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# Digital Humanities, Knowledge Complexity and the Six 'Aporias' of Digital Research

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#### DHers as intermediaries



"intermediaries," (Edmond 2005)

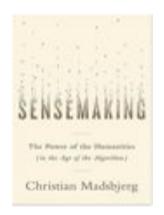
"translators" (Siemens et. al., 2011)

"hybrid people" (Liu et al 2007)



### Technology needs humanities







Mitchell Baker



Stewart Butterfield

"...if we have Stem education without the humanities, or without ethics, or without understanding human behaviour, then we are intentionally building the next generation technologists who have not even the framework or the education or vocabulary to think about the relationship of Stem to society or humans or life." (Mitchell Baker)

## Why speak of 'aporias'





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KPLEX Corpus: 38 linked interviews about big data research with computer scientists, collections holding institutions, and an interdisciplinary research community reaching from philosophy to fMRI studies

Evidence of six areas of significant, unresolved 'cultural' conflicts

See for yourself! Data available at: doi:10.17026/dans-xe6-hpm5

### 1. Language matters



Throughout human history, language has been a barrier to communication. It's amazing we get to live in a time when technology can change that. Understanding someone's language brings you closer to them, and I'm looking forward to making universal translation a reality.

Data is: "text" (WP2 I-1), "stored information that I can manipulate, search, query, get some statistics about" (WP2 I-2), "anything that I am analysing, or using to train a system" (WP2 I-4), "any material that you have in hand... like digital material." (WP2) I-3), "everything that I can use to study a certain subject" (WP2 I-5), "just evidence" (WP2 I-9), "facts, collected through facts... numerical facts that given in periodical time" (WP2 I-12), or "any piece of information, literally anything." (WP2 I-8).

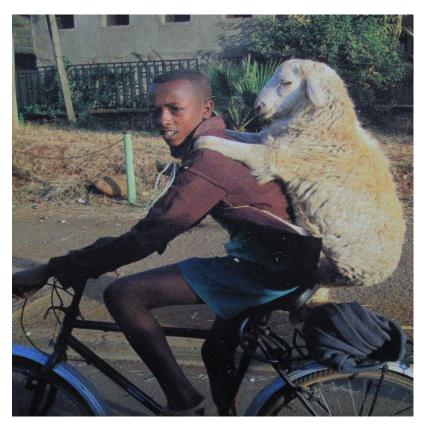
### 1. Language matters



translation a reality.

"I don't think like my opinion is that important. I try to explain what I know. I think of data as...I just mean that I don't have maybe enough knowledge in the area. I know some things, but there are definitely like way smarter people but I try to give you what I have." (WP2 I- 3)

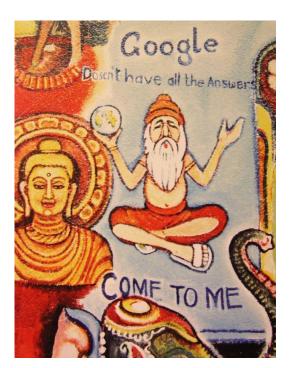
#### 2. Context matters.



"So, from an anthropological point of view/ We had all these 'writing culture' discussions on subjectivity. And that we have always to see the data we produce in relation to the researcher. And his or her standpoint in the landscape. Or standpoint in the situation, in the field. And these discussions about data storage imply that data is independent from the researcher. And from an anthropological point of view, I would say this is a step back."



## 3. Tools and standards are pharmaka



"People are so adapted to the Google search that they don't even know anymore that there is a different way of searching. [...] but we feel that this is more connected to the way in which researchers today, especially the young generation, use search engines and tools that we developed in the past."



# 4. Data without theory is as problematic as theories without evidence.

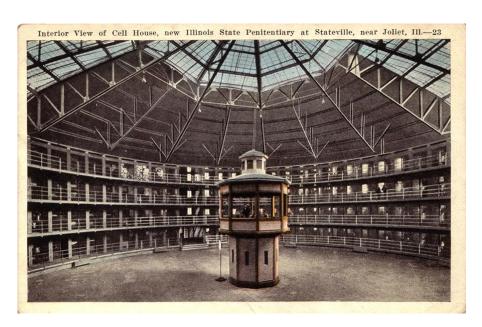
"I think [a] lot of the big data projects have failed miserably. They don't find the things that they wanted to find because they didn't have a theory. So, you need something to start with." (WP4-I15)

"So, whether you consider something to be noise or not is depending on how you frame your problem" (WP4 I2)





# 5. The power structures of technology inhibit accommodation of analogue or hybrid narratives.



"[...] you can say well it doesn't really matter if people don't realise we have much more, but it limits use of our collections and it also skews research towards what's easily available, properly catalogued, easy to find and ideally available freely online because that's what researchers will go to because it's just the most convenient."





"I thought that the big divide would be me with them or us with them. But it ended up that they among themselves were fighting. Like really fighting because statistics people for instance, socially, their data was problematic in MANY, many ways because they didn't know where it came from. So, actually their ideas aligned very well with my ideas that we need to do some sort of ethnography around the production of the data."

Humanistic competences are not taught in conjunction with digital approaches

	1	2	3	4	5	6	7	8	9	10
The Prostitute	1	0	0	0	0	0	0	0	0	1
The Soldier	1	1	0	0	0	0	0	0	0	0
The Parlourmaid	0	1	1	0	0	0	0	0	0	0
The Young Gentleman	0	0	1	1	0	0	0	0	0	0
The Young Wife	0	0	0	1	1	0	0	0	0	0
The Husband	0	0	0	0	1	1	0	0	0	0
The Sweet Girl	0	0	0	0	0	1	1	0	0	0
The Poet	0	0	0	0	0	0	1	1	0	0
The Actress	0	0	0	0	0	0	0	1	1	0
The Count	0	0	0	0	0	0	0	0	1	1

## Conclusions, Lessons and Recommendations



- 1. Mind the linguistic cultural gaps in DH projects
- 2. Defend the maintenance of context and provenance
- 3. Use DH's unique perspective to understand, expose and defend the methods of the humanities (exploratory, iterative, critical, speculative, dialogic...)



Humanists out there, specifically nondigital humanists: If someone were to call the sources you use "data," what would your reaction be? If you don't consider your sources data, what makes them different?

11:50 AM - 31 Oct 2018 from Los Angeles, CA

57 Retweets 170 Likes 📵 🚱 🙊 🥞 🍪 🧽 🌍













"Calling a source data means that person doesn't value it or respect its integrity."

- 4. Resist the digital Matthew effect
- 5. Promote the knowledge in CHIs regarding privacy and data-linking
- 6. Truly and emphatically support interdisciplinarity
- 7. Embrace the word 'data'

https://twitter.com/miriamkp/status/1057706465 866133504



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# 8. Get out of the box, the world needs your skills.



https://kplex-project.eu/