I, Internet:
We are more Borg than we thought

Christiane Rütten | cr@23bit.net | twitter.com/p4ula | #iinternet

On science

„And just because there is a very different degree of certainty where we can prove or at least convincingly affirm like in the Hard Sciences, this certainty comes at the price of being unable to talk about those things that cannot be proven or computed, that belong into the sphere or society, culture, and contingency."

Dr. Martin Warnke, kutur.informatik, 2004

Informational systems

- Synthesis
- Mimesis
- Contingency
- Autopoiesis
- Emergence

- Self-similarity

Warnke, kultur.informatik, 2004
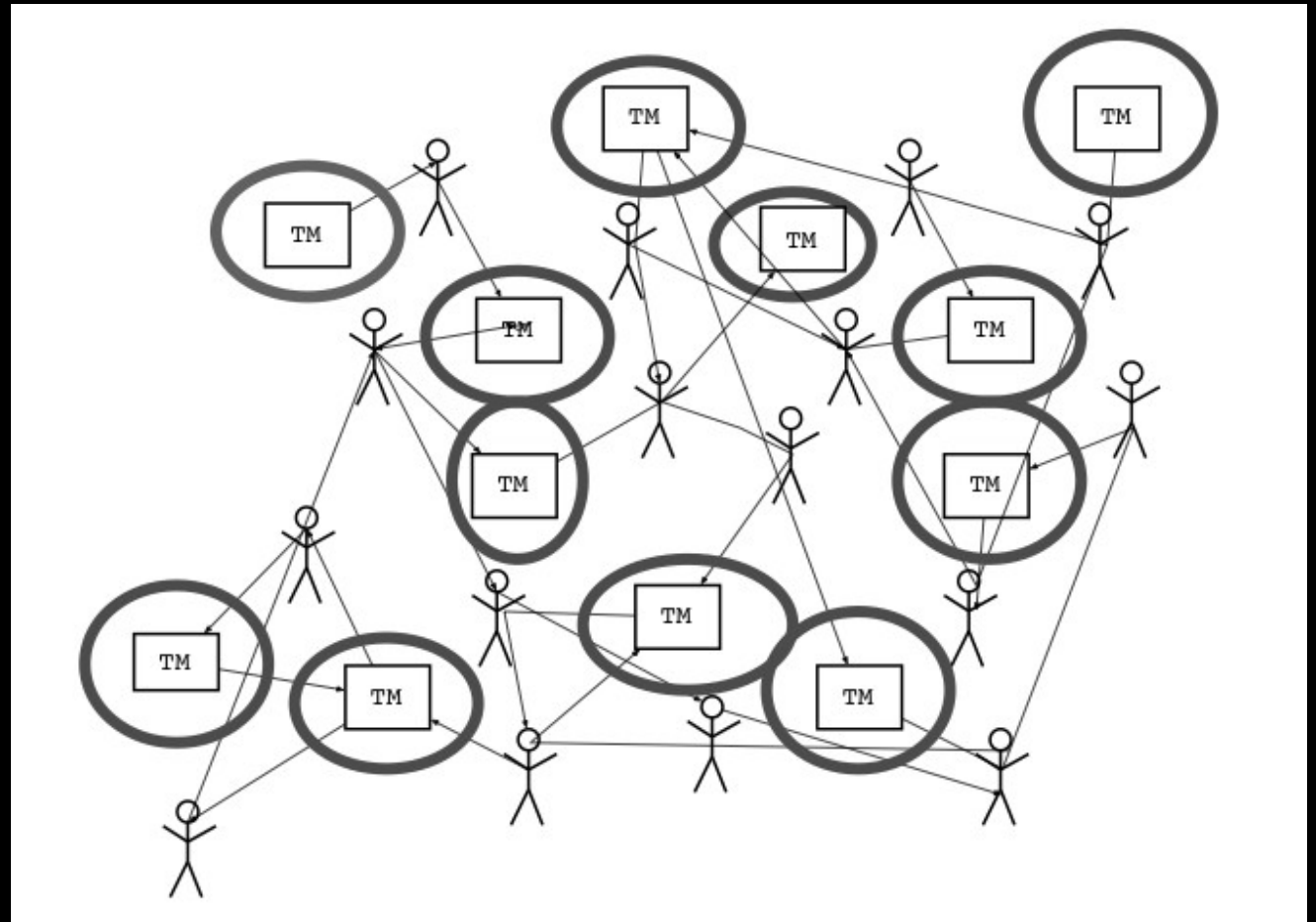
Emergence

„Therefore, emergence is not just accumulation of complexity, but a break and fresh start in complexity.“

Luhmann, 1994

Emergence (example)

Biological neuron

- Input: dendrites
- Output: axons
- Information: electrical impulses
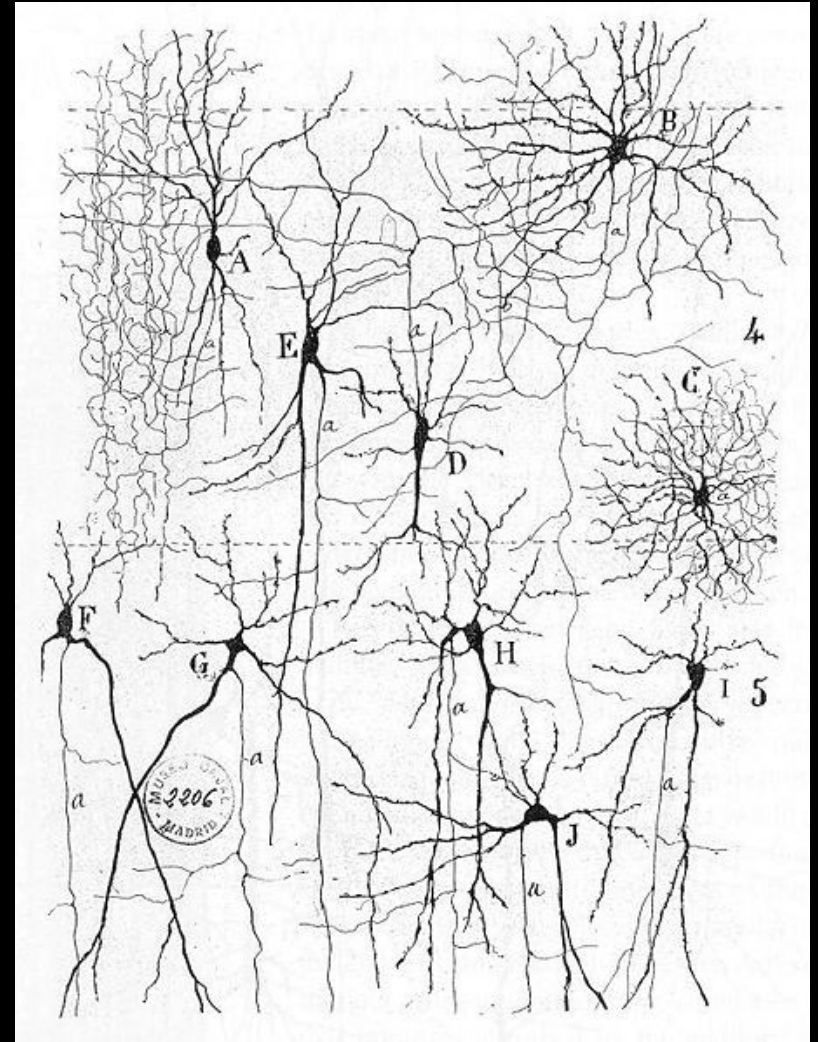
Artificial neuron
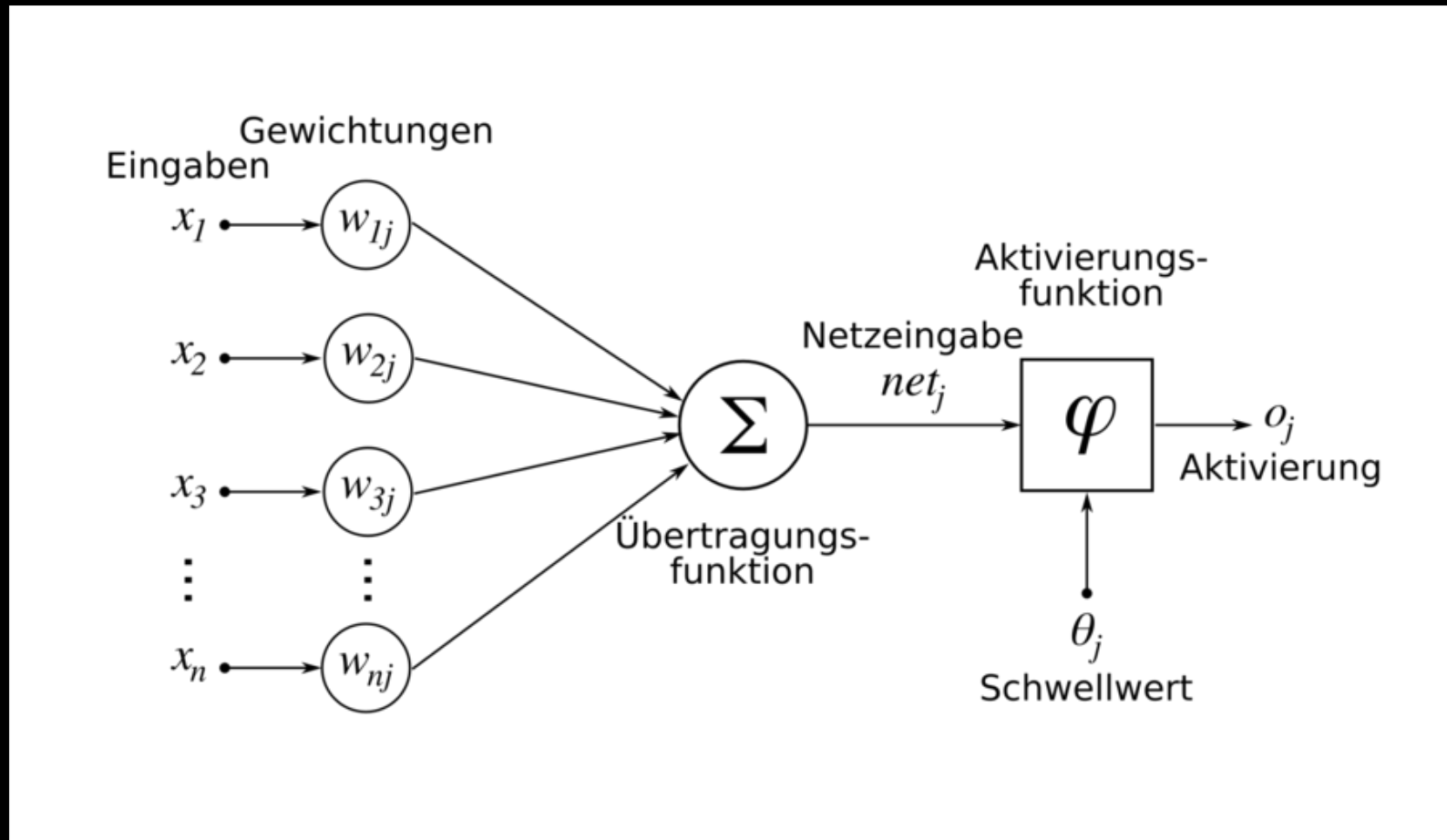
Neuronal network

Input layer   Filter layer   Output Layer
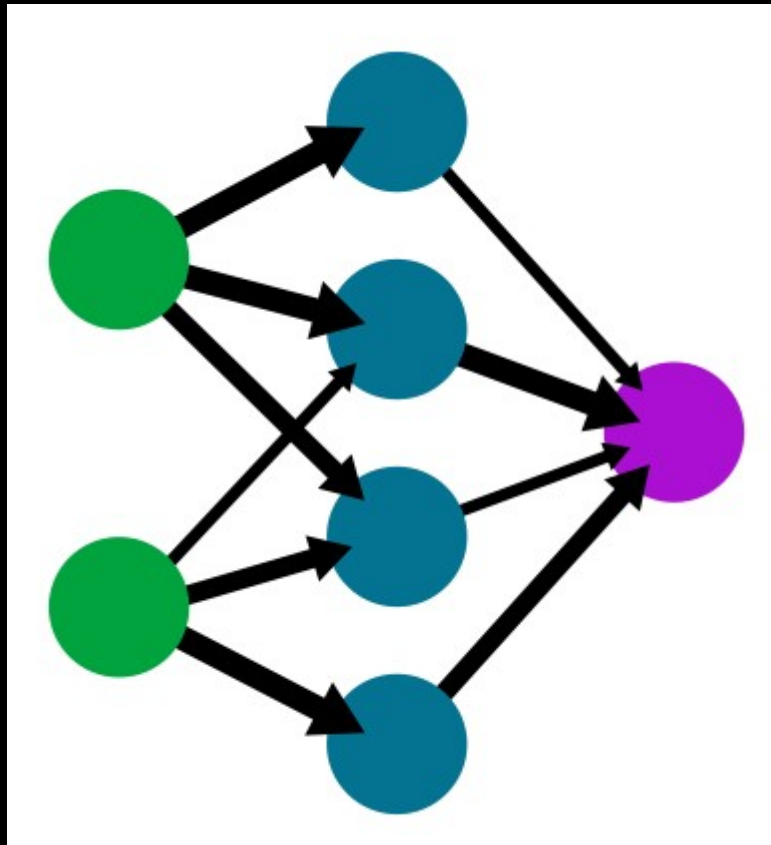
The Illusion of the Individual

- I think, therefore I am (Borg)
- Questionable boundaries
- Artificial limbs
- Augmented reality
- I/O
- Implants
- Explants

I, Cyborg, http://abstrusegoose.com/171

Sometimes I can't tell where I end, and the machine begins.

antenna

RF amp

speaker

ear drum

ossicles

cochlea

auditory nerve

auditory cortex

MY BRAIN

visual cortex

NEURAL NETWORK

vagus nerve

vocal cords

geniculate nucleus

geniculate nucleus

optic nerve

SIM card

hypoglossal nerve

C5
C6
C7
C8
T1

retina

retina

microprocessor

Flash

tongue

SRAM

mouth

L4
L5
S1
S2
S3
S4

spinal cord

brachial plexus

monitor

analog/ digital converter

mic

median nerve

radial nerve

ulnar nerve

Wikipedia

lumbosacral plexus

hands

network card

Google

sciatic nerve

tibial nerve

mouse

keyboard

TV tuner

foot

DVD

pedal

bus

throttle valve

engine control unit

fuel injector

bus interface

cache

registers

ALU

control unit

RAM

hard drive

engine

transmission

drive shaft

tire

axle

tire

Sometimes I can't tell where I end,
and the machine begins.

Borg everywhere
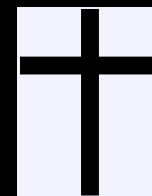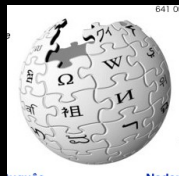
Political parties and governments

- Slow on adapting modern communication
- Very few, but „educated" constituents
- Output: laws, statements

Corporations

- Hierarchical structure
- Static graph
- Little node flux
- Fast internal communication
- Few people contribute to information
- Highly-filtered output

The Media

- Input: more complex systems
  - Increasingly New Media
- Reduce information complexity
- Output to less complex systems

The New Media

- Blogs
- Forums
- Portals
- Internet-based
  - Efficient information distribution
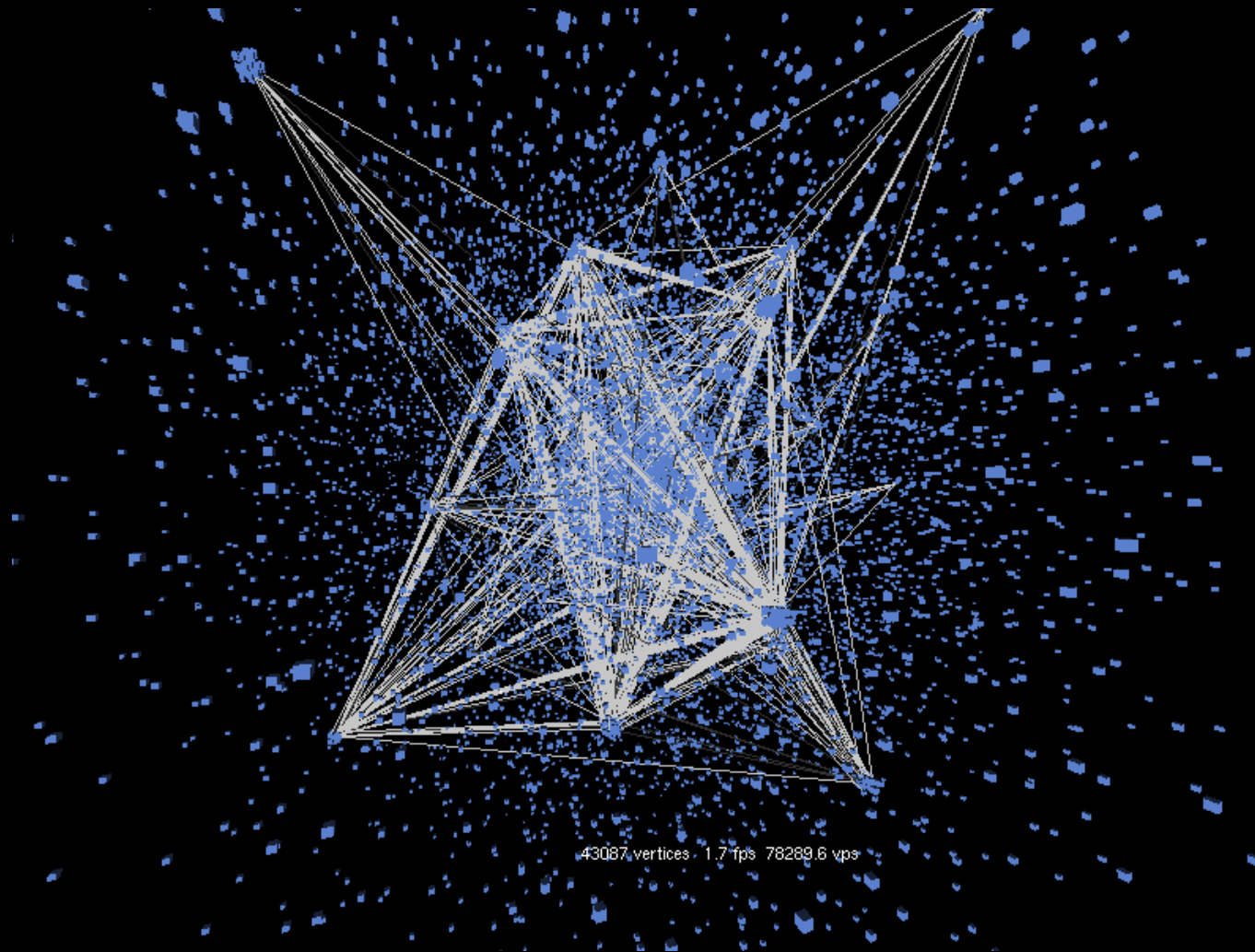 - Low latency
- Open for contribution

4chan

- The Anonymous /b/-ing
- Topic-centric network
- Short memory
- Mostly for teh lulz

Twitter

- 126 followers on average
- ~2 million tweets per day
- Peaks: 300 tweets per second
- ID-centric network
- Topical/relational clustering

Twitter graph

43087 vertices · 1.7 fps · 78289.6 vps

Borg emotions

- Fun
- Grievance
- Anger
- Fear
- Self-preservation
- ...

Borg wanna have fun

- #songsincode
  - @neave: if (stop == true) { hammerTime(); this.touchEnabled = false; }
  - @ara_p: var alabama = {location: "127.0.0.1", skies: "#00f"}
  - @sstaver while (false) { giveUp(u); letDown(u); runAround(); desert(u); makeCry(u); System.out.print("Goodbye"); tell(lie); hurt(u); }
  - …
  - „Man years have been wasted."

Borg in grievance
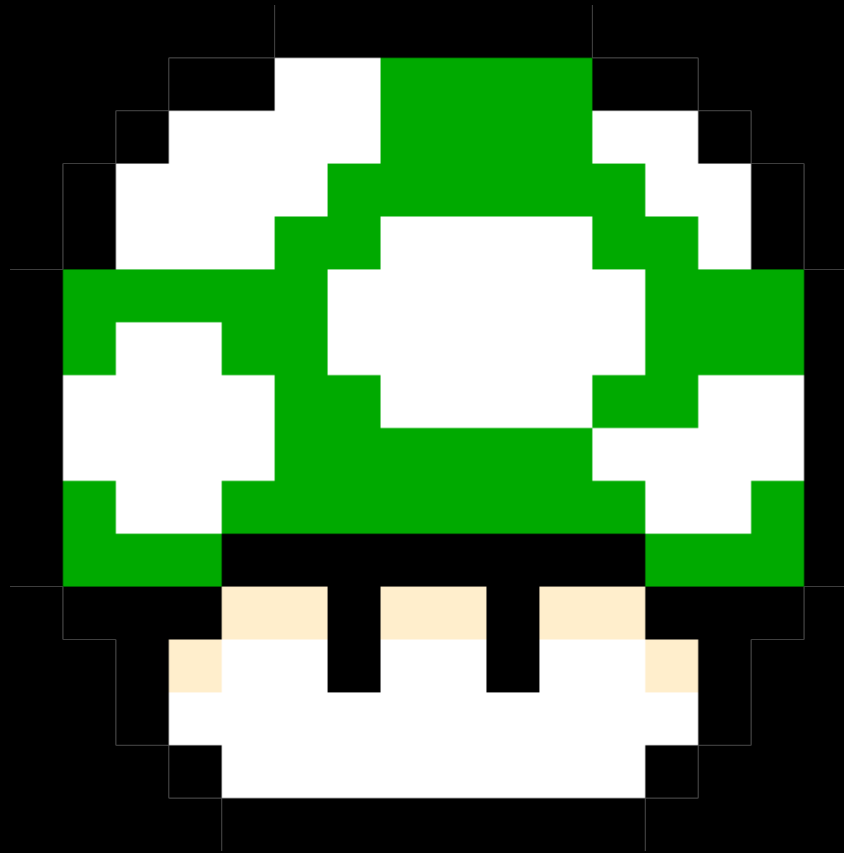
Borg tantrum

- … mostly while processing input of political nature.

Borg in fear

- Self-preservation
- Losing/gainig control over competitors
- Censorship debate
- Strong attitude towards information freedom

Being Borg feels like...

- 100 eyes
- 100 ears
- 100 memories
- 100 ideas
- 100 life experiences
- 100 emotions
- 100 opinions
- 100 hands
- 100 voices

The power of collective consciousness

- Collective intelligence
- "No more heinleinian polyomaths, instead a web of geeks, all of whom knows a lot about something." (Neal Stephenson)
- Technology symbiosis
- We are many.

Thanks!

Resistance is futile.