Project DigiVis

- University of Innsbruck
- Interdisciplinary Team
  - Teaching, Media Studies, German Studies, History, Computer Science
- Sponsored by the Tyrolean government
• MediaWiki + extensions as framework
• Structuring, visualizing, and analysing of digital archives
• Prototypical case studies with materials from cooperation partners
Partners

- Ernst von Glasersfeld Archive
- Tyrolean State Archive
- Diocesan Archives Brixen
- City Archive Innsbruck
- Museum of the Peoples, Schwaz
- Focus on publications of Ernst von Glasersfeld
- Analyze and display discursive argumentation structures
- Abstraction-levels with Semantic MediaWiki (SMW) and Semantic Text Annotator (STA)

Case Study
EvG-Archive
The understanding, like the eye, whilst it makes us see and perceive all other things, takes no notice of itself; and it requires art and pains to set it at a distance and make it its own object. (John Locke, 1690)

As adults we are constantly deceiving ourselves in regard to the nature and genesis of our mental experiences. (John Dewey, 1895)

One of the remarkable features of the Behavioral era in American psychology is that so many leaders and followers of that creed could claim to be Empiricists, cite John Locke as their forefather, and get away with it.

Had they read the first chapter of "Book II" of his major work, An Essay Concerning Human Understanding, they would have found, among many others, the following enlightening statements. Paragraph 2 has the heading: "All ideas come from Sensation or Reflection." Paragraph 4 has the heading "The operations of our Minds," and it is there that Locke explains what he means by "reflection":

This source of ideas every man has wholly in himself: and though it be not sense, as having nothing to do with external objects, yet it is very like it, and might properly enough be called internal sense. But as I call the other Sensation, so I call this Reflection, the ideas it affords being such only as the mind gets by reflecting on its own operations within itself.

In our century, it was Jean Piaget who vigorously defended and expanded the notion of reflection. He had no opportunity to distance himself from empiricists who denied the mind and its operations and wanted to reduce all knowing to a passive reception of objective "sense data". Yet, he should not have found it difficult to agree with Locke’s division of ideas because it is not too different from his own division between figural and operative knowledge. Similarly, I feel, Locke would have had a certain respect for Piaget’s effort to yet understand at a distance and to make it the object of investigation. And both men, I have no doubt, would have agreed with Dewey about the risk of deceiving oneself by taking mental experiences as given. It is therefore with caution that I shall proceed to discuss, in the pages that follow, first my own view of reflection, abstraction, re-presentation, and the use of symbols, and then a tentative interpretation of Piaget’s position. If, at times, I may sound assertive, I would beg the reader to keep in mind that I am fully aware of the fact that I am merely offering conjectures—but they are conjectures which I have found useful in constructing a model of mental operations.

Reflection

If someone, having just eaten an apple, takes a bite out of a second one, and is asked which of the two tasted sweeter, we should not be surprised that the person could give an answer. Indeed, we would take it for granted that under these circumstances any normal person could make a relevant judgment. We cannot observe how such a judgment is made.
Add further SMW-properties to each annotated text passage. (step 2)
Apply a second annotation on previously annotated argumentations. (step 3)
Entry Point to Archive

- Classic search mechanics
- Design principles of “Generous Interfaces” *
  - Show first, don’t ask
  - Provide rich overviews
  - Provide Context
  - Show high quality primary content

* Mitchell Whitelaw, 2015
The Construction of Knowledge:

Let us assume that I was here yesterday and, just as now, had a glass of water in front of me. I come in today and say: “Oh, this is the same glass, the identical glass that stood here yesterday.” If someone asked me, how I can tell that it is the identical glass, I should have to look for a particular that distinguishes this glass from all others.
Connections between argumentations, topics, and persons.
Create pathways from selected text fragments.
Custom MediaWiki Extension

- Specialpages
  - Processing pipeline
  - Visualizations
- Corpus-linguistic text analysis via python programs (on the server)
- Custom API-endpoints, parser functions, and templates
Current State of the Project

- Nearly half-time, runs till end of September 2020
- Implementation and evaluation
- Developing visualizations with a designer
- Follow-up projects with cooperation-partners
THANK YOU!
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