# Media Transformation Vorlesung

WiSe 2022-23
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Woche 6



## Swarm intelligence and symbiosis

- Bees
- Micro-organisms in human bodies
  - especially in the digestion system
- Human-horse
  - work
  - control
  - communication
- Human-reindeer
  - pastoralism
  - detailed control
  - general direction
- Ants aphids
  - communication
  - control
- Intentionality



https://influentialpoints.com/Gallery/Aphis\_viburni\_viburnum\_aphid.htm



#### Interaction and control

- Mario Luraschi:
  - https://www.youtube.com/watch?v=9dIRV6Z8xgY
- Kenzie Dysli und Doma Vaquera
  - https://www.youtube.com/watch?v=uaagPXIBowo
- Bujador, 7-year-old black lusitano stallion for sale
  - https://www.youtube.com/watch?v=d4IBuL2Nqd8



## Wayfinding as communication

- Being-in-the-landscape
- Finding the way through interaction
- Senses
- Maps
- GPS



### **Tools**

- Using a pen to write
  - or using your hand
- Fitting tools
  - -axes
  - magic wands
- Thinking tools
  - take part in our cognitive processes



## Humans and computers

- Tool usage
- Interactivity
- Controlling
- Being controlled
- Steering
- Being steered



# Seeing through manipulation

- As programmers we can see through manipulation
  - making the world real by interacting with it (Piaget)
- Tool users
  - response
  - feedback mechanisms



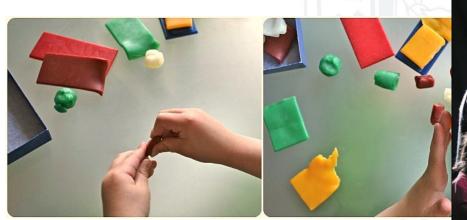
## Modelling

Creative process of thinking/reasoning

meaning made and negotiated through creation and

manipulation of external representations.

manipulation of external representations





 process by which researchers make and manipulate external representations ("imaginary concreta", Godfrey-Smith 2009) to make sense of conceptual objects and phenomena



## Digital humanities modelling

- Making sense via practical thinking
  - making in order to understand
- How do we learn from models
  - interacting with them
  - observe the new
  - test what we think we know
- Models or modelling
  - activity



## Digital humanities modelling

- Making sense via practical thinking
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  - interacting with them
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- Models or modelling
  - interactivity



## Learning by doing

- Interacting with the world around us
- the people around us
- the computers around us
- the books around us
- the reality around us
- the virtual reality around us
- the stories around us

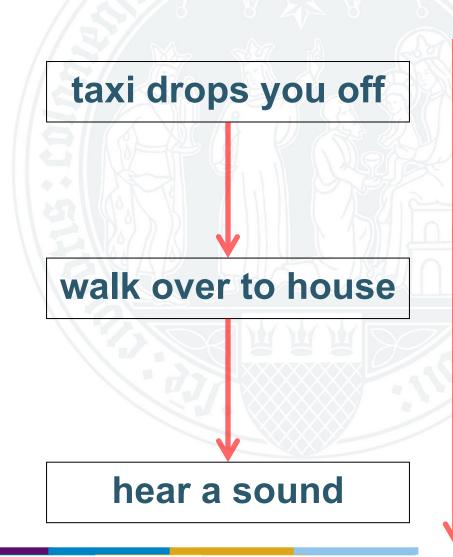


## Storytelling

The taxi drops you off in front of a big white house. The house looks desolated. You walk over to the side of the house, through the half meter of grass. You hear a low humming sound from an open window.



- (looks desolated)
- walk over
- hear a sound
   Story as a
   movement
   through events





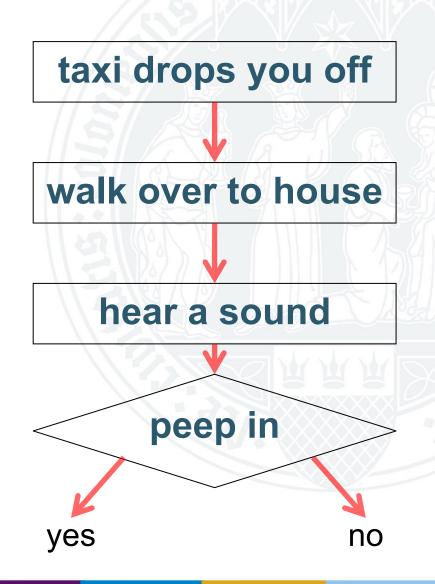
## Storytelling with branches

The taxi drops you off in front of a big white house. The house looks desolated. You walk over to the side of the house, through the half meter of grass. You hear a low humming sound from an open window.

Do you go closer to peep in? (Y/N)



- drops you off
- (looks desolated)
- walk over
- hear a sound
- go closer
- peep in





## Interactive storytelling

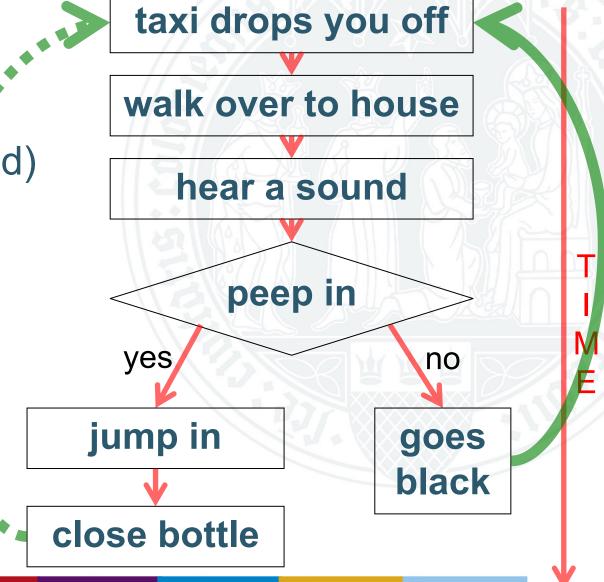
Do you go closer to peep in? (Y/N)

- Y: You see a gas bottle with the valve open and a candle lit in the corner. You jump in and close the bottle
- N: You wait for a few minutes for the others to arrive. There is suddenly a loud noise and everything goes black.



## Interactivity

- drops you off
- (looks desolated)
- walk over
- hear a sound
- go closer
- peep in
- jump in
- close bottle
- goes black

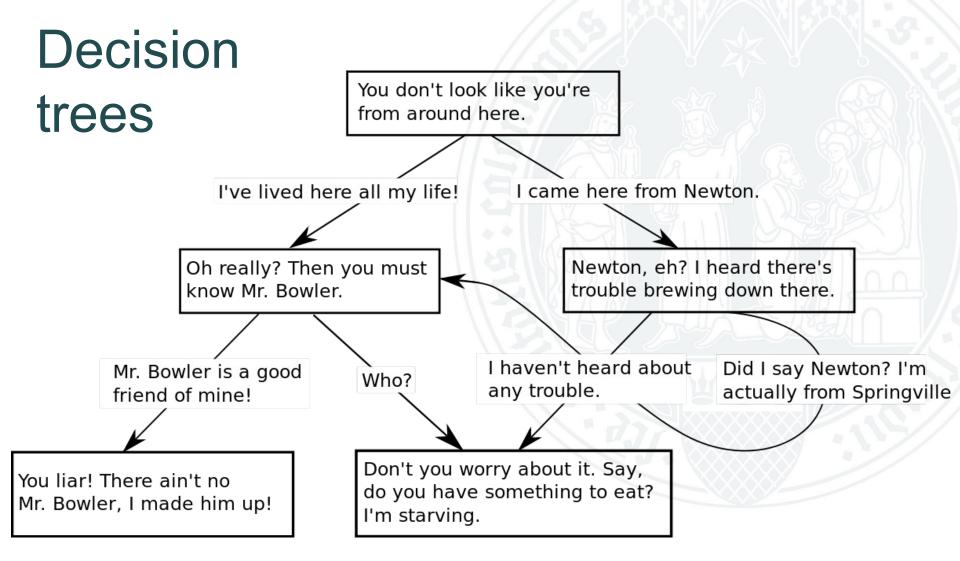




#### Choice

- Choose what to do
- Choose who to be
- Choose to play again
  - re-birth
- All choices are within limits
  - the human condition?





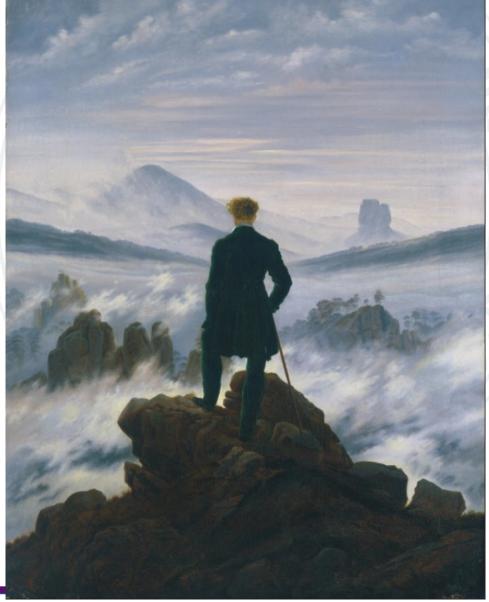
By Dcoetzee - Own work, CC0, https://commons.wikimedia.org/w/index.php?curid=12067659



#### Limitations of choice

- How many ways to the mountain?
  - can follow the path
  - or another path
  - or off path
- Continuous choice

Caspar David Friedrich. Wanderer über dem Nebelmeer, um 1817. Hamburger Kunsthalle.

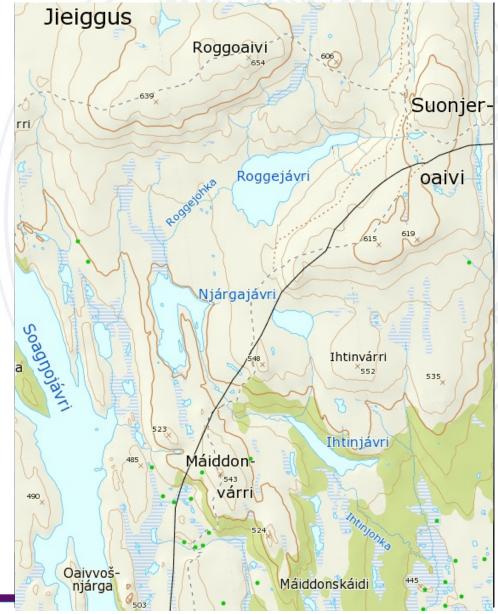




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Norgeskart. http://www.norgeskart.no/

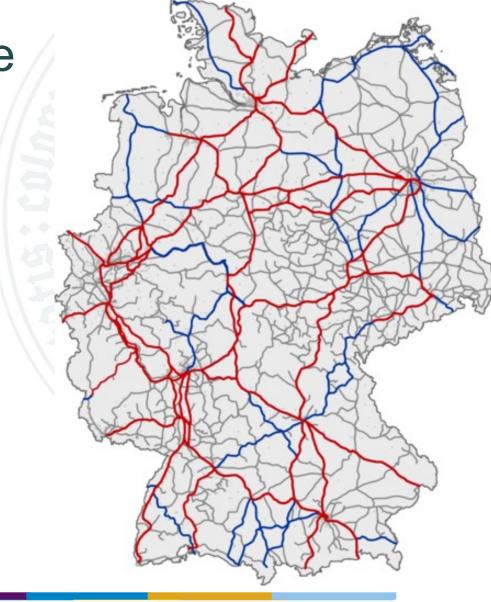




Limitations of choice

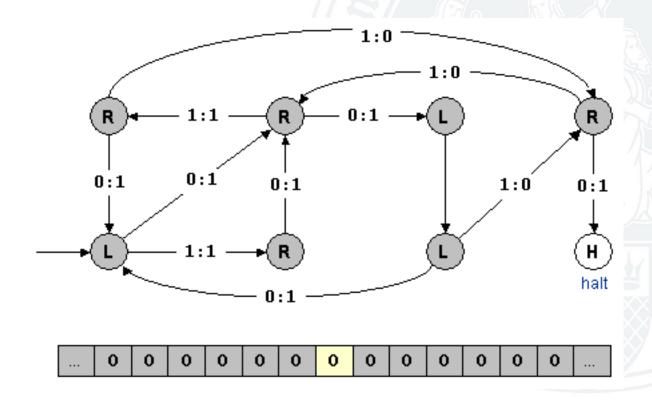
- How many train routes to Hamburg?
  - can follow one track
  - or another track
  - not off track
- Discrete choice

Bahn-Streckenkarte\_Deutschland.png: Qualle derivative work: YouthOfSword (talk) - Bahn-Streckenkarte Deutschland.png





### States as networks



Robert Sedgewick and Kevin Wayne. (2000–2016). *Introduction to Programming in Java.* 5.4 Computability. http://introcs.cs.princeton.edu/java/54computability/



#### Movement

- Through
  - a landscape
  - a train network
  - a text
  - a painting
  - a VR game
- Like painting and poetry
  - no absolute differences
  - different expressions
  - different humans



#### Games and life

"I would like people to play it once...because that's life. Life you can only play once...I would like people to have this experience that way."

[...] it is a game, and Cage understands that people will naturally want to go back and play through again, and even perhaps reload a previous save point to avoid unpleasant results that might occur because of actions taken in the game.

To this, Cage says, "I'm fine with that, but the right way to enjoy Heavy Rain is really to make one thing because it's going to be your story. It's going to be unique to you. It's really the story you decided to write...I think playing it several times is also a way to kill the magic of it."

David Cage about Heavy Rain in: Gaskill, J. (2009). Quantic Dream's David Cage: Play Heavy Rain Several Times, "Kill The Magic Of It." http://www.g4tv.com/thefeed/blog/post/698809/quantic-dreams-david-cage-play-heavy-rain-several-times-kill-the-magic-of-it/



## Music and singularity

- ➤ What are you doing in ten years from now?
- ➤ Play. I hope that one day I will manage to gather all the threads in this one tone that will knock down all the human beings on Earth. Aarrgghh!!!

Ottar Skagen is interviewing Bugge Wesseltoft, in Jazznytt, nr.1, 1993. http://www.wesseltoft.de/press/bugge\_jazznytt93.pdf



## Beyond the limits

- Music of one tone
  - simplicity
- Games only played once
  - life
- The aim to get beyond the limits of the medium



## Freedom in storytelling

- Telling a story
  - or
- Creating a story?



## Freedom of text based stories

- High: telling story
- Being told story
  - this is where interactivity is most relevant?
- Low: reading story



## Freedom in storytelling

- Before the story is told
  - freedom
- After the story is told
  - locked

- When the walk is walked it is fixed
  - but we can always walk again
  - and tell new stories



## How close can one get?

- The aim for reality
  - confessional literature
- Write your life
  - play your life?
  - design the game of your life?
  - of others' lives?
- Can we make continuous choices in games?
  - or in life?



#### Text as code

- Performance
- Text as a code (to be decoded)
- as score (to be played)
  - improvisation
- The fact that somebody gives you alternatives does not mean you are free
  - but not that you are unfree either

