. However, the **positive possibilities** of using the Internet also have **negative side effects**: cybercriminals have a variety of opportunities.

Crime moves to the Internet, new crime phenomena arise.





Crime vs revolutionary business

CYBERTHREAT REAL-TIME MAP  EN

[Download Trial](#)

MAP STATISTICS DATA SOURCES BUZZ WIDGET

Share   



GERMANY
3 MOST-ATTACKED COUNTRY

OAS	181774
ODS	313663
MAV	14886
MAV	142398
IDS	159881
VUL	8176
KAS	1897287
BAD	0

Detections discovered since 08:00 GMT

[More details](#)

Share data





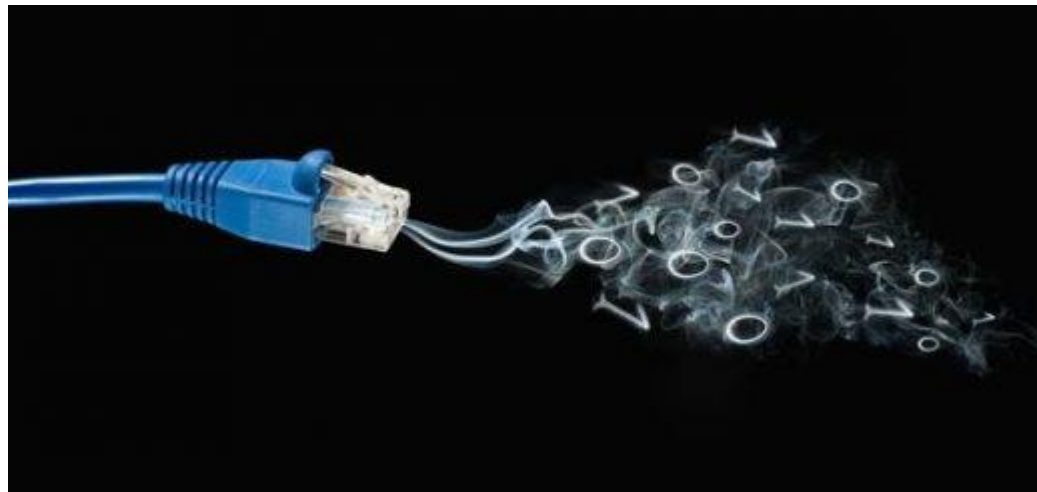


DEMO ON

4100000	348161	408465	322834	4367763	93774	345260	786
OAS	ODS	MAV	MAV	IDS	VUL	KAS	BAD

Login information for a large number of Mega accounts has been compromised

Mega, a company founded in New Zealand that provides **online cloud storage and files hosting services**, is currently found to have thousands of account credentials on its platform that have been publicly posted online. The leaked information is provided as a text file. It is understood that this text file contains more than **15,500 usernames, passwords, and file names**, which means that these accounts have been abnormally logged in, and the file name in the account is also crawled.

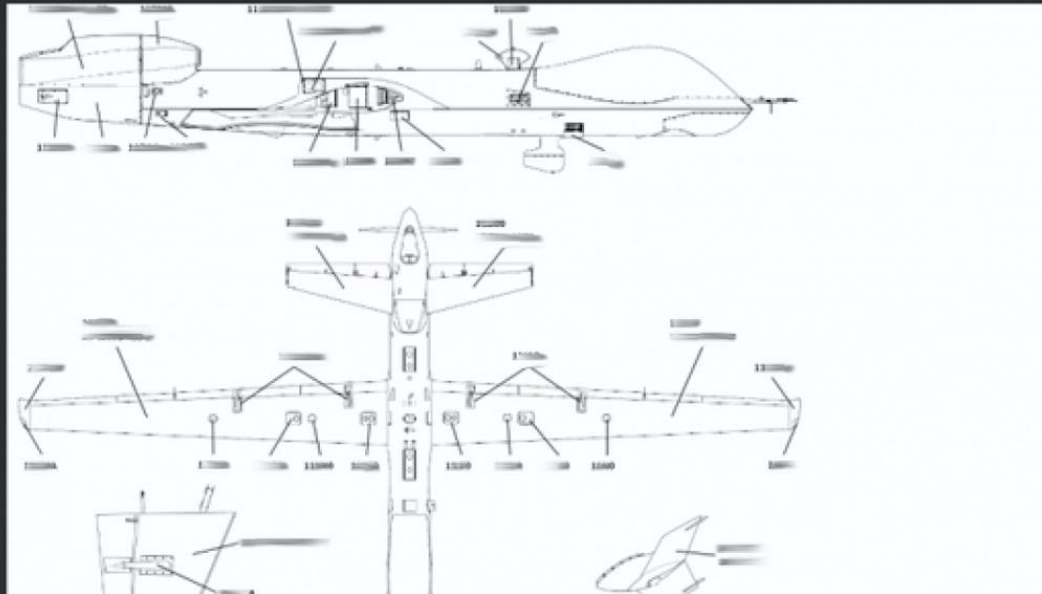


Hackers sell US military drone documents for \$150

This is interesting, mind giving a price range of how much you're expecting for a set?

I expect about \$ 150 or \$ 200

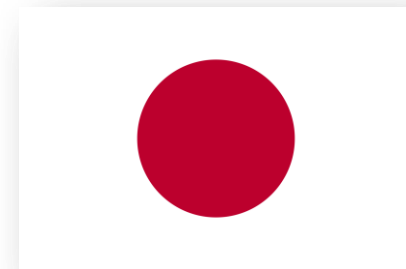
for being classified information



200 million Japanese netizens' personal data offered on the underground market

In a survey released on Thursday, May 17th, the **cybersecurity company FireEye** stated that the company's security team has discovered a set of data sets being sold on underground hacking forums. These datasets involve a large number of sensitive information includes **personal identity information (PII)** of more than **200 million Japanese netizens**.

According to the report description, these data sets were discovered in early 2017, and a cyber hacker suspected of living in China's Zhejiang Province is advertising for the sale of these data sets. The contents of the data set include name, login credentials (account number and password), email address, date of birth, phone number, and home address.



Australia's largest bank Commonwealth lost 12 million user bank data

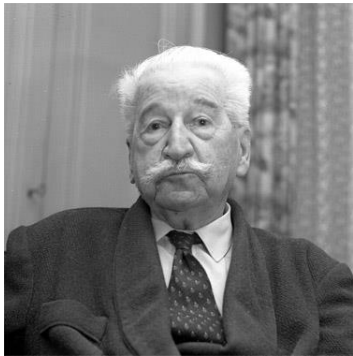
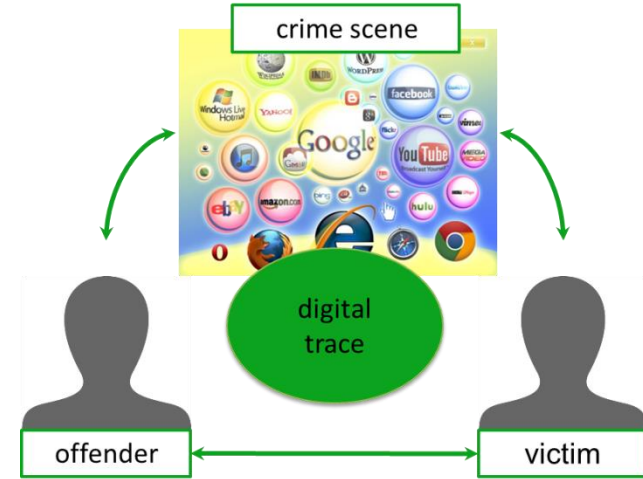
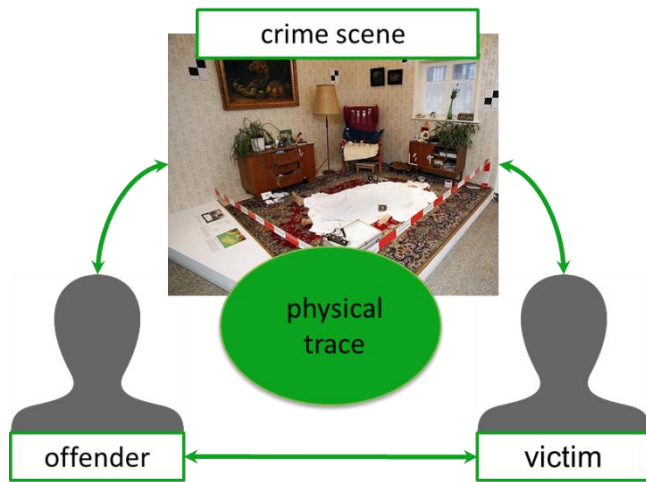
Foreign media BuzzFeed reported that **Australia's largest commercial bank**, the Commonwealth Bank of Australia (CBA), confirmed that two storage tapes containing customer's name, address, account number, and transaction details record from 2004 to 2016 were identified in a data center transfer mission. Its subcontractor Fuji-Xerox was lost. Including at least **12 million users of bank transaction data**.



Crime moves to the Internet, new crime phenomena arise.

- Cybercrime -

Cybercrime covers the offenses that are directed against the Internet, data networks, information technology systems or their data or that are committed by means of this information technology.



Locard's exchange principle

holds that the perpetrator of a crime will bring something into the crime scene and leave with something from it, and that both can be used as forensic evidence

link

real und virtual world

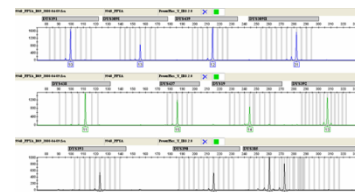
MAC-, IP-Adress,
net information
Photos/pictures



Dr. Edmond Locard (1877 - †1966)

Physical or digital traces

- fingerprint
- DNA traces
- traces of blood and pattern
- **Texts**
- **Short messages**
- **Chats**
- ...



circumstances of a crime

- Analyses
- Validation
- **Evaluation**

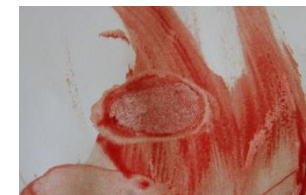


evidence



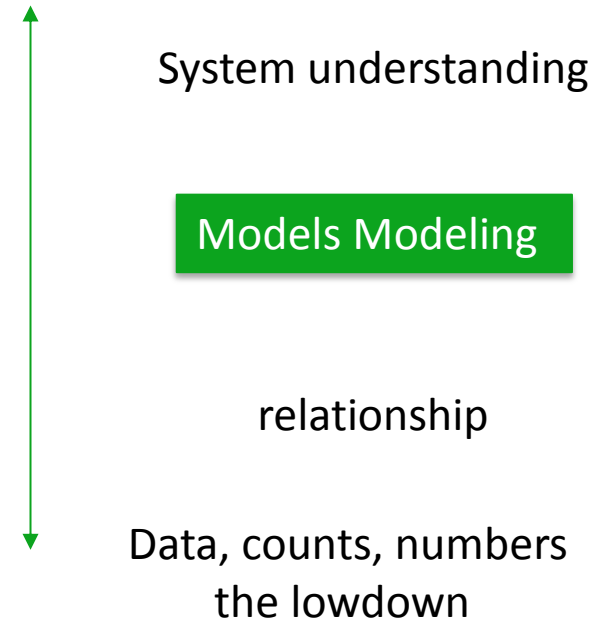
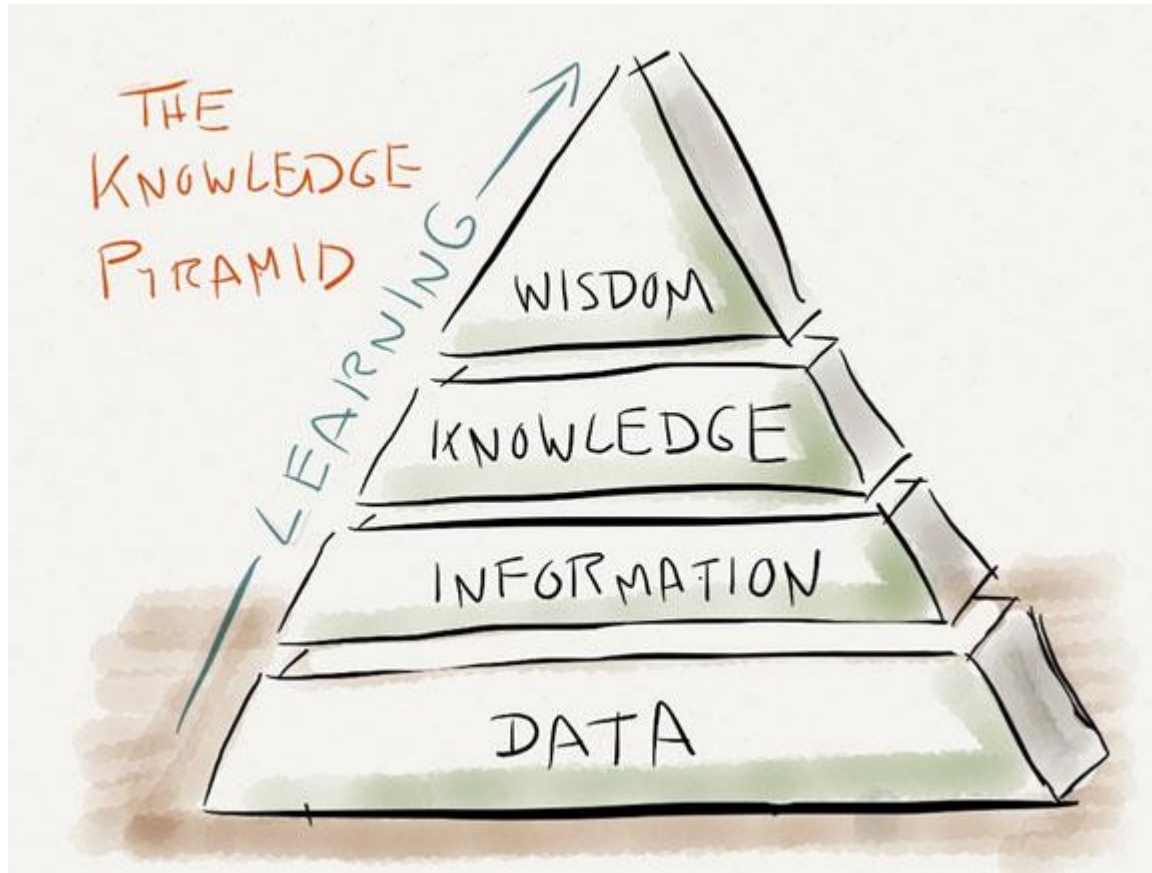
comparison of traces:

- Methods for the comparison
- Definition of similarity
- Evaluation of the results



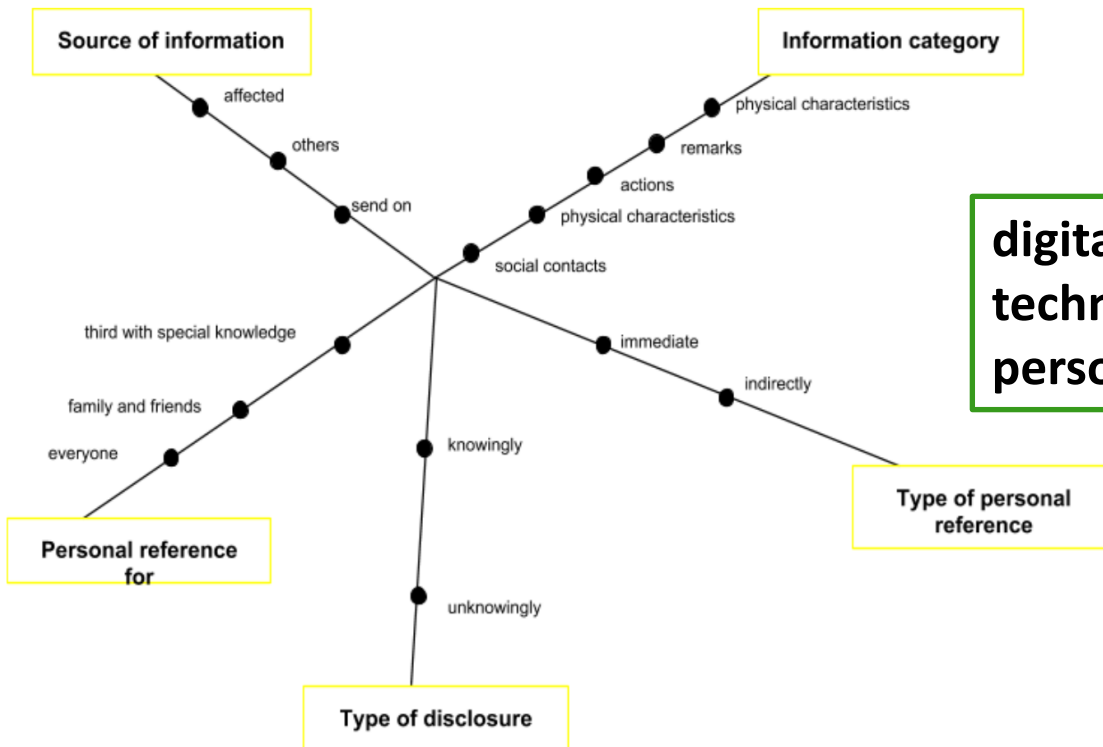


Human Individual Digital Footprint



Modeling Models \leftrightarrow real System

The **Identity** is the unique personality structure of a human being: **who am I, who am I referring to, who refers to me, what do I define myself and what makes me special?**



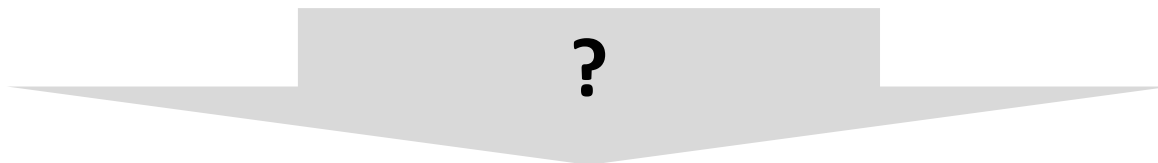
digital Identity: Any form of technical data that belongs to a person.



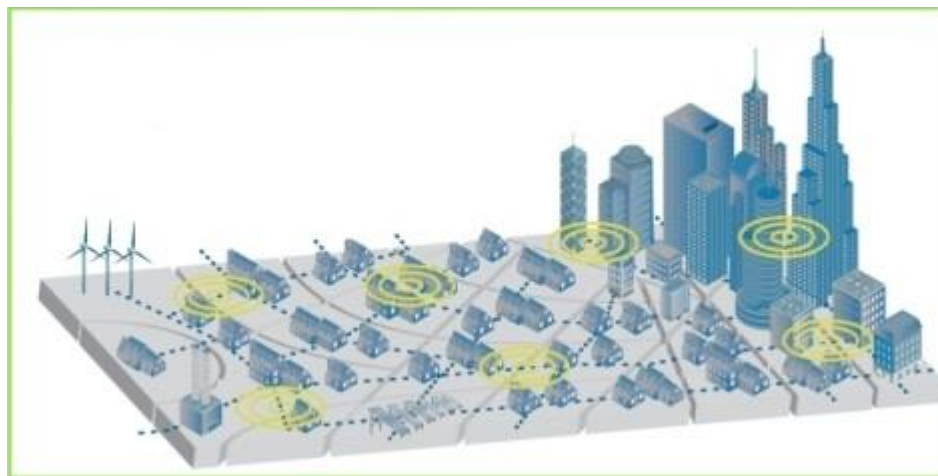
Communication and content have changed due to the digitalization.

Digital identity and real identity

Modern ways of communication is not only used in order to perform criminal acts, yet especially to plan criminal activities.



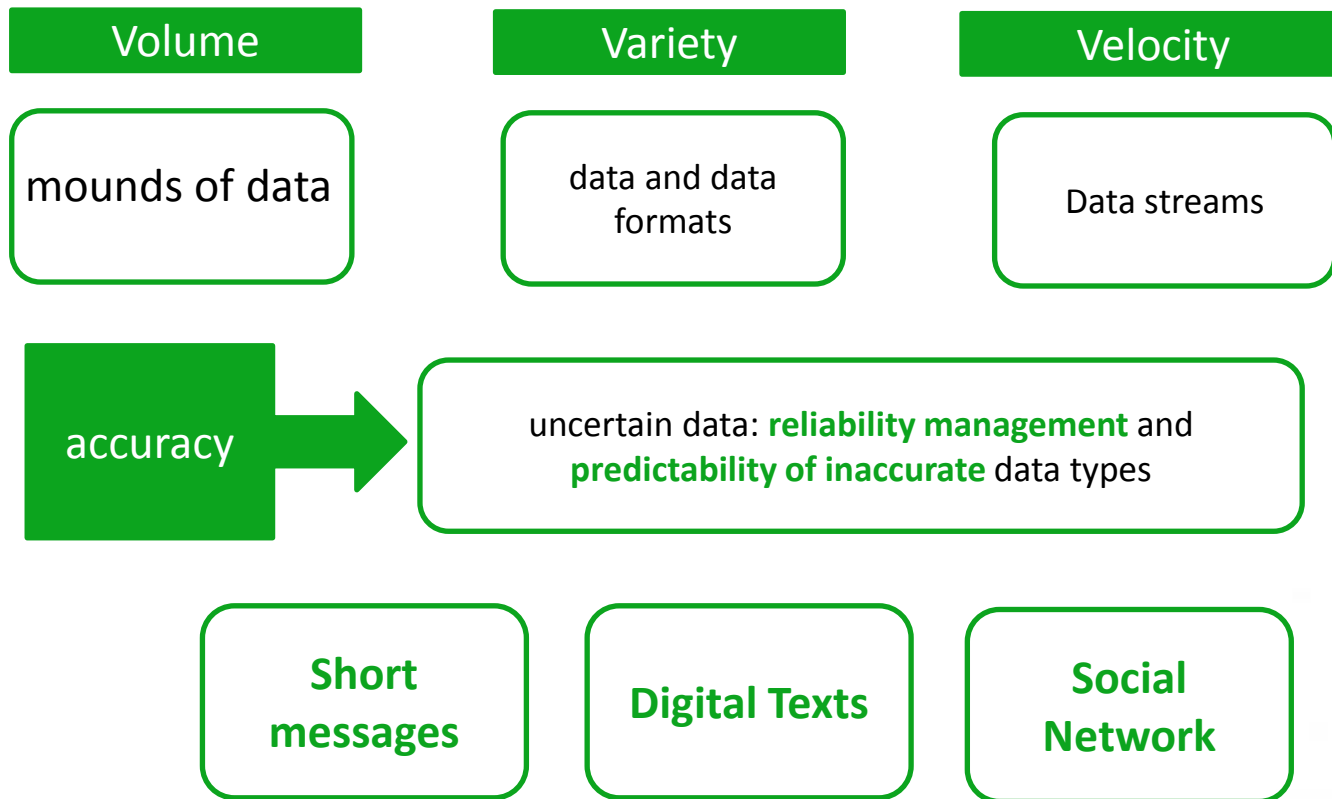
Consideration of digital communication for the modeling and simulation of criminal offences.



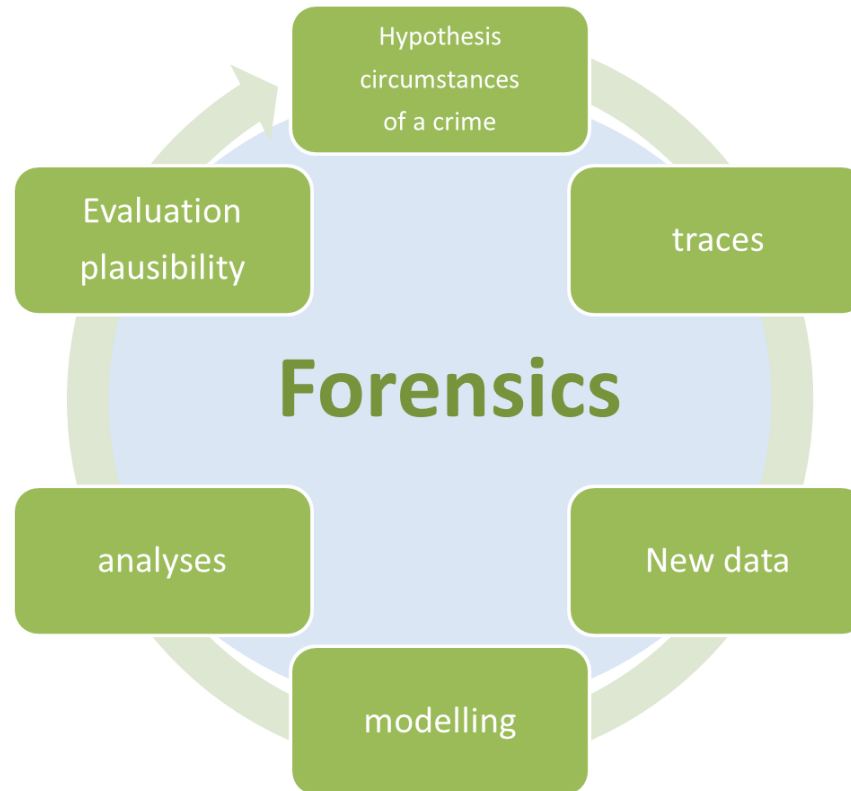
Combating crime

Digitization of society

4 Dimensions of BigData



Big Data analyzation -- prediction of system states

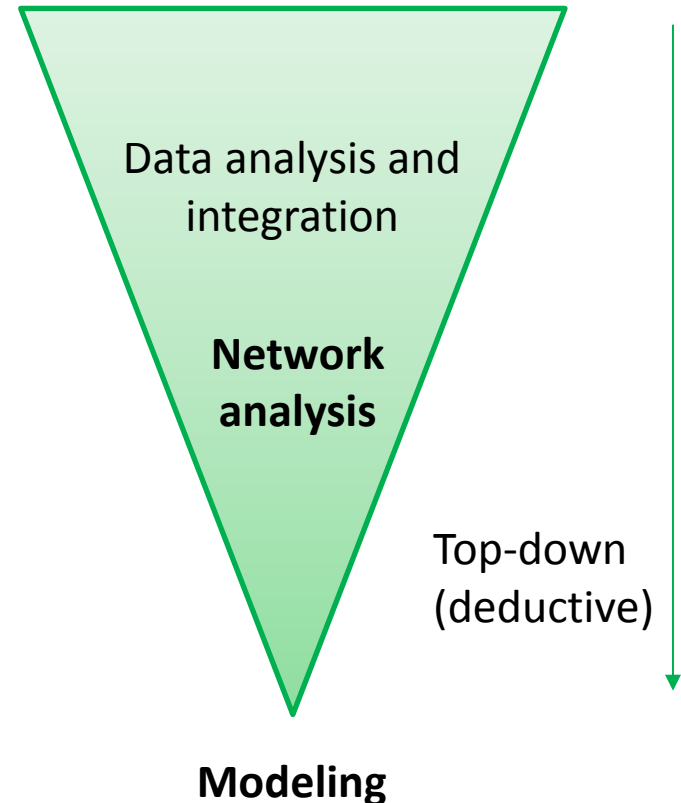


Approaches for modern forensics from the system theory Methods in information gathering

Top-down (deductive)

- Creating experimental data
- Analysis of data and formulation of hypotheses (iterative)
- Validate hypotheses by means of experiments (iterative)
- **Goal: Identification and characterization of new mechanisms leading to a better understanding of the complex relations in a „populated urban structure“**
- Integration in the resilience process

Measurement of overall condition



A **Simulation** is an approach used for the **analysis** of systems which are too complex to be analyzed theoretically or with formulas. This is mostly the case for **dynamic system behavior**. In a simulation, experiments are performed with a model in order to gain knowledge about the real system.

- Discovering of network structures on different levels
 - Gathering of the temporal and spatial dynamic of „system“ components using different (environmental) conditions
 - Development of detailed mathematical models
 - Visualization of networks and the processes taking place within those networks
- > **Understanding of the processes as a whole**

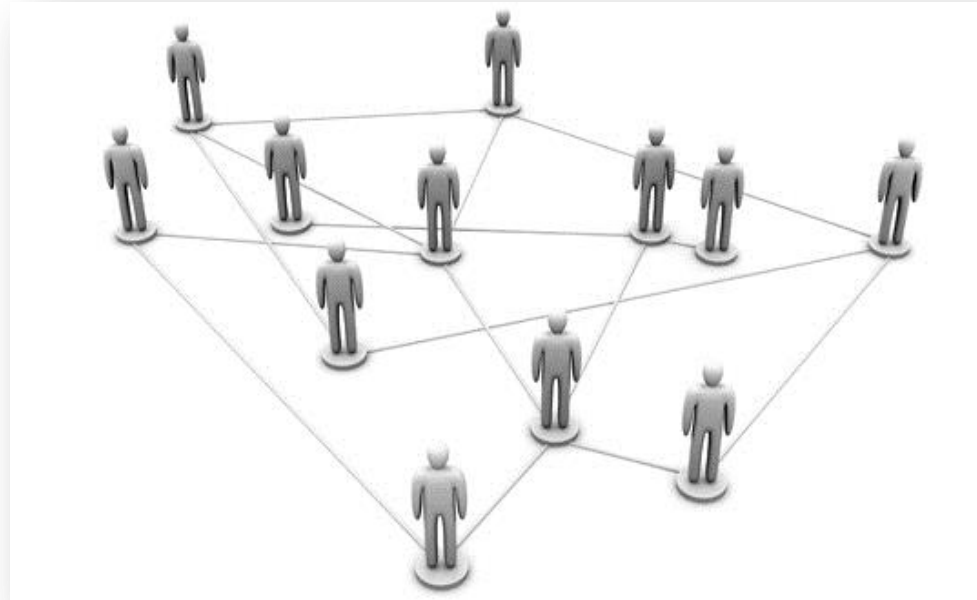
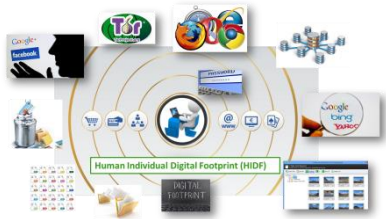
Can we use the *Human Individual Digital Footprint*
in the modern forensics?

Digital communication and predictive policing

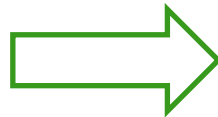
Communication

Communication of Criminal Groups on the Internet

Human Individual Digital Footprint (HIDF) Network

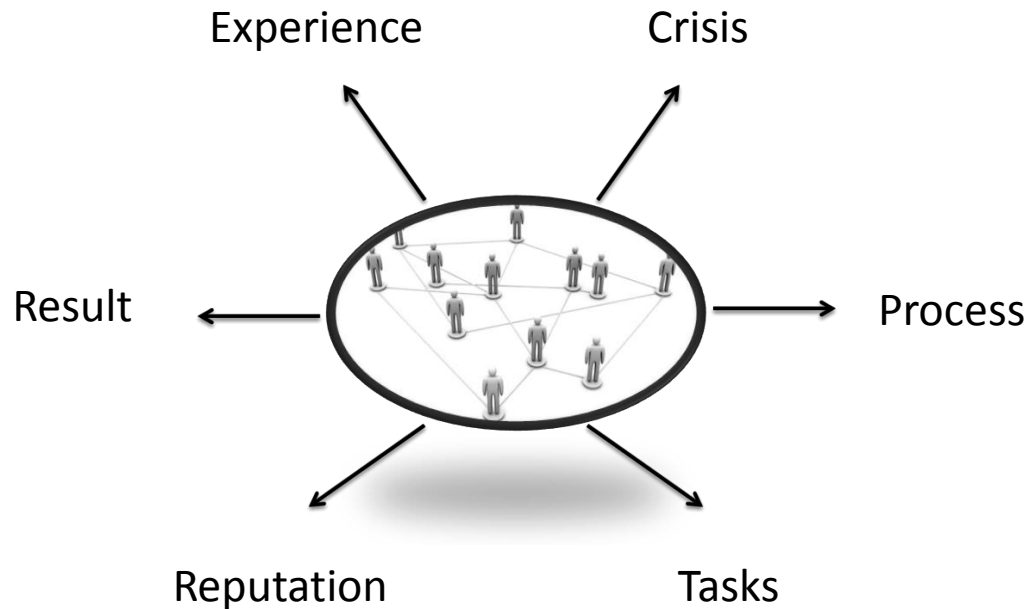


- Communication
- Information transfer
- Feelings
- Emotions
- Sentiments
- Statements
-



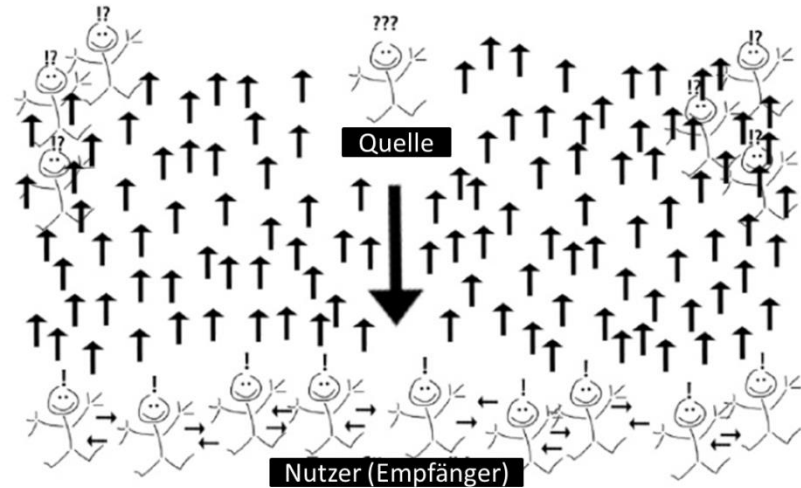
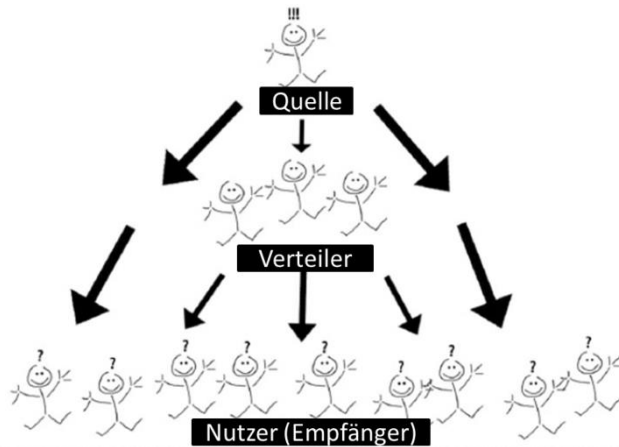
- **Analyses**
- **Validation**
- **Evaluation**

HIDF in groups, sub-groups



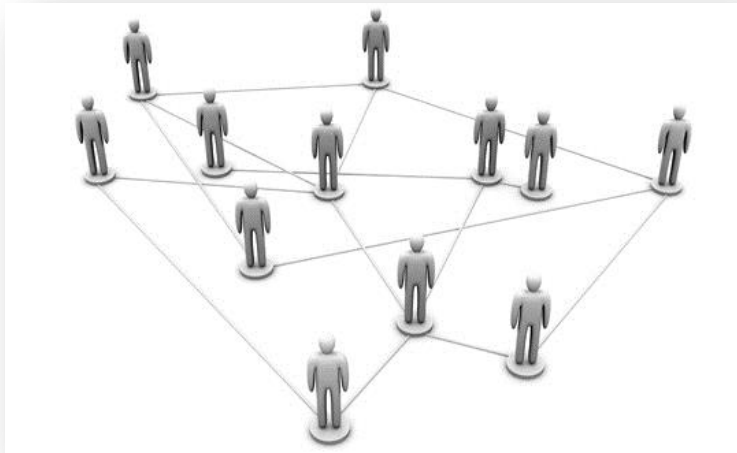
Virtual groups, where the members mainly (**but not exclusively**) communicate via computer-aided communication.

In the context of the virtual group, the spatially dispersed members collaborate for a certain amount of time to complete defined tasks.



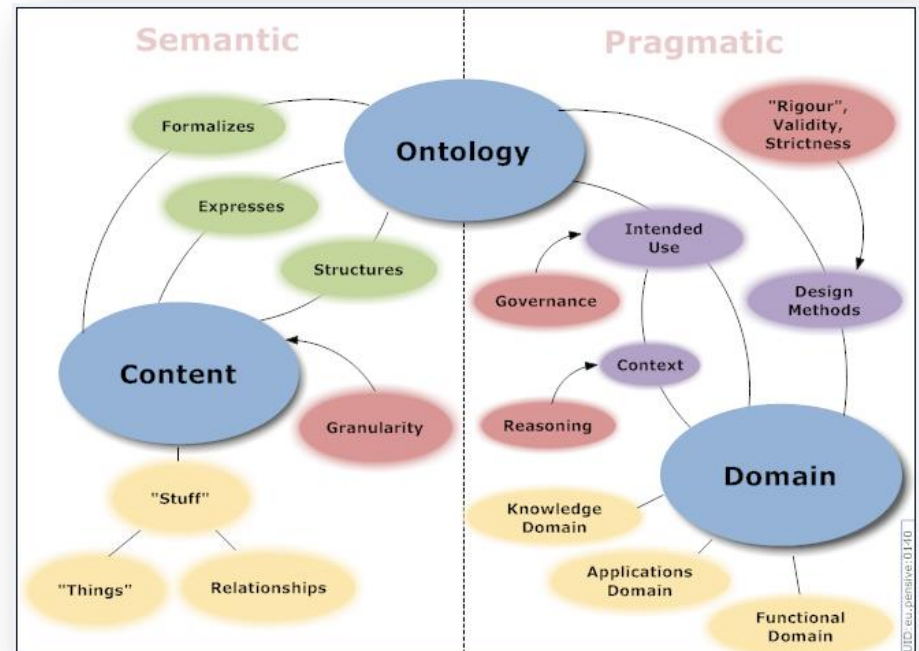
Computer-mediated communication, which is proceeds via computer networks. In the narrower sense computer-aided communication is understood to be only **text communication**, as it is typical for exchanging via e-mail, mailing list, newsgroup or chat, for example, and is theoretically modeled using various models.



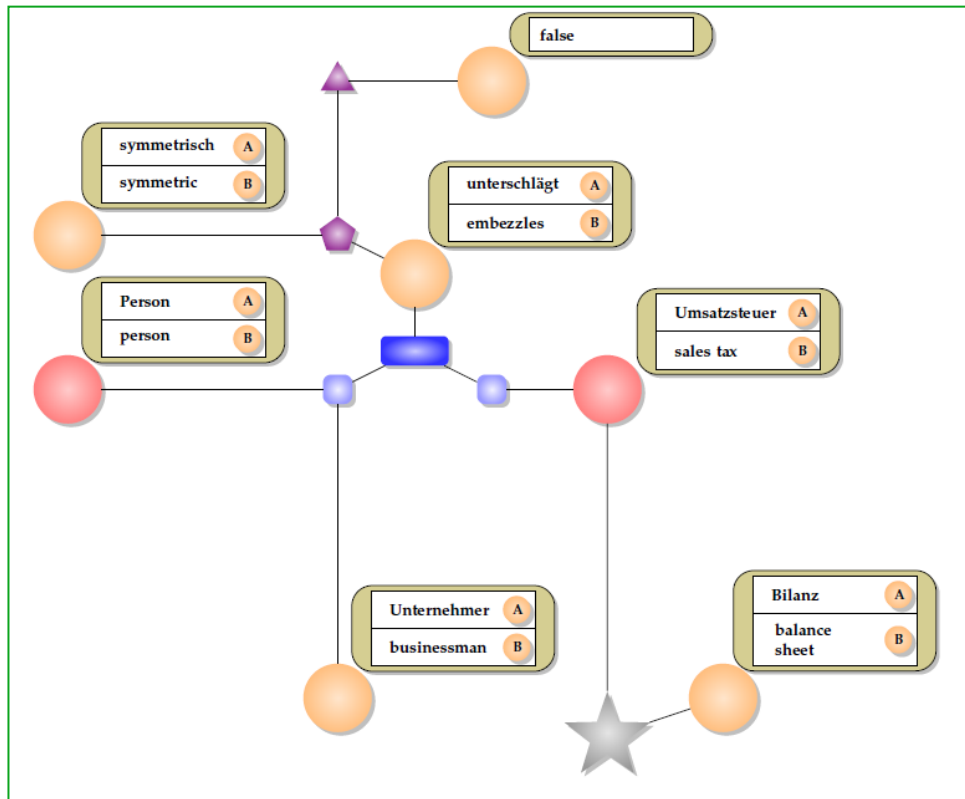


An ontology is a specification of a conceptualization.

Definition of syntax of terms and symbols in a network of associations



Ontologies and Semantics

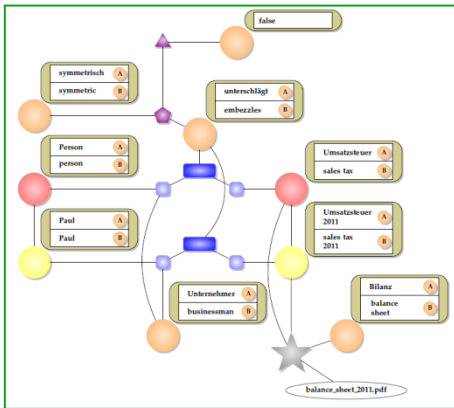


- they define terms and symbols referring to a syntax and an association network
- can support the information extraction process in different ways
- can support the visualization of results

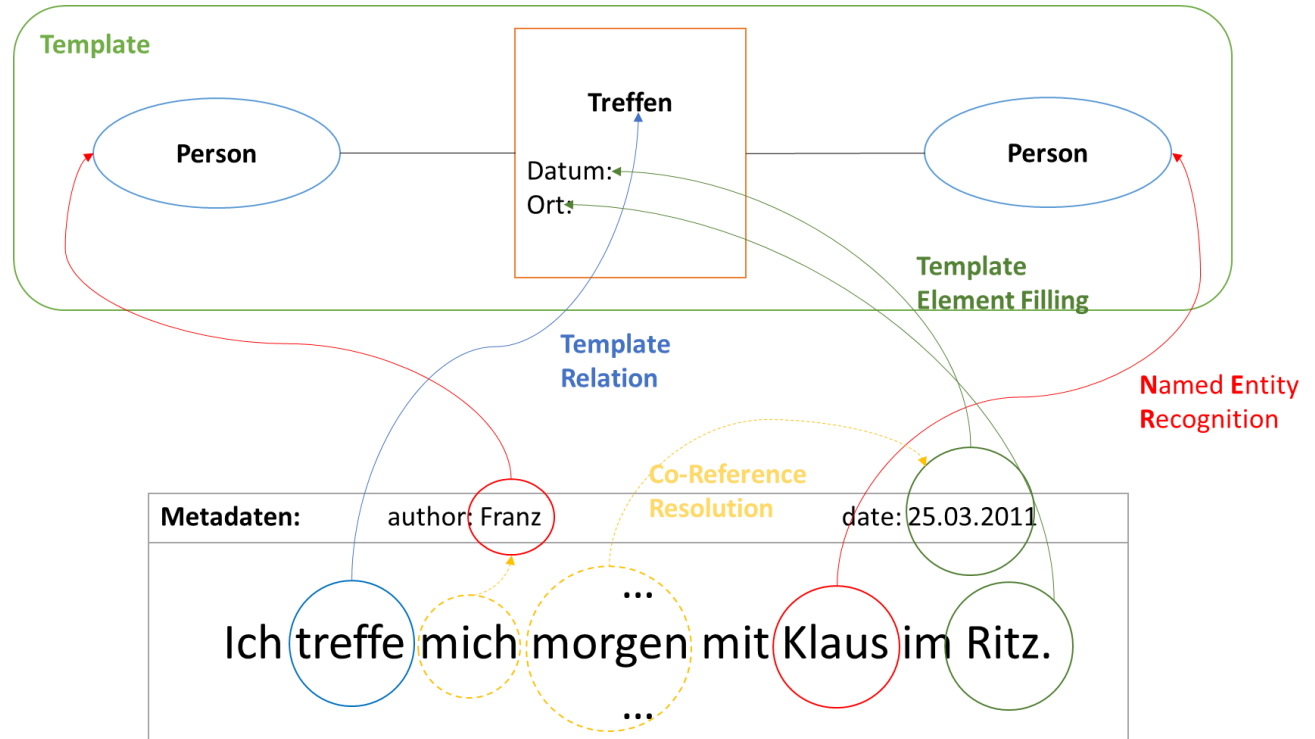
- oriented in the Topic Map ISO-standard
- readable for humans and processable for computers

Ontologies and Semantics

Forensische Topic Map instantiation



Information Extraction

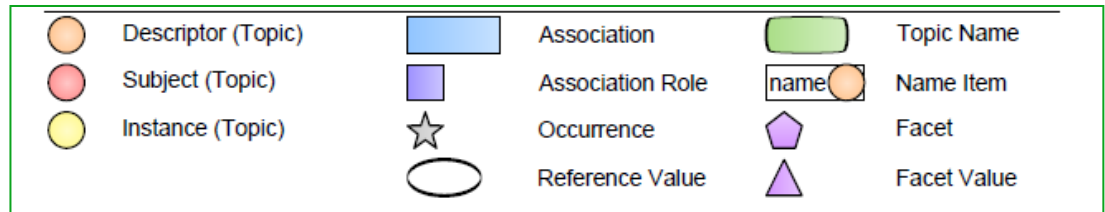
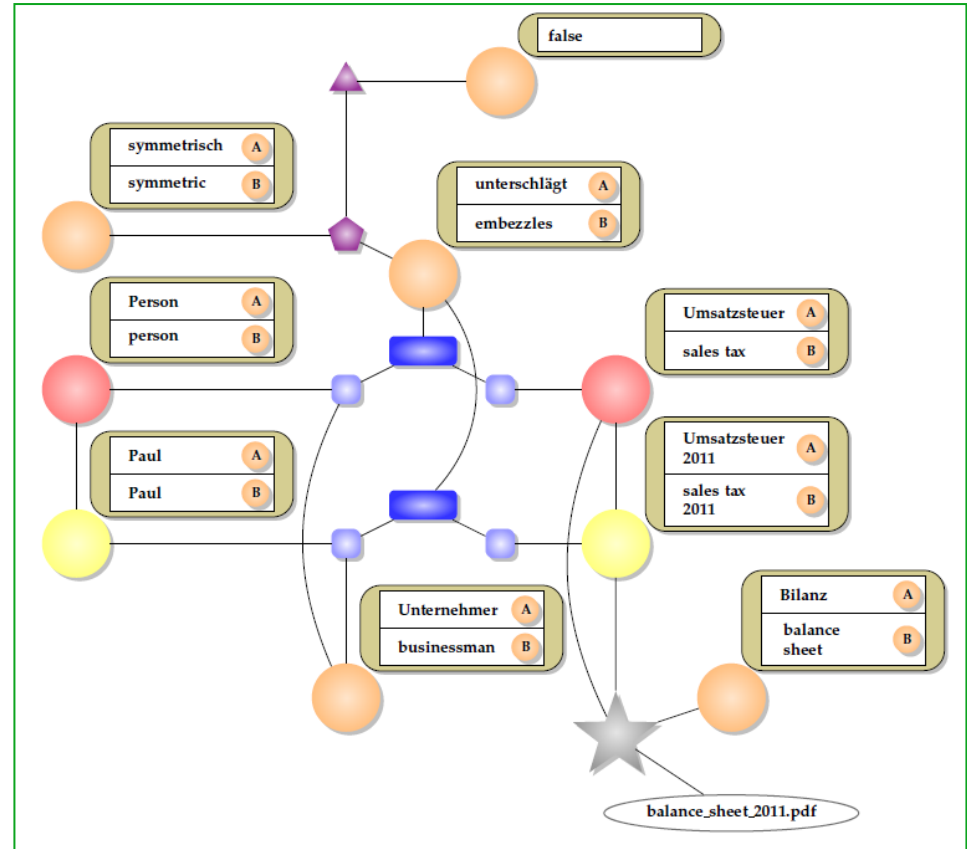


Ontologies and Semantics

Forensische Topic Map
instantiation



Question Answering System



Measurement of communication

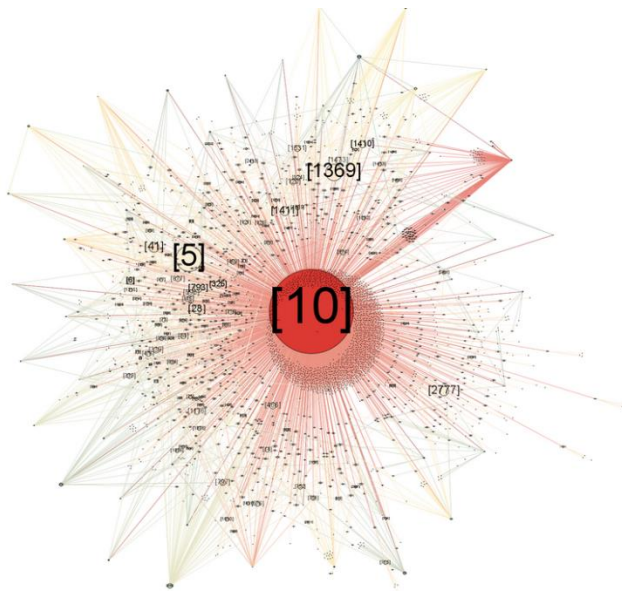
Thursday, July 26

IMMM 3: Information Mining and Management II

Session chair: Ayodeji Oyewale

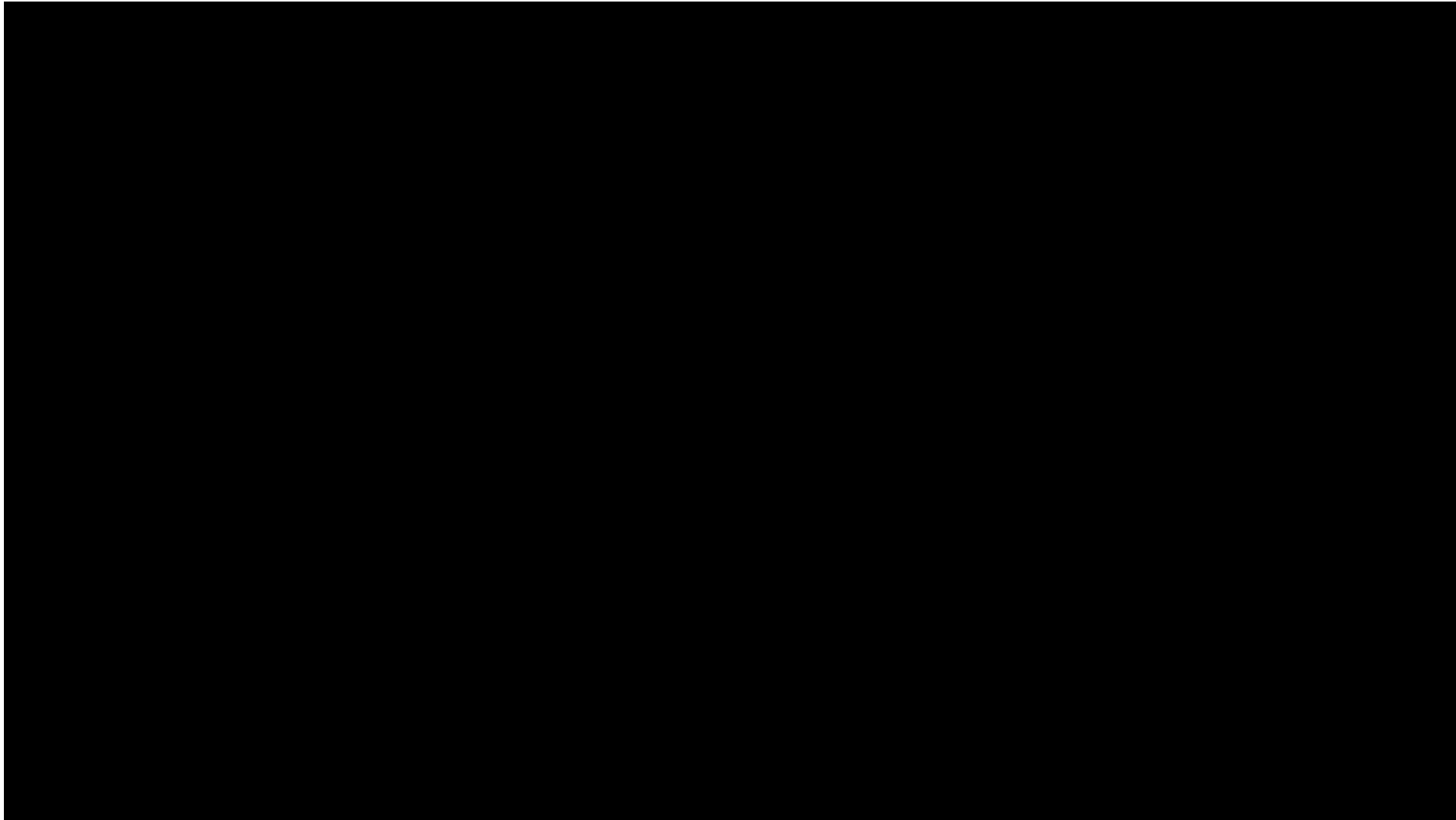
Opinion Leaders in Star-Like Social Networks: A Simple Case?

Michael Spranger, Florian Heinke, Hanna Siewerts, Joshua Hampl, Dirk Labudde



- Influence
- Opinions
- communication

Predictive policing



Advertising ... but

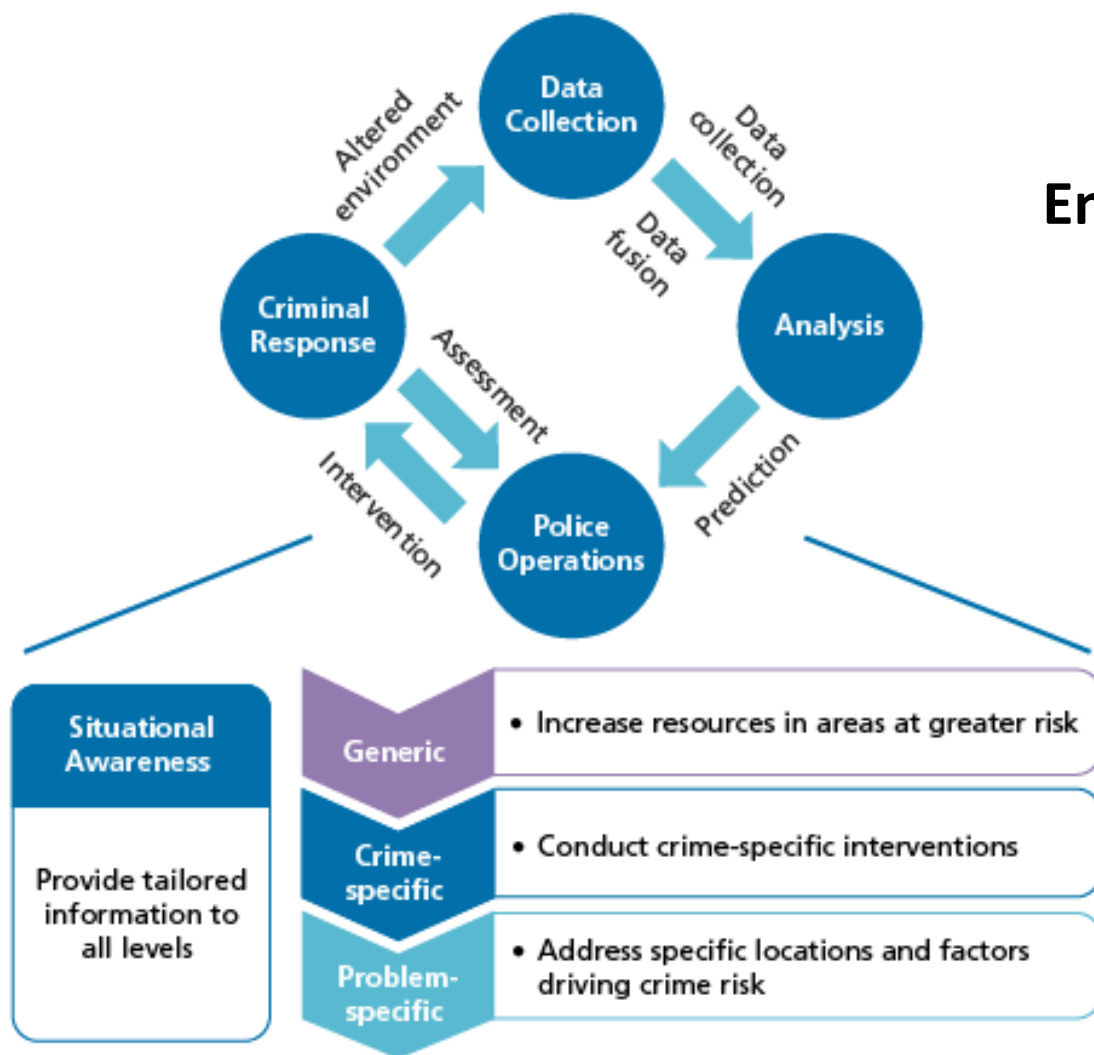
- temporal aspect
- spatial aspect
- Aspect of Data collection
 - Aspect of statistical prediction
 - Aspect of the intervention



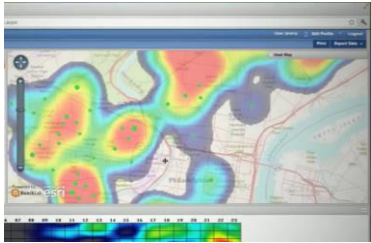
Information about future crimes

Predictive policing is a “multi-disciplinary, law enforcement-based strategy that brings together advanced technologies, criminological theory, predictive analysis, and tactical operations that ultimately lead to results and outcomes – crime reduction, management efficiency, and safer communities.” (Uchida 2014)

End-to-End-Process



Mathematical models and assumptions

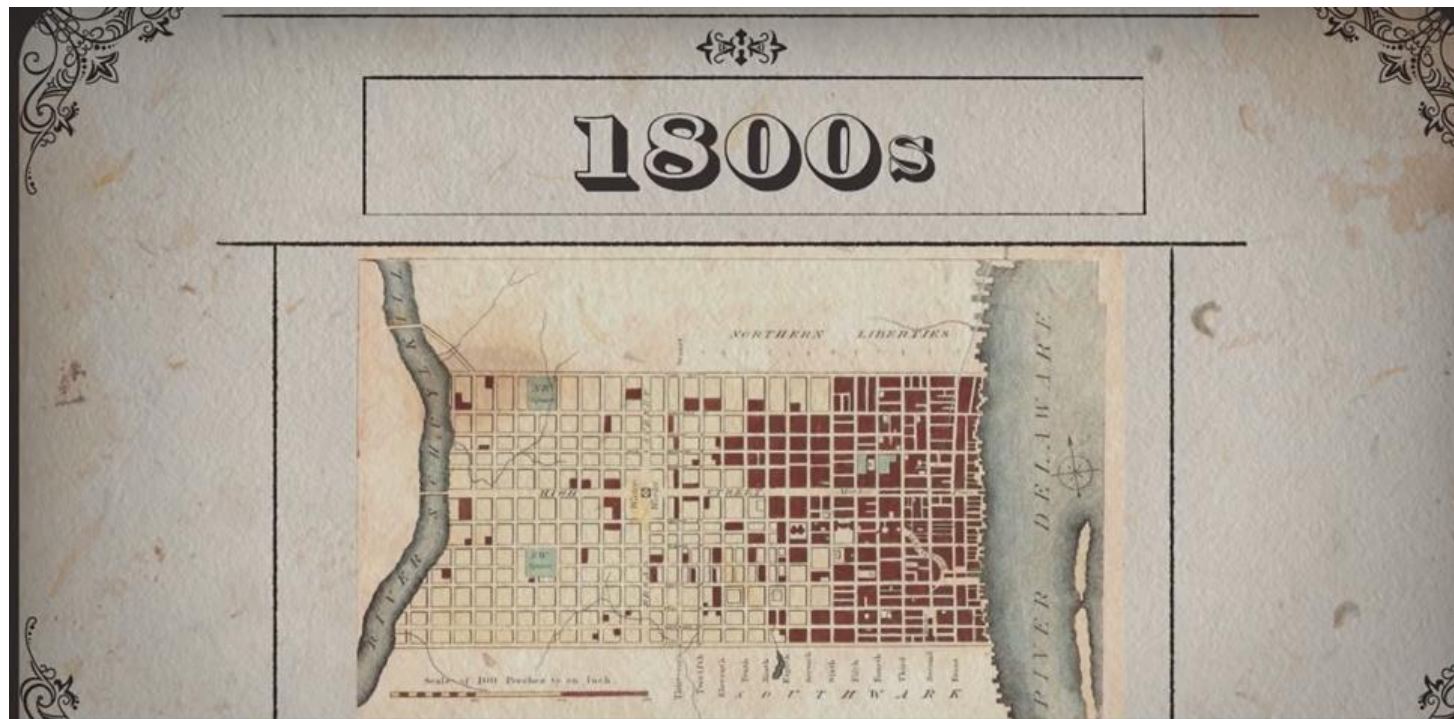


- Approaches from epidemiology (diffusion)
- Crime Sociology "Repeat Victimization"
- „Routine-Activity-Theory“
- Rational Choice
- Lifestyle Approach
- Broken Windows-Theory

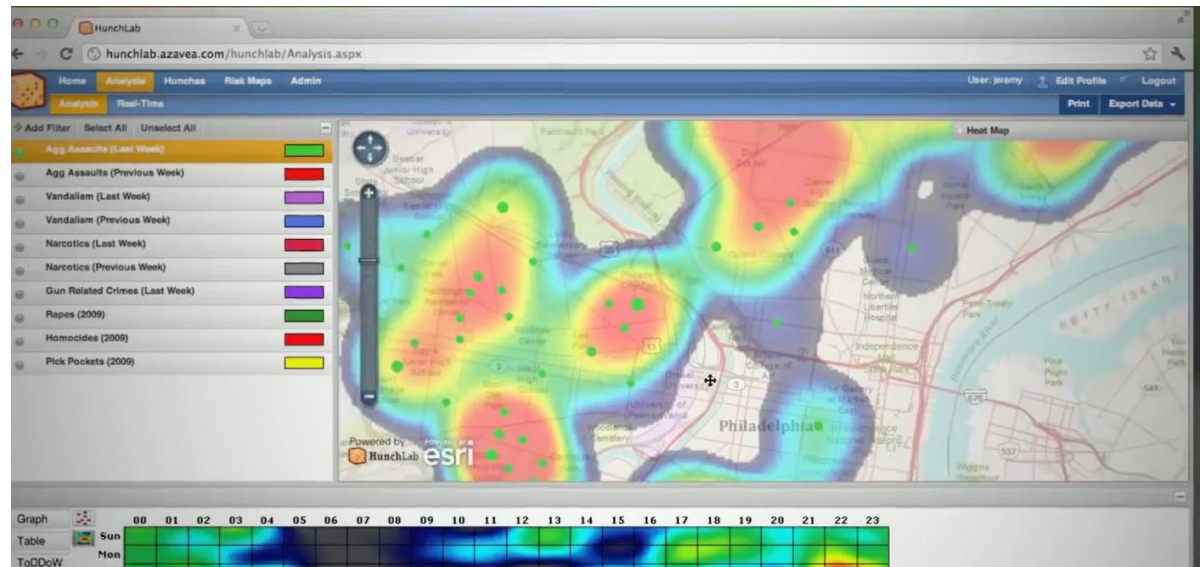
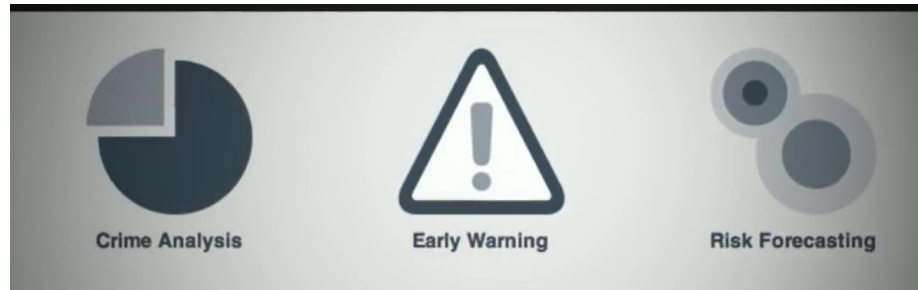
**Geographic Information Systems
+
space-based algorithms and modeling
=
Probabilities of crime**



Search for patterns



First „statistic of criminal activity“ – people mark crimes on a map.
Basic idea – divide in quadrants (grid)



Number of criminal offences and their „conditions“



All still awake?

Near-repeat pattern analysis

Question:

When a criminal event takes place, how does the risk develop in the surrounding area?

→ Repeated attacks at the same or nearby places

$$P(A|x, t) \rightarrow P(B|x + \Delta x, t + \Delta t)$$

What influence does an assault A at the place x at the time t have at a later point in time $t + \Delta t$ and a nearby place $x + \Delta x$.

Relations for time and space can be derived from statistics.

Near-repeat pattern analysis

Odds Ratios

	0 to 15 days	15 to 30 days	30 to 45 days	45 to 60 days	60 to 75 days
Same location	2.6803	0.9033	0.6894	0.4331	0.6208
0 to 121.92 meters	1.2824	1.1158	0.8223	0.9218	1.0476
121.92 to 243.84 meters	1.1851	0.9325	1.0807	0.9207	0.8254
243.84 to 365.76 meters	1.1203	0.9448	1.0811	0.9923	0.851
365.76 to 487.68 meters	1.065	1.0754	0.9932	0.9271	0.8171
487.68 to 609.6 meters	1.149	1.0396	0.9577	1.002	0.9482
609.6 to 731.52 meters	1.0259	1.0772	0.9504	0.9865	1.0612
731.52 to 853.44 meters	1.0309	1.0922	1.046	0.9247	1.0202
853.44 to 975.36 meters	1.0423	1.0727	1.0303	1.0683	0.9943
975.36 to 1,097.28 meters	1.0666	1.0307	1.0631	1.0236	0.9784
1,097.28 to 1,219.2 meters	1.0027	0.9971	0.9834	1.0447	1.04
> 1,219.2 meters	0.9943	0.997	0.9993	1.0004	1.0019

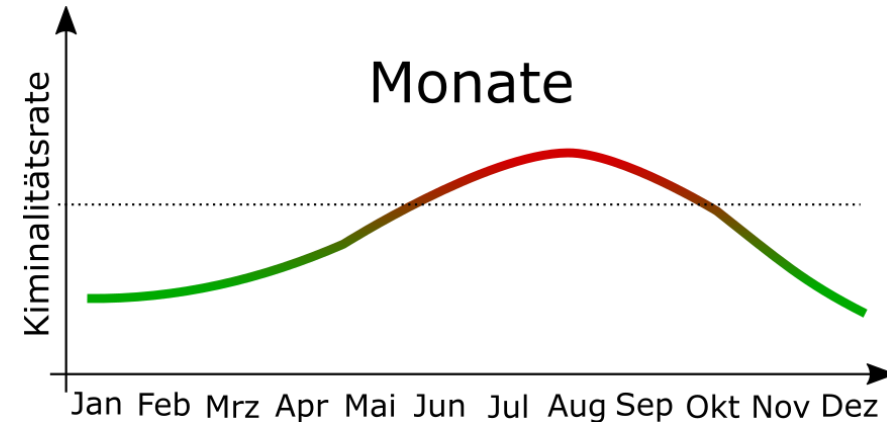
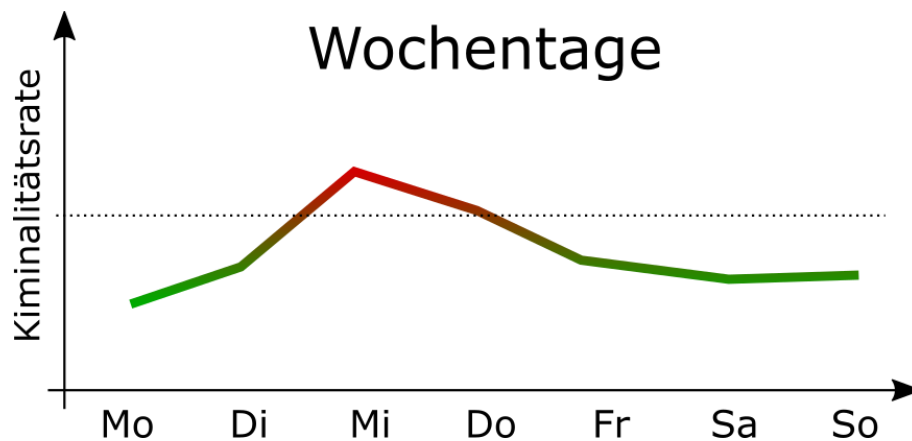
Near-Repeat Patterns in Philadelphia Shootings. Jerry H. Ratcliffe and George F. Rengert, Security Journal 2008.

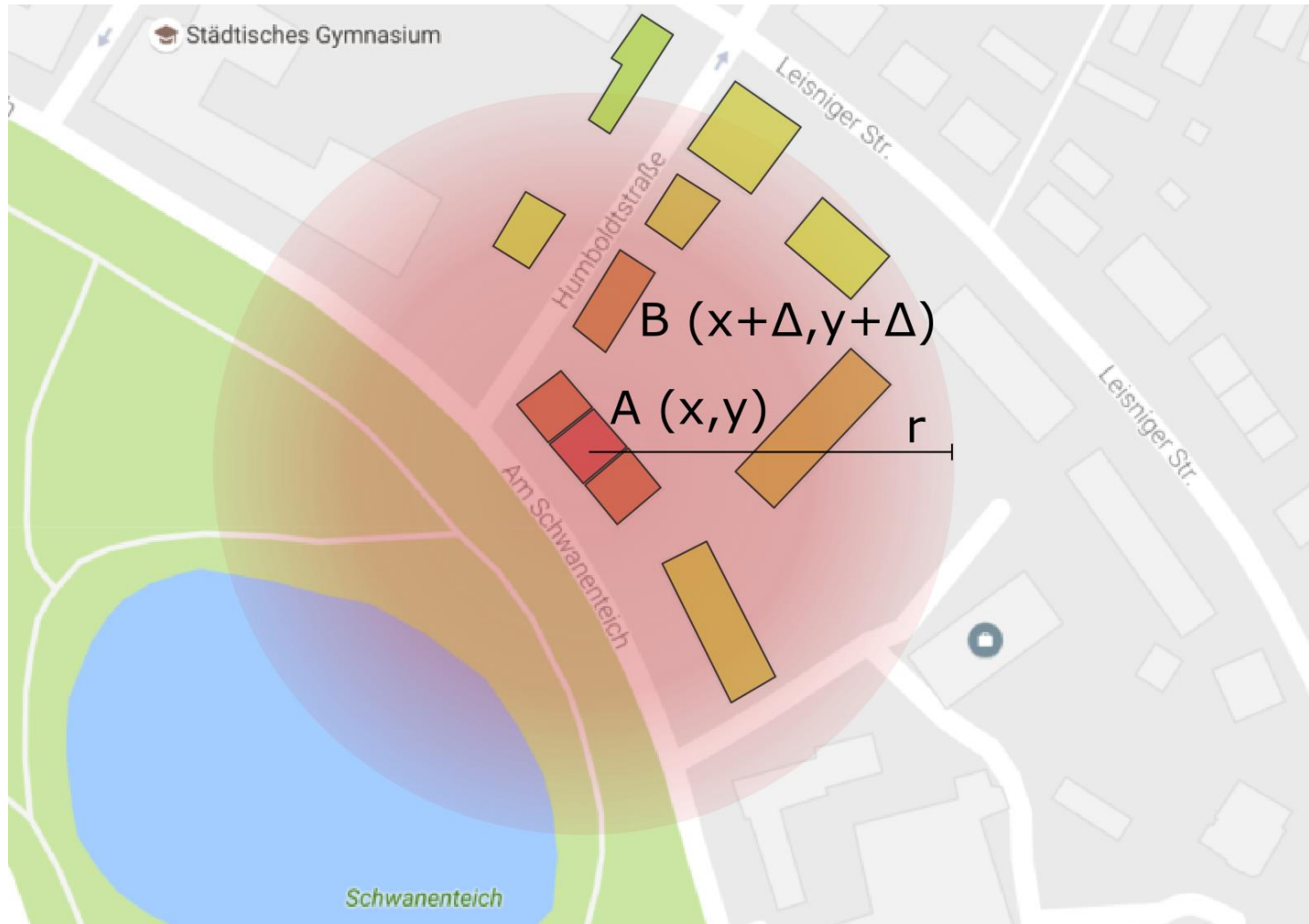
Cyclic-load forecasting

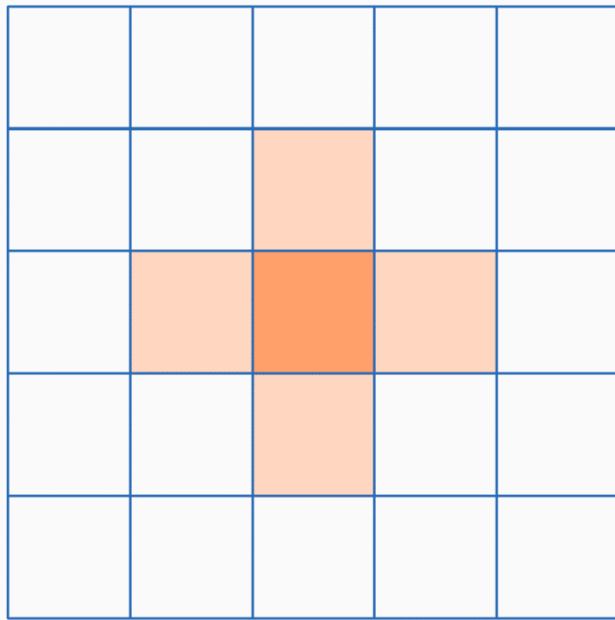
Question:

Are there certain days in the year, certain days of the week or certain times in the day in which more criminal incidents are to be expected?

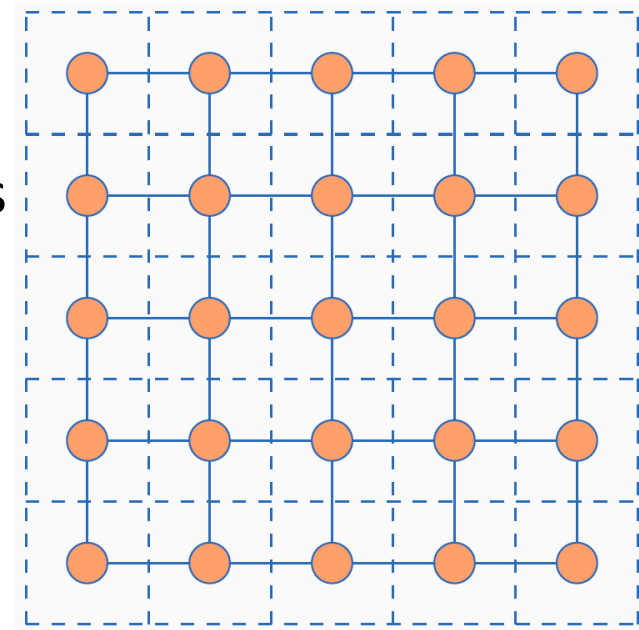
$$\begin{aligned}
 P(\text{Event} | \text{Point in time}) &= P(\text{Event} | \text{Month}) \\
 &+ P(\text{Event} | \text{Day}) + P(\text{Event} | \text{Day of the week}) \\
 &+ P(\text{Event} | \text{Time of day}) + \dots
 \end{aligned}$$







Definition of neighbors by means of a graph

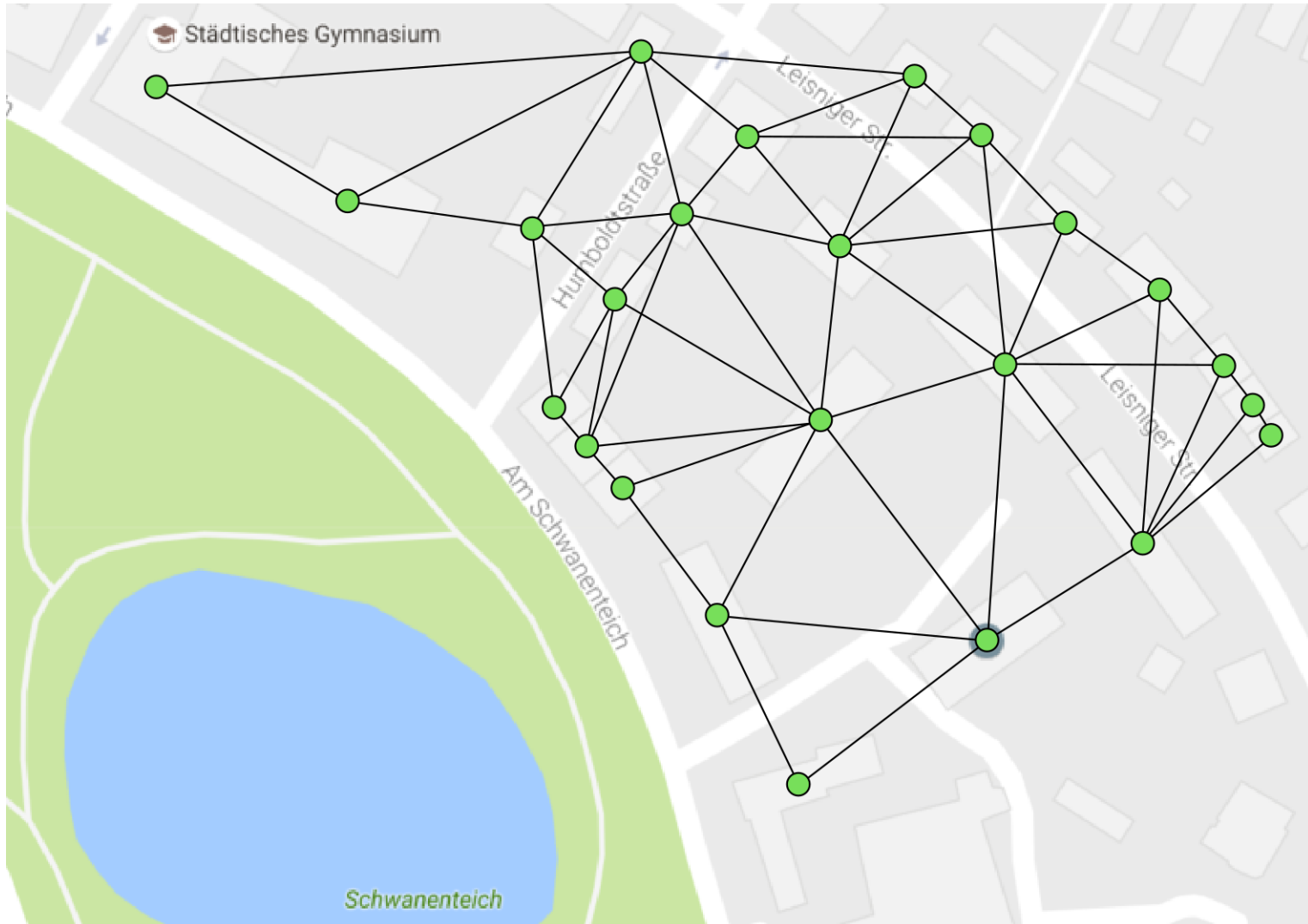


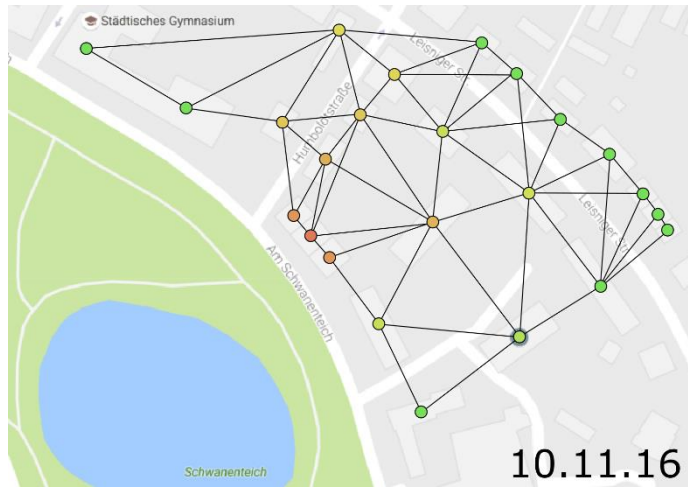
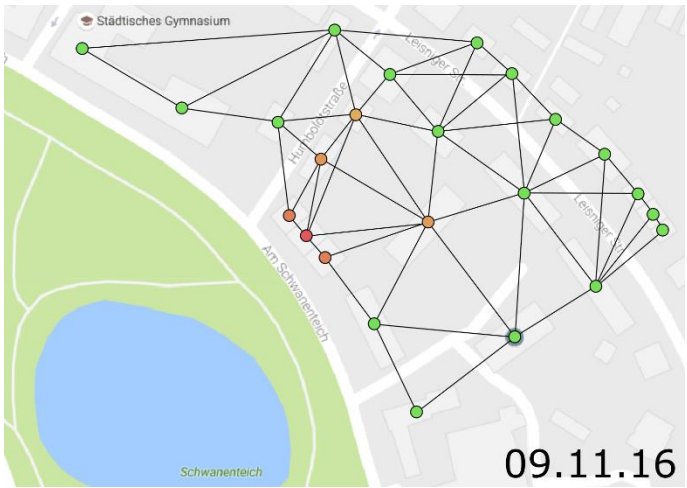
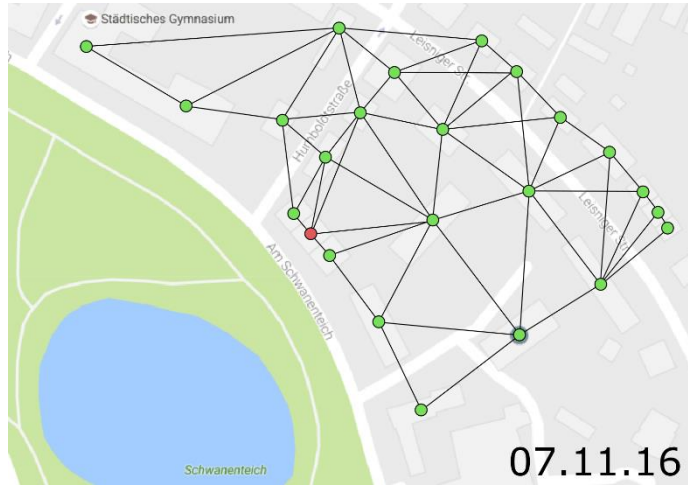
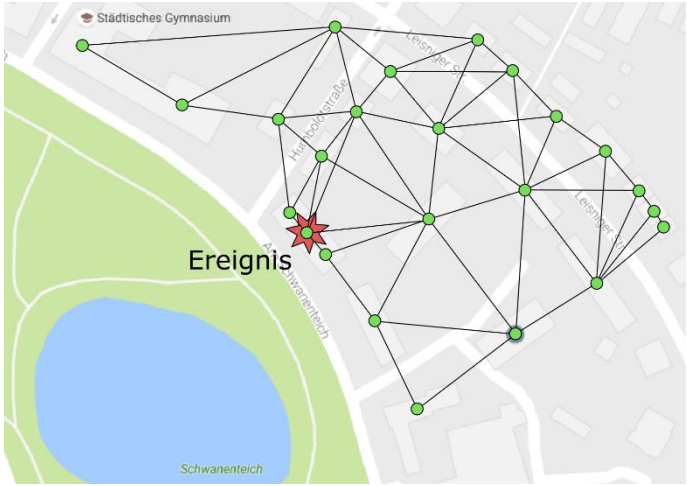
Cellular Automata

- Interaction with neighboring cells in a fixed grid
- Neighborly relations have to be determined at the beginning

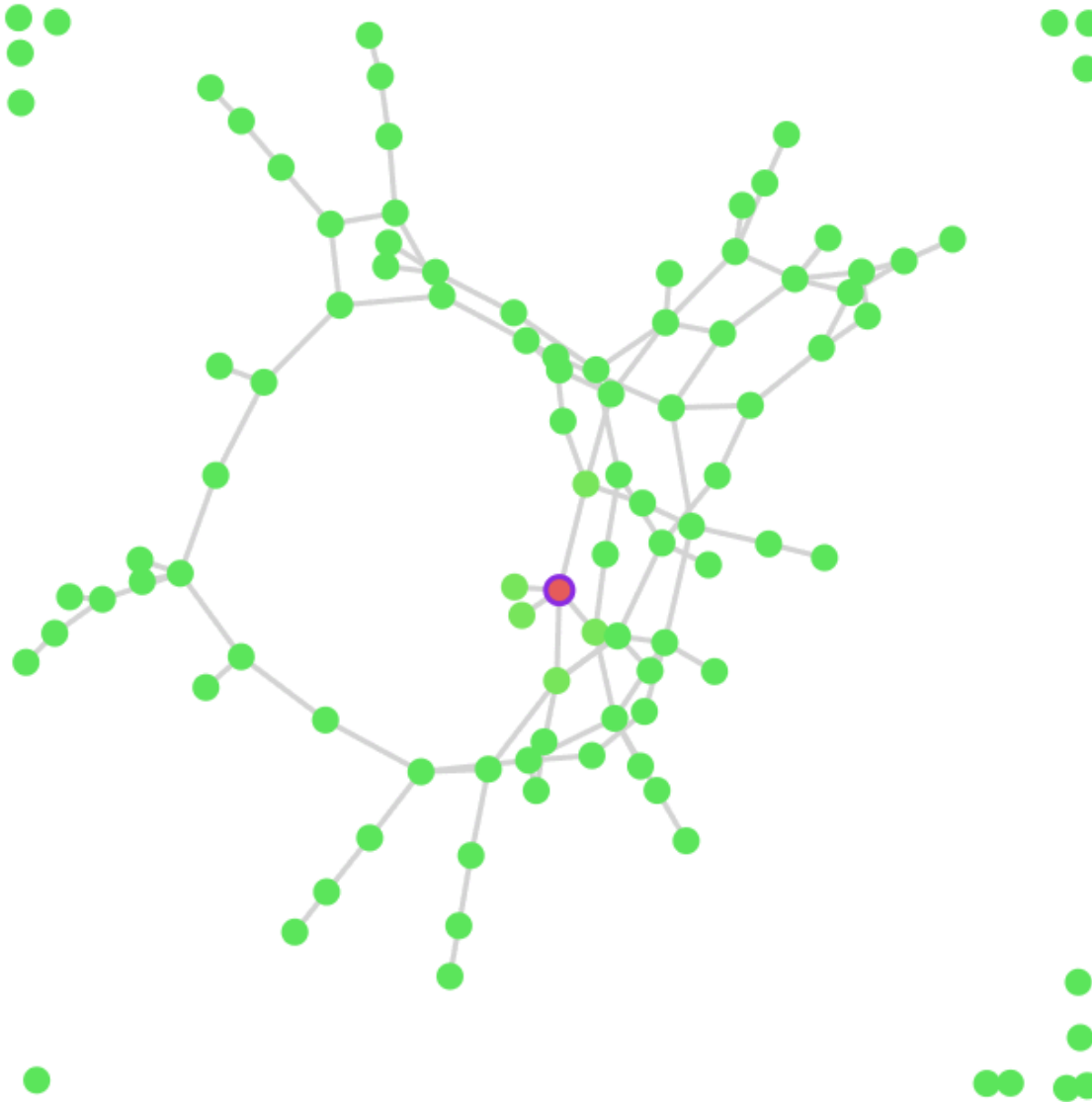
Graph Automata

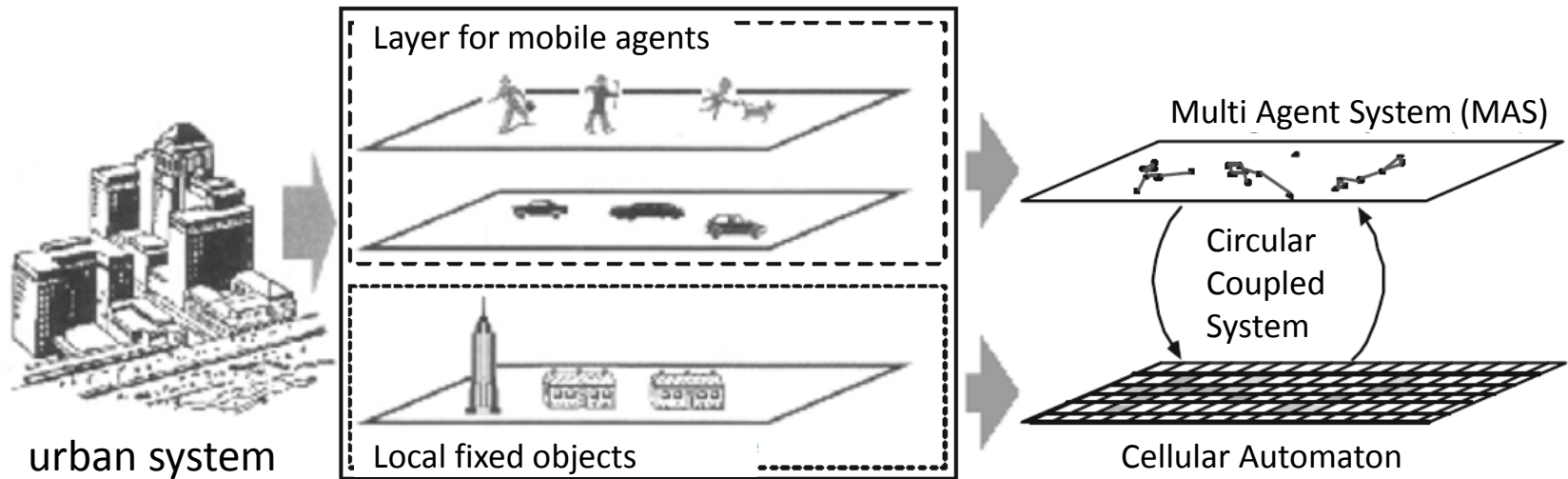
- Neighbor geometry can be flexibly modified
- Neighborly relations can change at any time





Security of a house in an urban structure with a well defined crime rate

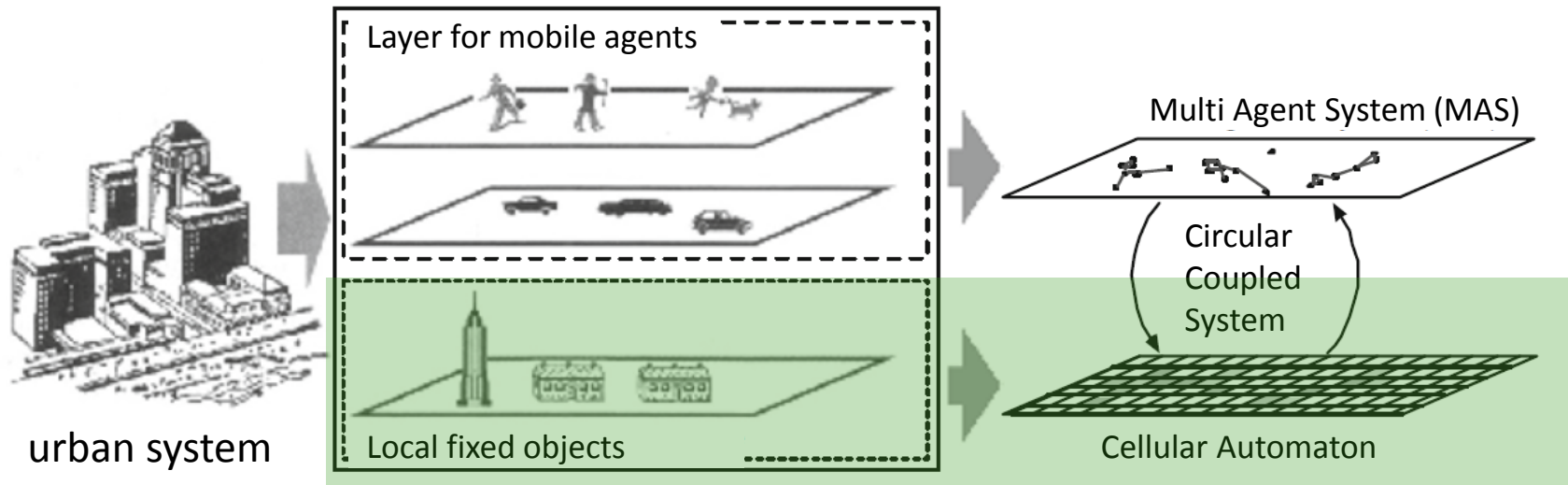




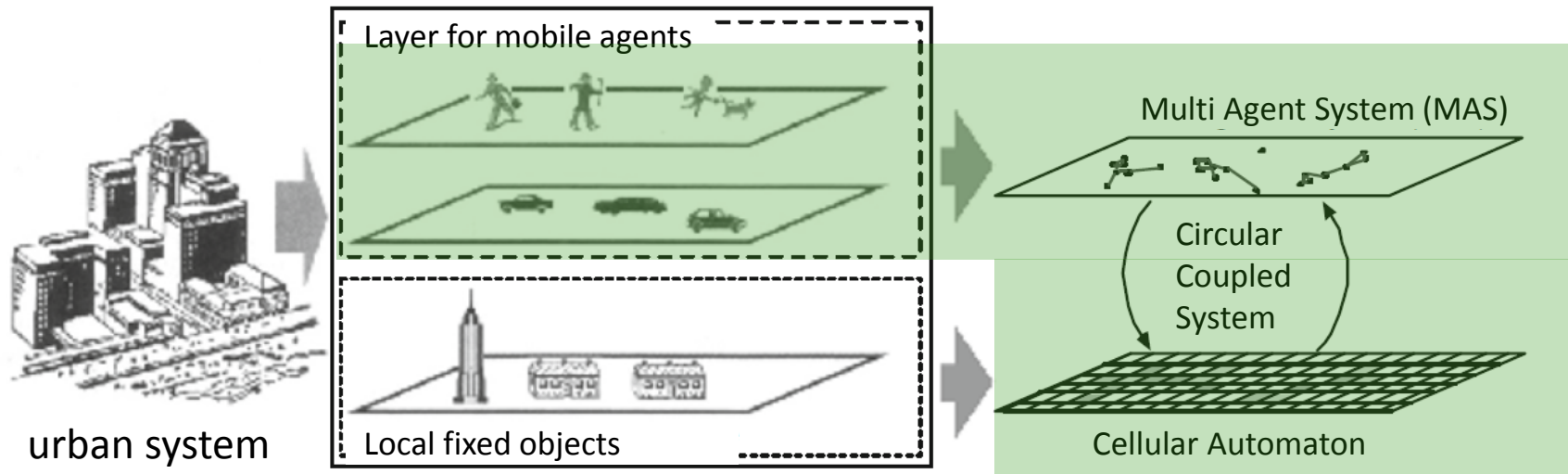
Cellular automata and multi-agent systems can be used for the simulation of the dynamic of **spatial processes**.

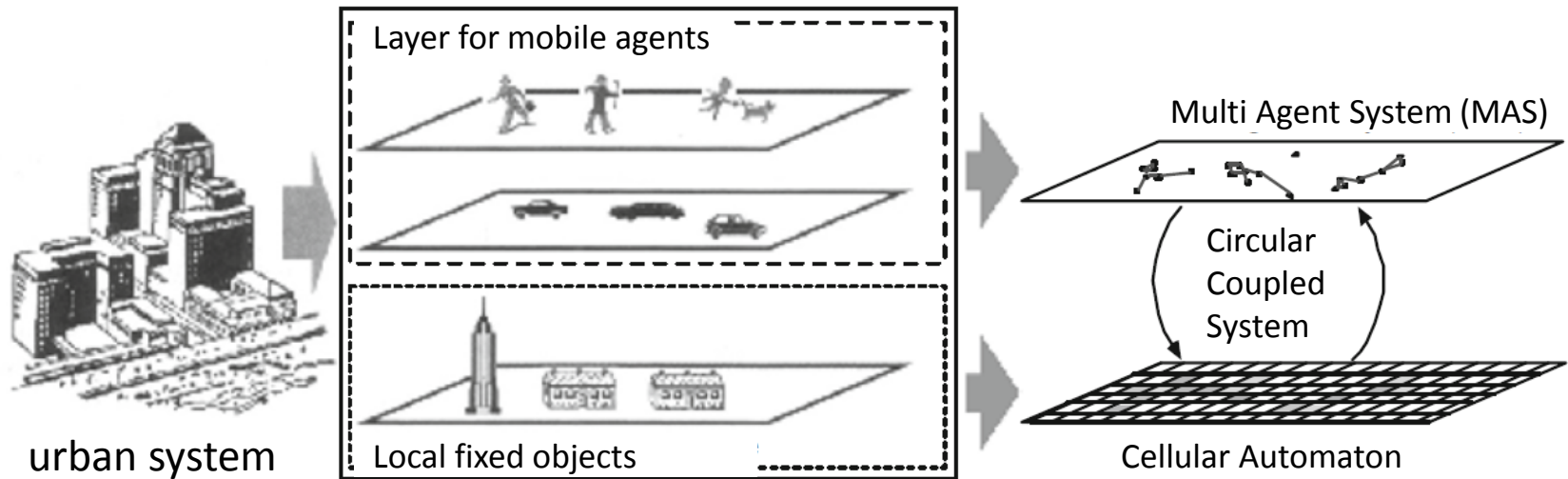
Cellular automata

Cellular automata model spatial elements such as streets, parcels of land, and buildings. Those are treated as locally fixed objects, whose state can change at a certain point in time. In a first step, these elements are transferred to a cell of a regular grid and saved as the status of this cell.



A second level includes the individual and collective urban actors, which will be called agents. In comparison to the cells, agents are mobile and can move freely through the cell grid, the cellular room. It is possible to define different types of communication between the agents and between the agents and the cell.





Model of an urban system. The system is separated in different levels, which are represented either by the cells of a CA or the agents of the MAS.

Communication as additional input for predictive policing

Social networks - Sentiment analyses of groups in social networks

Generation of landscapes

Sentiment Detection:

- sub-area of text mining
- automatic analysis of texts with the aim of identifying an **expressed attitude** as positive or negative

trend analysis

Statistical analysis starts from a basic set of concepts (or **n-grams**), which is associated positive or negative sentiments.

- Occurrences of positive or negative sentiments
- Comparison
- Designation of trends, opinions Statements

Inside the Web --- feelings, beliefs and personal opinions!

Generation of person landscapes from Facebook

PEGIDA – Patriotische Europäer gegen die Islamisierung des Abendlandes
(*Patriotic Europeans Against the Islamisation of the West*)

“Slogan”

- Asylindustrie – alysum industry
- Lügenpresse – lies press
- Volksverräter – public traitor
- Der Untergang des Abendlandes
- „the decline of the West”
- Islamisierung ... Islamic



Generation of landscapes from Facebook

<https://www.facebook.com/pages/PEGIDA/790669100971515>

PEGIDA
Community Organization

204,669 people like this

Invite friends to like this Page

ABOUT

WIR WURDEN BELOGEN

5K 1.3K

Ask for PEGIDA's address

likes

2,549 shares

Myrko Zirnstein wirklich sehr schade das wir dieses Szenario nicht in mehr Städten haben..... schön das wir unser Dresden haben!!
See Translation
Like · Reply · 751 · January 20 at 11:55pm
View previous replies

Myrko Zirnstein Iris Frühling ich glaube nicht das das ein Problem der Organisation ist. Selbst in Leipzig klappt das nicht so richtig. Die Medien haben eine zu große Macht und schaffen es das ganz klein bzw. schlecht zu reden. So schlimm wie es ist es muss wahrscheinlich erst noch viel mehr passieren damit die Leute aufwachen!!
See Translation
Like · Reply · 352 · January 21 at 12:35am
View more replies

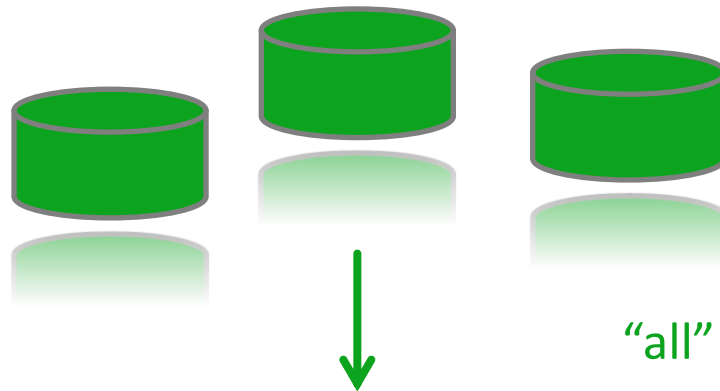
Andy Lent wenn mann eine Linie zieht über die bei diesem Demonstrationszug je Sekunde im Schnitt etwa 11 Menschen gehen dann sehen wir hier 5940 Teilnehmer, nur sollte man bedenken das das Video schon endet nach 11 min der Zug aber nicht... WEITER SO ! es müssen noch mehr werden am besten direkt vor s Kanzleramt
See Translation
Like · Reply · 358 · January 20 at 11:55pm
View previous replies

Birgit Klein direkt vor dem kanzleramt, damit die politiker da drinnen das auch live miterleben können- das hätte mehr wirkung. und pegida müsste sich mit der AfD zusammentun. (im prinzip wollen pegida und die afd-anhänger das gleiche: unser land wieder zu dem machen, was es einmal war). respekt vor dresden! die berliner sind leider immernoch im koma und zu bequem oder zu faul auf die straße zu gehen.
See Translation
Like · Reply · 44 · January 21 at 4:38am
View more replies

Comments

Definition of a general **Data Model** – based on the Graph API

Information from FB via API → Data model



“all” relevant Data (Subsets)

Search relations and correlations

and sentence

The screenshot displays the SoNA - Social Network Analyzer interface. The main window shows a complex contact network visualization with numerous nodes and edges. The nodes are represented by small icons, some of which are highlighted in green. The edges represent connections between these nodes. The interface includes a menu bar (File, Help, Repository), a search bar, and a navigation panel on the right. The navigation panel shows a Facebook icon and the text 'PEGIDA'. Below the navigation panel, there are 'Visualization Properties' including a 'Time Range' section with 'From: 10.01.2016' and 'To: 18.01.2016', and a 'Search' section with a search bar and a 'Search' button. The 'Search' section also has checkboxes for 'Users', 'Posts', and 'Comments'. The bottom part of the interface shows a 'Post' section with a message and an 'Outline' section with a list of comments.

Post

ID: 790669100971515_1038725212832568
Caption: epochtimes.de
Message
#PEGIDA #InformiertEuch #InformiertAndere
Ja, vom sogenannten "arabischen Frühling" kennen wir das alle.
In Skandinavien kennt man es schon länger als #Vergewaltigungsjihad.

Comments

- "Nach Charlie Hebdo hat man gesagt: Ich bin Charlie(...)" - Eddie Graf
- "Das sind doch alles nur Phrasen ..." - Ute Fugmann
- "Polizei ging voll Hass gegen #PEGIDA vor.https://(...)" - www.unzensuriert.at
- "Lasst erst mal die Freibadsaison u. den Sommer kom(...)" - Ioane Xevsur
- "also müsste dem mit gemeinschaftlich begangenem Ei(...)" - Herbert Graf



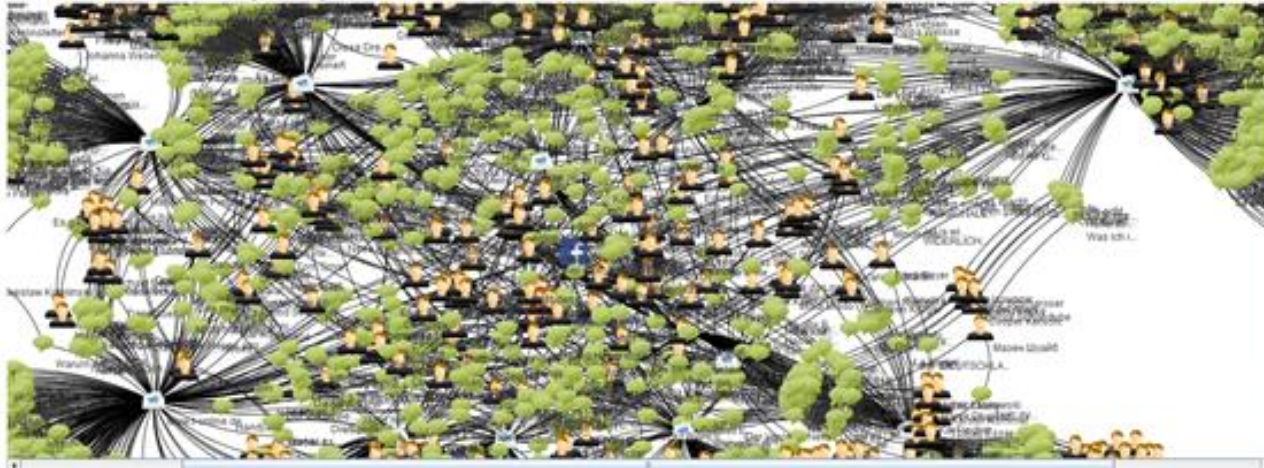
nigen arabischen Ländern das Phänomen der gemeinschaftlich begangenen sexuellen n durch junge Männer in der Öffentlichkeit. Dies gehe bis zur Vergewaltigungen. Ein men sei in Deutschland bislang nicht bekannt.

CONFERENCE-PAPER

"Towards Predictive Policing: Knowledge-based Monitoring of Social Networks"

Autoren:
Michael Spranger, Florian Heinke, Steffen Grunert, Dirk Labudde

veröffentlicht:
IMMM2015



All information are labeled by time and user!

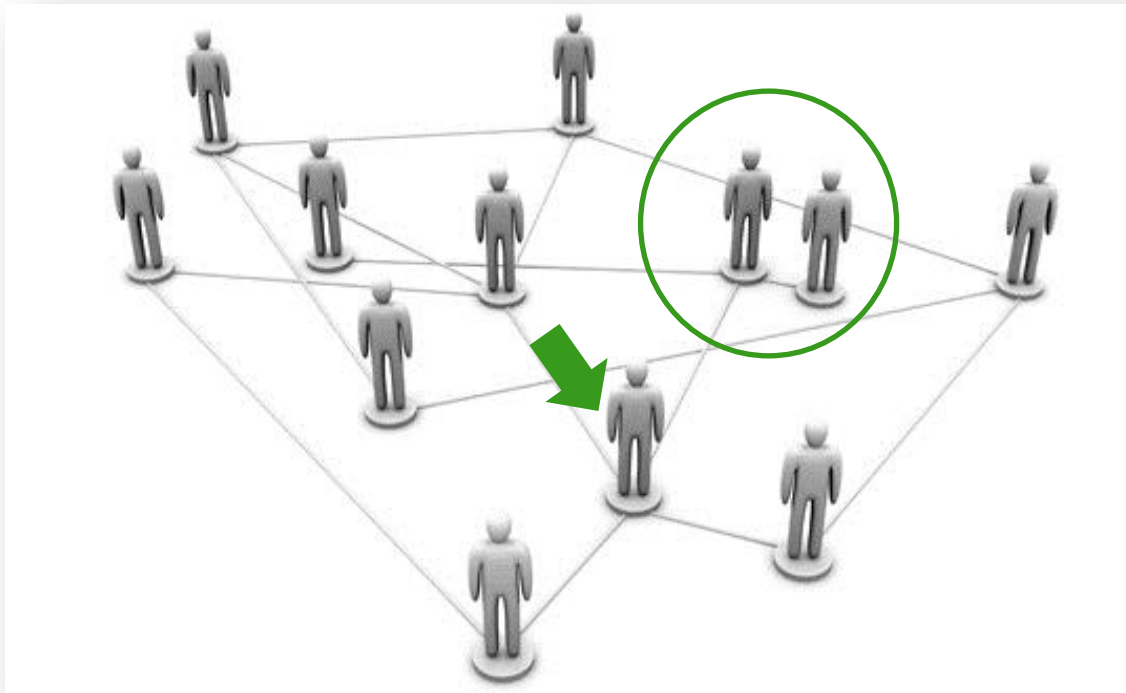
Analyze der opinion in der Group

- a. positive
- b. negative
- c. neutral

Sentiment Analyze



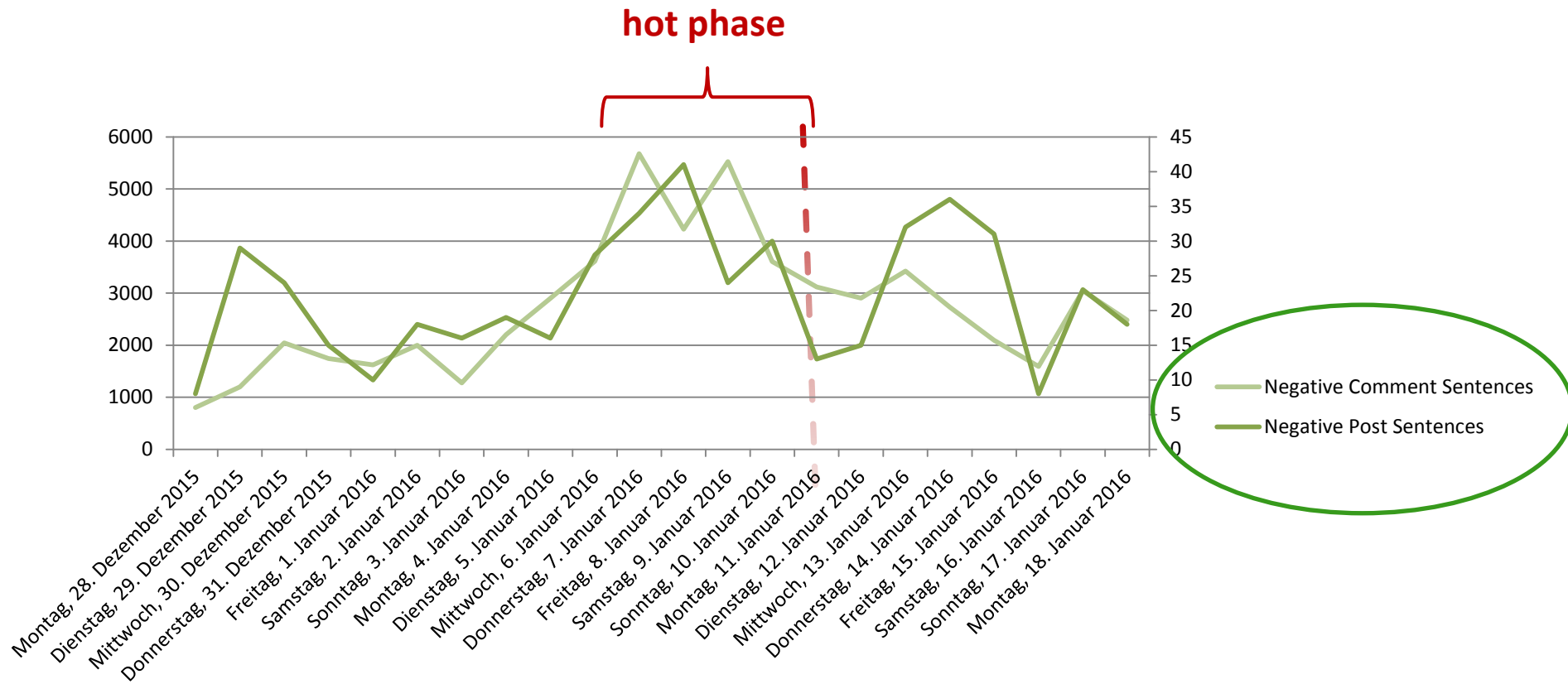
Time and geographical
Monitoring



- User activities
- Topics
- Subgroups

- User-specific content
- Sentiments of the network

Opinions and moods (Sentences)



Digitized traces - geographical Monitoring

Digital traces



Foto BigData



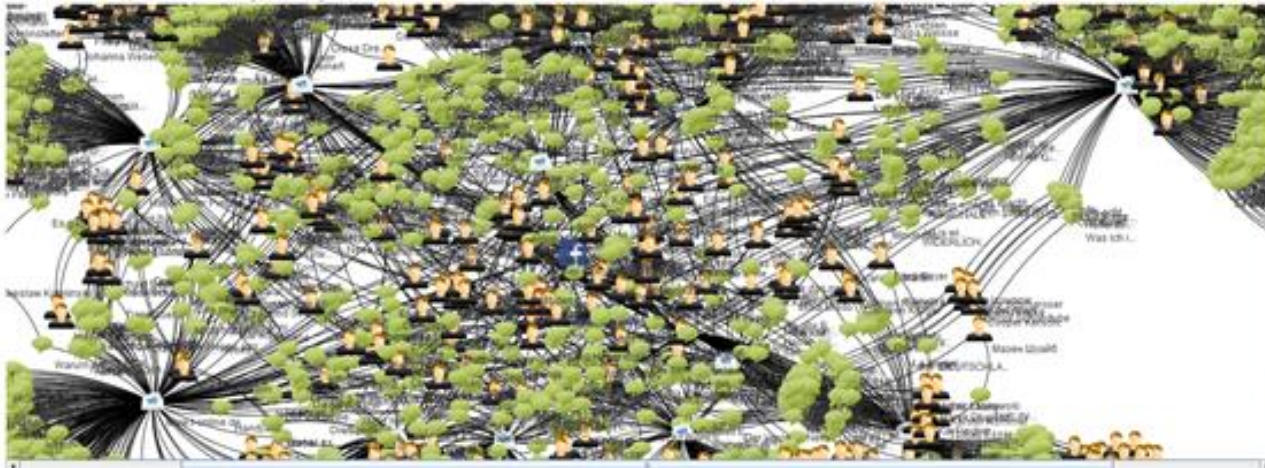
Video BigData



Content

Meta-data

User-list



All information are labeled by time, locations and user!

Sentiment Analyze

+

Possible geo-information

Digital traces

Digitized traces

Digital traces

Digitized traces

Digital traces

Digitized traces

Digital traces

Digitized traces

Digital traces

Digitized traces



Prediction

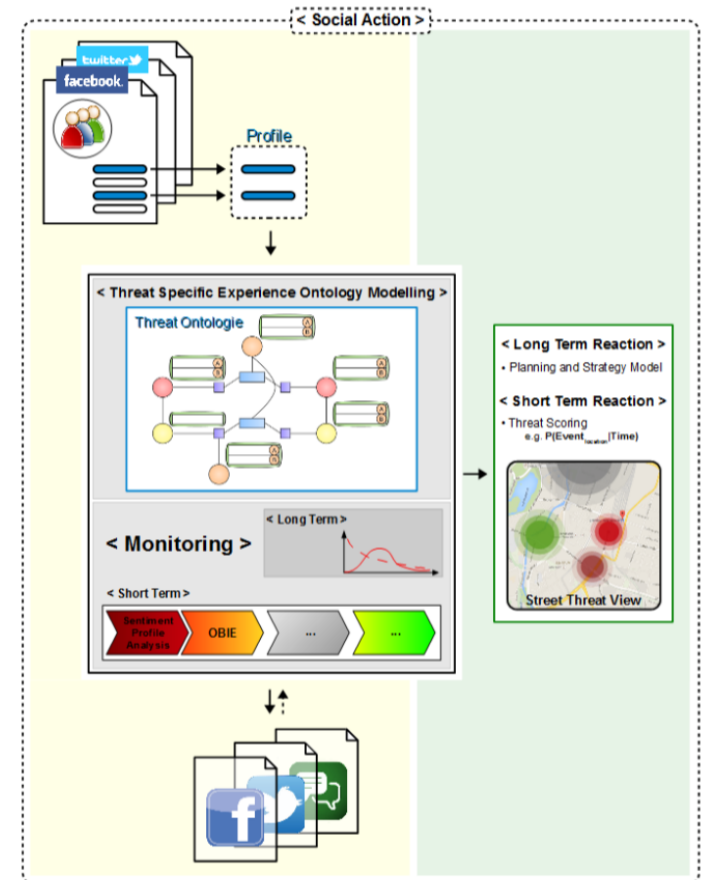
BigData from communication – Predictive Policing

Towards Predictive Policing: Knowledge-based Monitoring of Social Networks

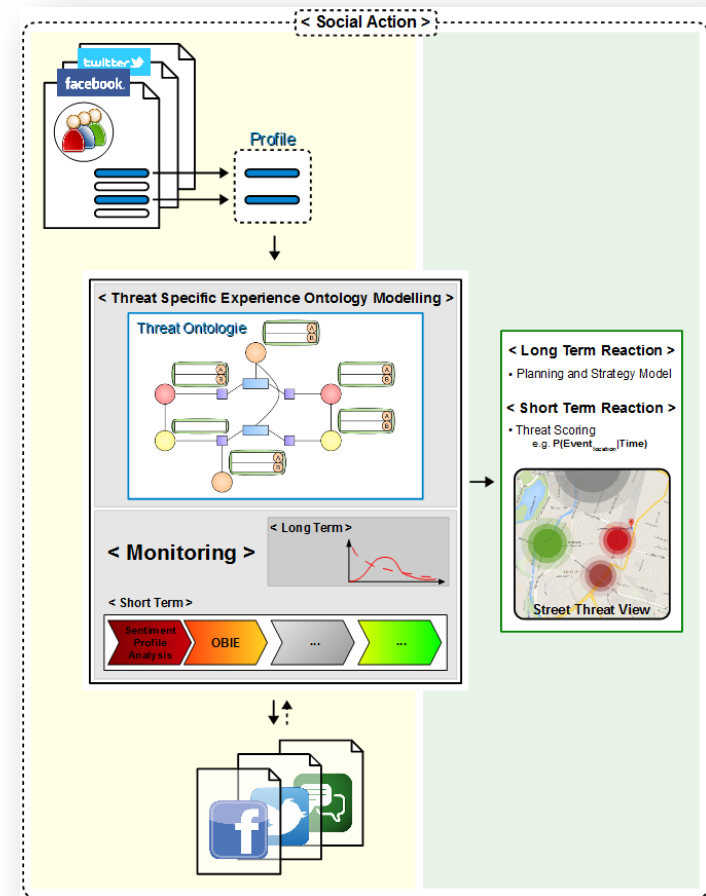
Michael Spranger, Florian Heinke, Steffen Grunert and Dirk Labudde
 University of Applied Sciences Mittweida
 Mittweida, Germany
 Email: {name.surname}@hs-mittweida.de

Abstract—Increasing the resilience of the society against disorders, such as disasters, attacks or threatening groups, is one of the biggest challenges. Recent events highlight the importance of a resilient society and steps which are required to be taken in resilience engineering. *A priori* the optimal way to handle such adverse events is to prevent them, or at least provide appropriate courses of preparation. The essential requirement for every kind of preparation is information about relevant upcoming events. Such information can be gained for example from social networks and can form the basis for a long-term and short-term strategic planning by security forces. For that purpose, an application framework for knowledge-based monitoring of social networks is proposed, which is able to predict short-term activities as well as the long-term development of potentially dangerous groups, and discuss its basic concepts.

Index Terms—forensic; text processing; resilience engineering



- Extraction of profiles for monitoring
- Extraction of post or comment content relating to the threat ontology and a sentiment analysis
 - enables short-term reaction
- Simulation of temporal development of groups and hot-spots
 - enables long-term resource and strategic planning
- Increasing resilience



Opinions and moods (Sentences)

rights rioters in Leipzig-Connewitz

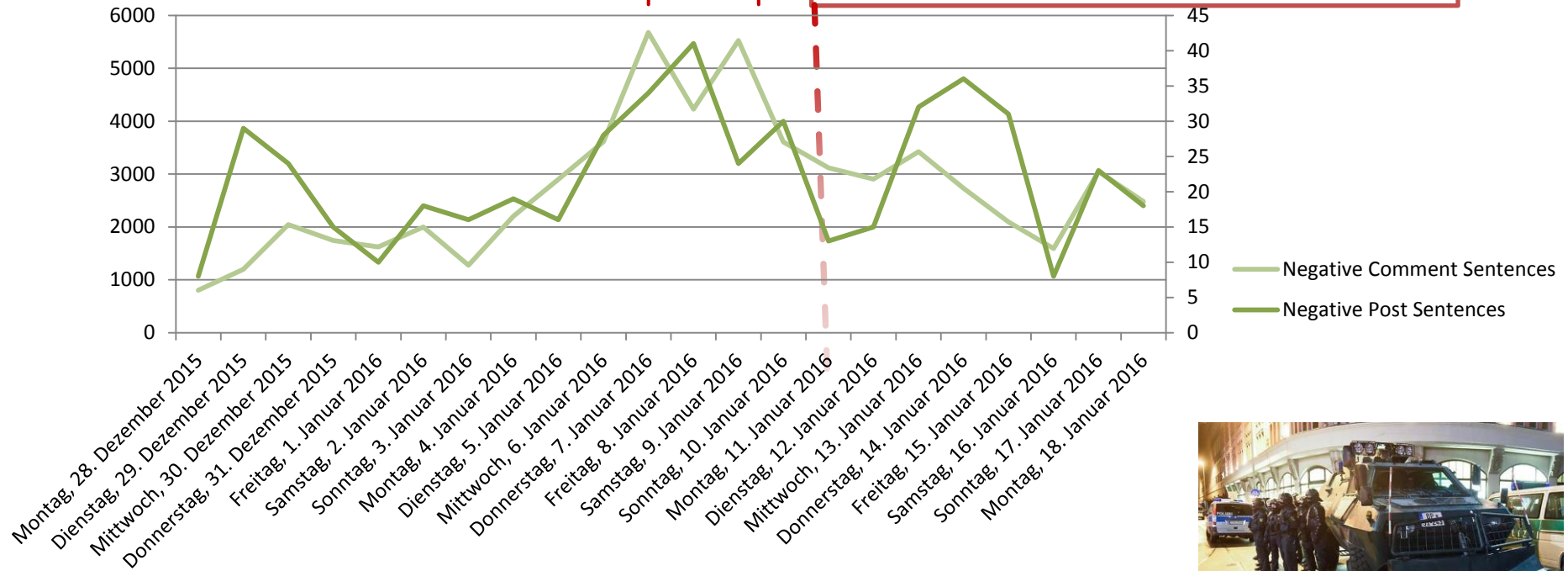


hot phase

Montag, 11. Januar 2016

Entsetzen in Leipzig Rechte Randalierer verwüsten Connewitz

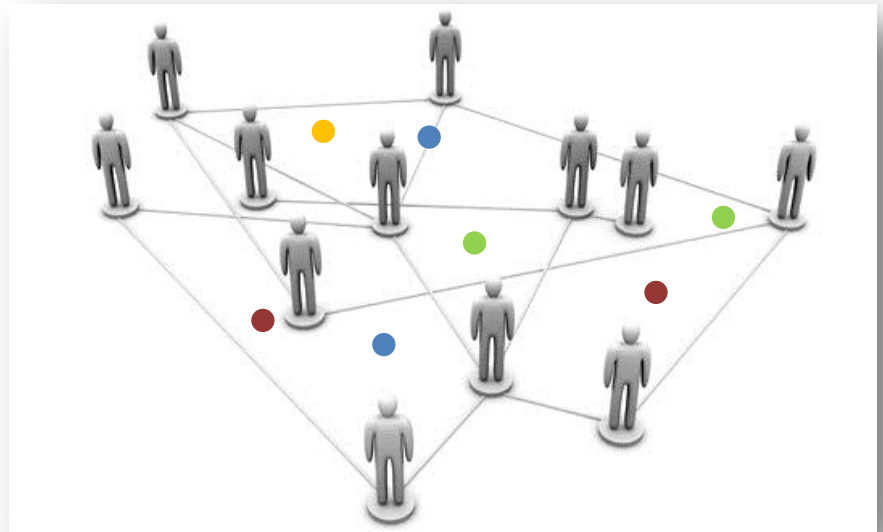
Während in der Leipziger Innenstadt das fremdenfeindliche Legida-Bündnis demonstriert, nutzen rund 250 Hooligans die Gelegenheit, in Connewitz einzufallen. Sie ziehen eine Schneise der Verwüstung durch das linksalternative Viertel, bevor die Polizei die Lage unter Kontrolle bekommt.



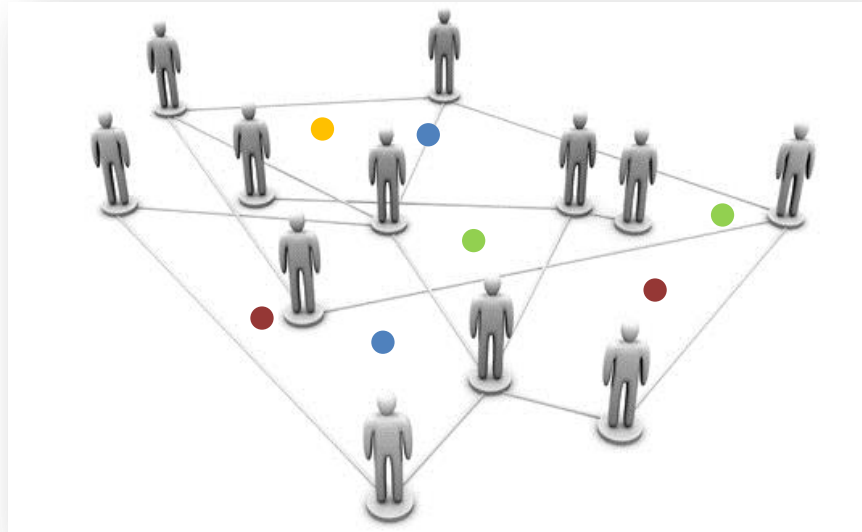
statistical testing units



„energy agents“



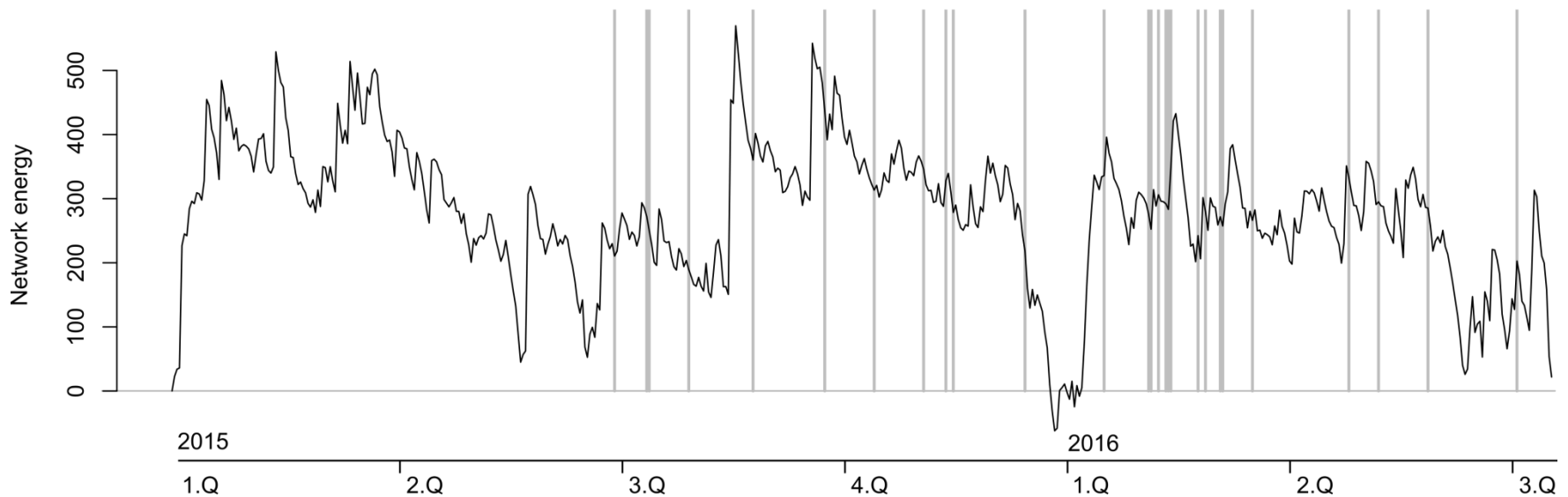
- comprised by a set of independent **statistical testing units**
- the role of each unit is **to test the degree of change between sentiment statistics obtained for two points in time**



- an energy value is assigned to each unit
- for each observation (sentiment and comment frequencies), it is decided whether a given unit conducts a statistical test **on the new data depending on its energy value**
- **in the test, the new data is compared to the data the unit processed during the last test!**
→ **the network memorizes the data and underlying dynamics!**

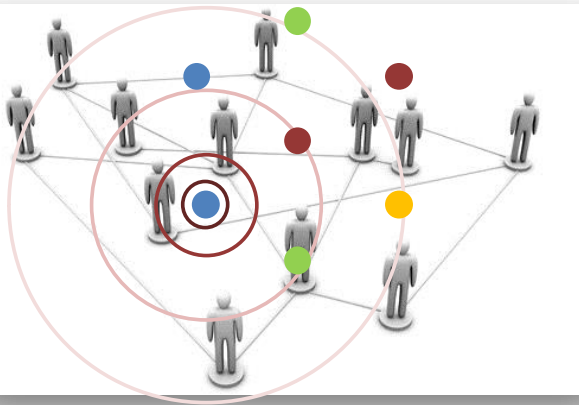
Sentiment analyses of user comments made on official PEGIDA's facebook page
→ per day 'temper' tracking

Boltzmann-stochastic Chi-Squared Tester Network

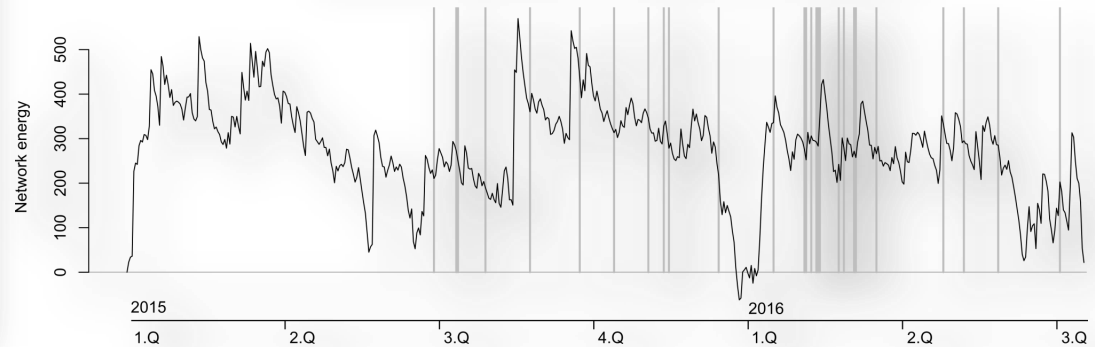


**The networking energy is the sum of all unit energy values
→ Representation of 'network awareness'**

Sentiment analyses of user comments made on officials PEGIDA's facebook page
→ per day 'temper' tracking



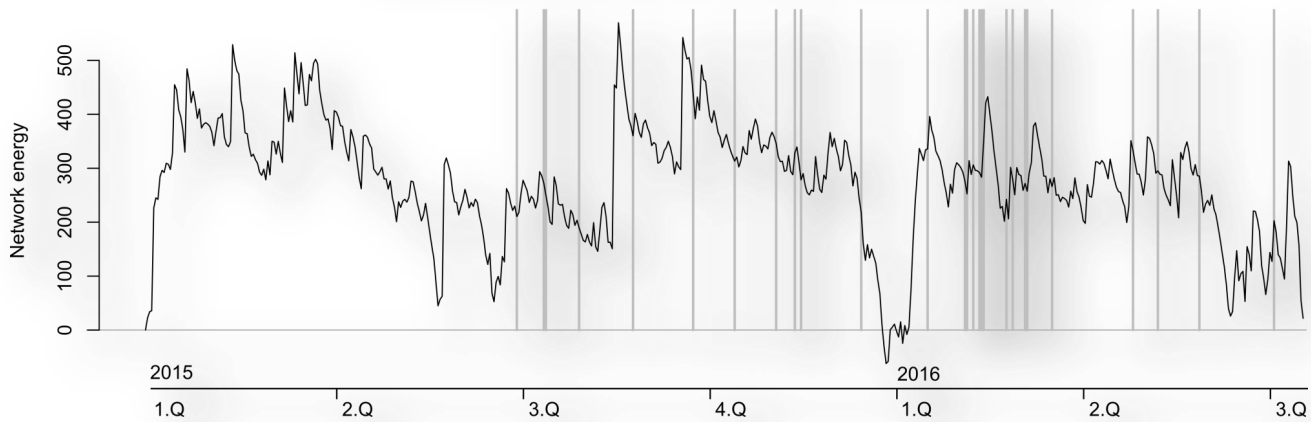
Boltzmann-stochastic Chi-Squared Tester Network



Are energy peaks correlated to major criminal incidents with anti-Islam and anti-refugee background?

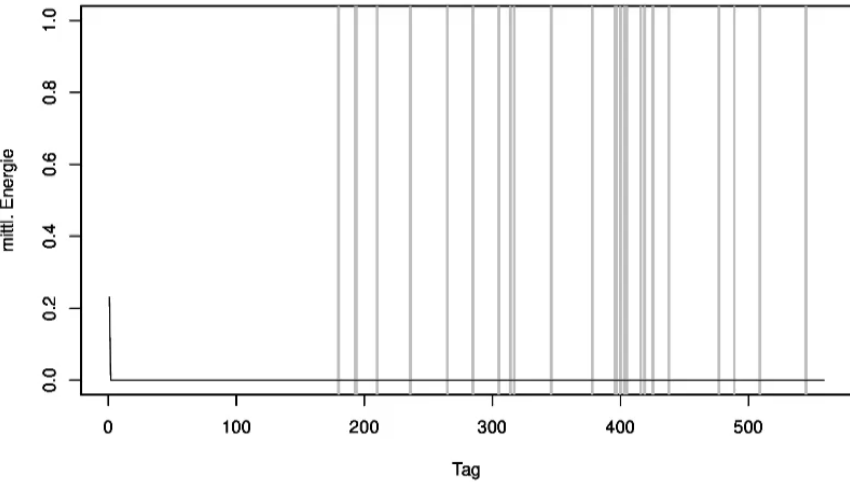
**The networking energy is the sum of all unit energy values
→ Representation of 'network awareness'**

Boltzmann-stochastic Chi-Squared Tester Network

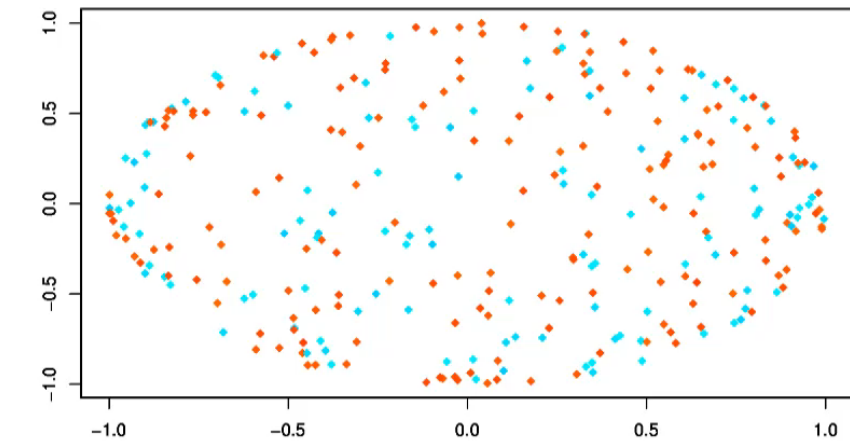


Are energy peaks correlated to major criminal incidents with anti-Islam and anti-refugee background?

Social networks – Predictive Policing



The networking energy is the sum of all unit energy values
 → Representation of 'network awareness'

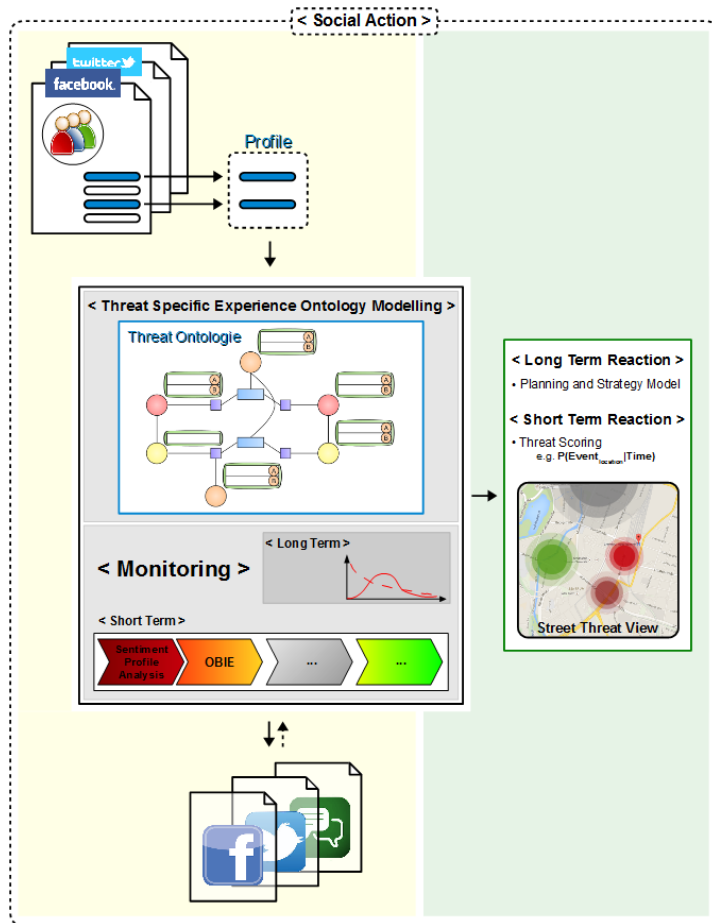


Datei-Bearbeiten: Format: Ansicht

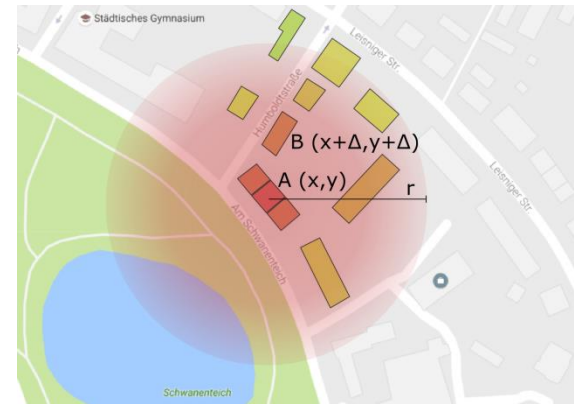
27.06.2015	erweis	15	Schwarz	Witten	21	26	mit seinem Stahlhelm auf den Kopf + auch als ein Opfer am Boden liegt, verletzt er es weiter + erst als Passanten eingreifen lässt er ab, zeigt den Hiltlergruß und verschindet	http://www.freipresse.de/NACHRICHTEN/SACHSEN/Polizei-fasst-rechtseradikalen-schlaeger-194191387.php
27.06.2015	Heßen	"	Brandanschlag	auf geplante Flüchtlingsunterkunft"	Täter sind in Gebäude eingedrungen und haben eine Wohnung angezündet		http://www.spiegel.de/panorama/justiz/messias-anschlag-auf-asylunterkunft-brandstifter-zwei-festgenommen-verurteilt-a-1089818.html	
10.07.2015	Leipzig	(Gohlis)	zweimalig	nachrichtliche Schüsse auf ein bewohntes Flüchtlingsheim, so dass mehrere Scheiben zu Bruch gingen			http://www.vz.de/mitteldeutschland/polizeiermitteldeutschland/asylsuchende-in-angst-schüsse-auf-fluechtlingsheim-in-bohlen	
27.07.2015	Freital	Springatz	explodiert	im Auto von Michael Richter, Vorsitzender der Linken-Fraktion im Stadtrat			https://www.lpb-bw.de/fremdenfeindlichkeit.html	
11.07.2015	Leipzig	(Gohlis)	zweimalig	nachrichtliche Schüsse auf ein bewohntes Flüchtlingsheim, so dass mehrere Scheiben zu Bruch gingen			http://www.vz.de/mitteldeutschland/polizeiermitteldeutschland/asylsuchende-in-angst-schüsse-auf-fluechtlingsheim-in-bohlen	
22.08.2015	Heidenau	wieder	Flüchtlingsheim	Straßenanschlag zwischen hunderten Rechtseradikalen und der Polizei + Polizei mit Flaschen, Steinen und Feuerwerkskörpern beworfen + später auch Auseinandersetzungen mit Rechtseradikalen und Gegendemonstranten der Antifaschisten			http://www.welt.de/politik/deutschland/heidenu-wieder-kravalle-von-rechtsextrrem-a-1049417.html	
20.09.2015	Freital	Anschlag	auf Flüchtlingsunterkunft	mit Pyrotechnik + fast zeitgleich Anschlag auf örtliches Büro der Linkspartei			http://www.lpb-bw.de/fremdenfeindlichkeit.html	
10.10.2015	Crimmitschau	Anschlag	mit Stahlkugeln auf Wohnungsgesellschaft Crimmitschau, so dass mehrere Fensterscheiben zu Bruch gingen + Firmenschild und Eingangstür des Büros mit rechten Parolen wie "Vollstveräter" oder "wir kriegen euch alle" beschriftet				http://01kipsqrk-crimmitschau.de/anschlag-auf-crimmitschauer-wohnungsgesellschaft-zusammenhang-zur-fluechtlingsunterbringung-liegt-nah/	
30.10.2015	Dippoldiswalde	und Dresden	Brände	in zukünftigen Flüchtlingsunterkünften			https://mopo24.de/nachrichten/cossebaude-brandanschlag-aufgeklart-fluechtlingsunterkunft-hotel-via-festnahmen-brandstiftung-74174	
08.11.2015	Leipzig	(Beucha)	Unbekannte	versuchten geplante Flüchtlingsunterkunft in Brand zu setzen + Täter zerstörten die Eingangstür und Fenster und warfen einen Brandstift in das Gebäude			https://rdl.de/betrieb/anschlag-auf-geplante-fluechtlingsunterkunft-biet-leipzig	
11.11.2015	Crimmitschau	Brandanschlag	auf Wohnhaus, in dem Flüchtlinge untergebracht wurden + Täter warfen Brandstift gegen die wand des Hauses und Blumenkübel auf ein Fenster				https://www.freipresse.de/LOKALES/Zwickau/NEUBAU/Brandanschlag-auf-fluechtlingsunterkunft-in-Crimmitschau-19354333	
10.12.2015	Cheimitz	(Jahnsdorf)	Circa 30	Leute attackieren einen Bus mit Flüchtlingen mit Steinen und Feuerwerkskörpern			http://www.welt.de/politik/deutschland/article149878311.html	
11.01.2016	Leipzig-Comnewitz	Randale	durch circa 250	Rechtsextrrem in Leipzig-Comnewitz, welches für seine Linksalternative Szene bekannt ist + die Scheiben dazwischen geschleudert wurden + zeitgleich demonstrierte Legida in der Innenstadt			http://www.welt.de/politik/deutschland/article150933487.html	
29.01.2016	Cheimitz	Gräma, Leipzig (Draß)	vier	Flüchtlingsheime angegriffen durch werfen von Steinen auf das Gebäude + in den Leipziger Fall sollte auch ein Sprengsatz gezündet werden + Ermittler gehen von Fremdenfeindlichkeit her			http://www.netz-gegen-nazis.de/artikel/chronik-rechtsextrrem-rassistischer-und-antisemitischer-gewalt-in-februar-2016-10633	
02.02.2016	Freital	Unbekannte	Täter	beschrifteten Fassade und Eingangstür eines Linken-Parteibüros mit schwarzer Farbe + auf Eingangstür stand „NS“ und an Luftaßäule in der Nähe waren rechte Symbole und Antifaschisten-Sprüche			http://www.dnn.de/Mitteldeutschland/Polizeiermitteldeutschland/Linken-Partei-büro-in-Freital-mit-schwarzer-Farbe-beschriftet	
02.02.2016	Zschopau	Wann	grahlt vor zwei	Mädchen (11 und 12) mit Pistole, Klappmesser, Feuerzughenitz und Feuerzeug + anschließend zeigt der Mann einen Hiltlergruß und greift mit Anschlag auf ein Flüchtlingsheim			http://www.netz-gegen-nazis.de/artikel/chronik-rechtsextrrem-rassistischer-und-antisemitischer-gewalt-in-februar-2016-10633	
05.02.2016	Gräma	Neumann	hat	linksalternativen Jugendgruppen lebensgefährlich verletzt + Täter hat das Opfer mit einem Messer/Schraubenzieher versucht zu erstechen - er verfehlte knapp das Herz, durchstach aber die Lunge und das Opfer lag zwischenzeitlich im Koma - vorher gab es wohl Streit zwischen einer rechtseradikalen und einer linksalternativen Gruppe			https://mopo24.de/nachrichten/mehere-gewalttaten-erzgebirge-sachsen-aue-zschopau-annaberg-buchholz-45125	
06.02.2016	Bautzen	Unbekannte	Täter	attackieren einen Flüchtlingsheim (12) mit Pfefferspray			http://www.netz-gegen-nazis.de/artikel/chronik-rechtsextrrem-rassistischer-und-antisemitischer-gewalt-in-februar-2016-10633	
07.02.2016	Heidenau	"MITTENDRUM"	Wahlmal	gegen Ausländerfeindlichkeit vermutlich von Neonazis übermalt + 15 Meter langer Schriftzug komplett in rot-schwarz-weiß übermalt (nationalen Farben von Nazi-Deutschland)			https://www.lpb-bw.de/fremdenfeindlichkeit.html	
18.02.2016	Clausnitz	mehr	als 100	Menschen blockieren für mehrere Stunden die Anfahrt eines Busses mit Flüchtlingen und beschimpfen die Insassen + wir sind das Volk" auf			https://www.lpb-bw.de/fremdenfeindlichkeit.html	
18.02.2016	Limbach-oberfranna	11-jähriger	syrischer	Junge von zwei Männern verprügelt und getreten			https://mopo24.de/nachrichten/junge-verpruegelt-und-bekanntem-maennern-limbach-oberfranna	
18.02.2016	Löbau	Brandanschlag	auf bewohntes Flüchtlingsheim + zwei Täter, die der rechten Szene zugeordnet wurden, warfen Molotowcocktails gegen die Eingangstür und gegen Fenster der Unterkunft				https://www.sz-online.de/nachrichten/brandanschlag-auf-loebau-fluechtlingsheim-327766.html	
21.02.2016	Bautzen	schwerer	Brand	in noch unbewohntem Flüchtlingsheim + in Nebenstraße rechte Parolen gerufen und schaulustige jubeln			https://www.lpb-bw.de/fremdenfeindlichkeit.html	
27.02.2016	Cheimitz	mehr	als 100	Menschen blockieren für mehrere Stunden die Anfahrt eines Busses mit Flüchtlingen und beschimpfen die Insassen + wir sind das Volk" auf			https://www.sagesspiegel.de/politik/brandstiftung-in-bautzen-geplante-asylunterkunft-brennt-schaulustige-jubeln12993480.html	
27.02.2016	Cheimitz	mehr	als 100	Menschen blockieren für mehrere Stunden die Anfahrt eines Busses mit Flüchtlingen und beschimpfen die Insassen + wir sind das Volk" auf			http://www.welt.de/politik/deutschland/article152746225.html	
28.02.2016	Cheimitz	drei	verleibende	Männer attackieren Taxifahrer mit ausländischen Wurzeln + dieer Flüchtlinge mit versucht, ein Kostümlieder den ihn zu treten + alle drei Täter riefen rechte Parolen und zeigten den Hiltlergruß			http://www.netz-gegen-nazis.de/artikel/chronik-rechtsextrrem-rassistischer-und-antisemitischer-gewalt-in-februar-2016-10633	

Possible events

predictive policing 2.0



Number of criminal offences and their „conditions“



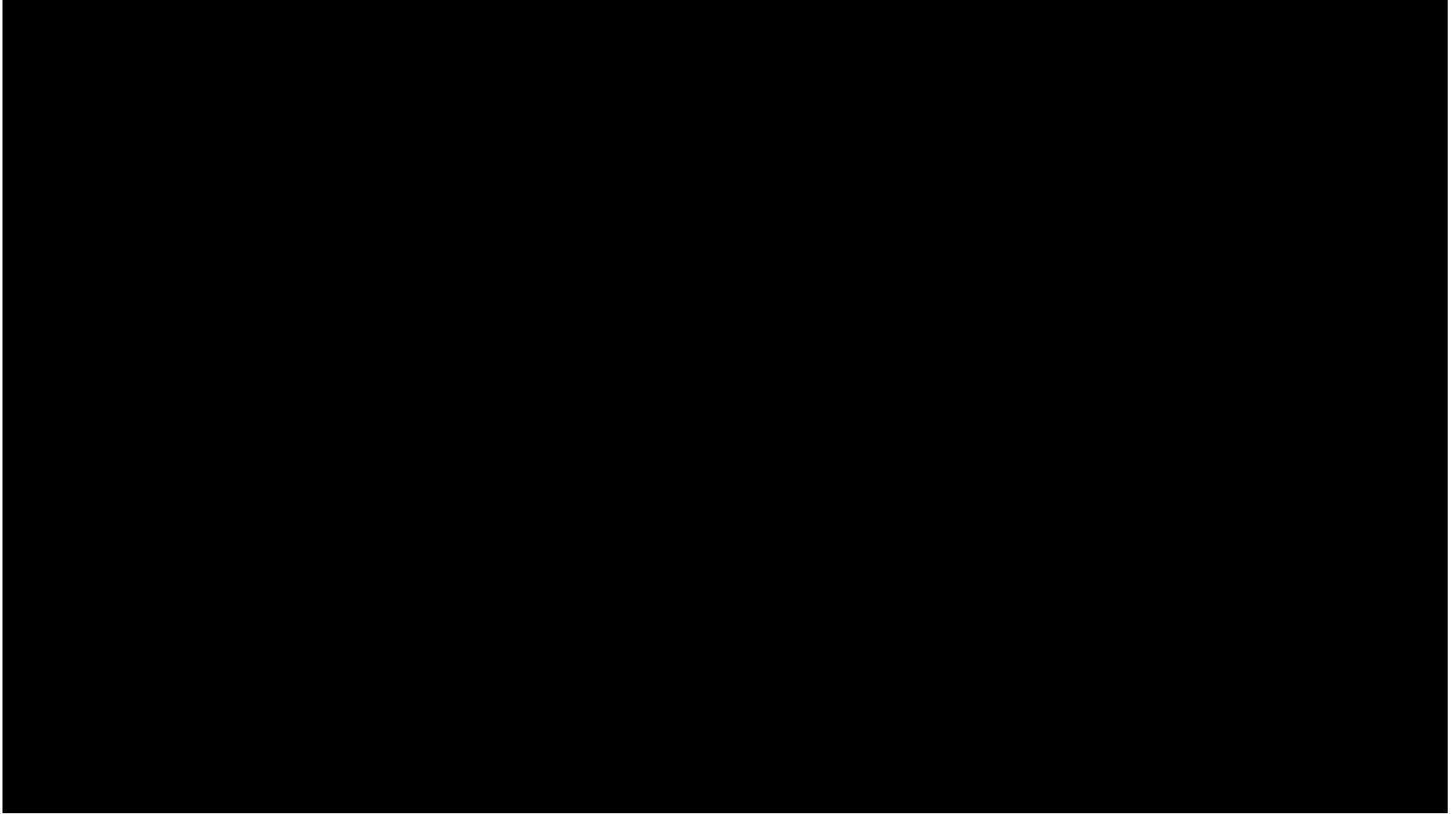
Combination of two statistically approaches:

Real world and Digital world

Data from social networks: communication behavior of “virtual” groups

Is this the future of policing?

Is everything allowed?



Wednesday, July 25 - 15:45 - 17:30

How Dark is the Darknet? -- Dangers and Possibilities for the Digital Society



Time for discussions

FEEL FREE TO ASK QUESTIONS



VISIT US AT: www.bioforscher.de/FoSIL