

[Course] Frédéric Kaplan (@frederickaplan), Time Machines [How to Build a Time Machine]

[Kaplan's personal web page: <http://www.fkaplan.com/en/pag1-bio.html>]

Project Website: <http://dhlab.epfl.ch>

- changes to Geneva (prior it was almost a walled medieval city)
- panoramic view of Geneva - reconstruction of Geneva in 1850: http://www.panoramio.com/?no_redirect
- relief Magnin, at Maison Davel: shows the city in ca. 1850 <http://www.ville-ge.ch/mah/index.php?content=6.2.1.3.5.&langue=eng>
- using "bird's eye view" as a tool without realizing how revolutionary it is
- What is missing of Google's Maps & Street views is the time factor
- <http://robotflaneur.com/> based on google street view thanks to the work of google that made the space machine-readable (ie not only visible) : we now live in a huge map \o/ => did he say so or not ?
- Check this game based on Google street view : <http://geoguessr.com/>
- we are living in a "big now" - relationship between time and space (high intensity "now")
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- Hilarious depiction of year 2000 prediction: "en l'an 2000" images: <http://www.ufunk.net/en/insolite/en-lan-2000-le-futur-imaginer-en-1910-avec-24-illustrations-retro/>
- Travelling through space and through time: can we build the tools to do it?

Can we build Google Map of Past, Facebook or other social networking for past?

Information mushroom: <http://fkaplan.files.wordpress.com/2013/03/champignon-en-lucida-3.png>

Digitization of information available can help with that as well as extrapolation of information (simulation).

Used Digitization and Simulation for VENICE TIME MACHINE:
<http://fkaplan.wordpress.com/2013/03/14/lancement-de-la-venice-time-machine/>

80km of archives of Venetian history over 1000 years written in different languages, documenting every detail of Venetian history

Goal: Transform 80 km of Archival documents spreaded on 1000 years in a single digital knowledge system

Digitizing 450 volumes per day! And so 10 years. (First step of the project).

Maturing techniques to improve efficiency

- digitize, transcribe (crowdsourcing), translate, index documents

- demonstrates the development of language and also the meta-development of documents/documentation
- speech recognition software might show a way to improve OCR of historical documents if we know what kind of text we expect
- next step: semantic extraction of 10 billion events for different type of information search from it.

It will allow us to discover how Venice developed as a city as well as an empire

- from this data, we can also extract information about, say, maritime routes (and we can build a Mediterranean simulator)
- allows for a recreation of maritime habits (i.e. if I were living in 1323, how would I get from point A to point B) ["routerank of the past"]

<http://orbis.stanford.edu/>

Inconsistencies have to be taken care of while generating these simulations. These include:

- A. Incompleteness
- B. Errors
- C. Falsification

in primary sources;

and

- A. Inconsistencies and Contradictions (intra as well as inter document)
- B. Errors in transcriptions
- C. Interpretive Biases

in secondary sources

Also, some additional ones during processing and pre-processing of documents.

Coding metadata permits to speak about the notion of "fictional space" (in order to say that we speak about possible representations, and we always deal with a "truth").

Metadata coding will not ensure correctness but a procedure for correcting whenever it is found. A kind of inconsistencies tracker.

Coding uses RDF standards and some additional TRICKS....

Problems of the word fiction: he prefers the word fiction because it has the potential of being true

Who is this tool for? propels us into second half of talk

- larger goal is to create a sense of attachment (the VTM is their project)
- one strategy: make the search/visualization/contribution tools disappear...
- Aimed audience composed by researchers AND a large audience to engage them in various ways to evaluate using some evaluation matrices.

The missing piece: students, prepare them for a change, which can happen or is seen as happening as it did in life sciences. So that they are ready for the Paradigm shift in the Humanities: large-scale projects

Teaching

Course of Kaplan: dh101.ch #DH101 --> give them the feeling of being part of something larger than the course

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Guiding Challenges while teaching the students:

MOOC courses as a way of teaching students and engage them in such large scale projects and engage them in a distributed manner where they learn while working on REAL project. (and crowdsourcing)

The project tries to invent a new kind of large-scale academic projects.

Question: What about financial aspect ? Well... it's a scientific adventure...

Question: What kind of team is already in place?

- a big one... but one that always has room for more. ;)

Question: How can you be so optimistic about manuscript OCR?

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