





Digital Humanities Case Study

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What is the subject of your research?

I am a philosopher with a particular interest in the philosophy of language. There are two reasons for this interest. One is that sometimes debates in Philosophy seem to hinge on how language is used. Perhaps we can get a better grip on debates regarding things like knowledge, goodness, and beauty if we better understand what the words 'know', 'good', and 'beauty' mean. The second reason is that language itself is philosophically interesting. There are unresolved questions around how linguistic meaning works. This is an area where philosophers, linguists, and psychologists can come together. Zooming in, much of my previous research focuses on context-sensitivity in linguistic meaning – how words or sentences can change their meaning across different contexts. Recently I have focused on how corpus linguistic methods can be used in these debates. That includes investigating particular corpora to see how specific words or phrases are used, but also the automated use of very large corpora as a basis for language model technology.

How and why did you get involved with Digital Humanities?

I came across a volume entry called **Vector Space Models of Lexical Meaning** by Stephen Clark, which opened my eyes to the radically different way that linguistic meaning was treated in computational linguistics. I was fascinated, and in the years since I've turned towards combining the kind of methods you find in computational linguistics and corpus linguistics with the kinds of questions typically asked in philosophy of language. But it's been a journey, and not one that I could have taken without the University's help. Being able to attend events like the Digital Humanities at Oxford Summer School is an opportunity to see various digital methods and how they can be applied. I've also benefitted from the expertise of colleagues such as Prof Sylvia Jaworska, who introduced me to methodologies in corpus linguistics. The **DH Community of Practice** has been a great help, as it has allowed me to be part of a community of humanities researchers, often facing similar challenges.

How have you used Digital Humanities methods or principles in your research?

One of my first forays was to employ corpus linguistic methods – exploring how words are used across large corpora – to investigate certain assumptions widely-held in philosophical debates about the word 'justify'. One important philosophical question concerns how our beliefs are ever justified, and in investigating this question, many have made assumptions about the ordinary use of the term 'justify'. I used corpus linguistic methods to challenge those assumptions.

Much of my research now focuses on large language model (LLM) technology. The motivating question has been whether LLM technology should lead us to reconceive how we think of linguistic meaning. The primary relevance of digital methods has been in exploring how language models represent word meaning internally. In one project I ran with Nat Hansen (Reading) and J.D. Porter (University of Pennsylvania),





we investigated whether language models are subject to older criticisms against holistic models of word meaning. In another, I investigated how LLMs deal with linguistic phenomena like context-sensitivity and ambiguity. In future research, I hope to develop a more general method for philosophical questions to be investigated by exploring the way that LLMs behave.

What were the benefits of doing so? Were there any challenges?

Digital methods have allowed me to formulate research questions that wouldn't otherwise be possible. As much of my research is premised on the idea that we can gain philosophical insight from exploring the internal workings of language models, digital methods are fundamental. But there are also challenges. My background in Philosophy gave me no formal training in digital methods, so it is difficult to upskill to a point where you feel able to conduct research using them. Even when you are ready, the work can be painstakingly slow for newcomers. I've certainly had the experience that many in DH have had of losing an afternoon to some error that someone else could have dealt with in 5 minutes. Another challenge is in being clear on how digital methods will help you answer your research question. We particularly face this in Philosophy as it is less clear how digital methods would help answer questions about the nature of morality, knowledge, or existence (say). I haven't felt willing to engage in the (time-costly) research until I felt sure that there was a question worth answering for a tangible output like a journal article.

What would you advise others to think about when engaging with DH?

The entry cost (in time and effort) can be high, so you need to be sure it will be beneficial. But if you think there is a project worth undertaking and you just don't have the skillset, there are a few things to keep in mind. One is that there are training opportunities available, particularly online (the DH Hub's links page has a good list). Second is that it's worth talking to others within DH. Even if they are in a different discipline or employ different methods, hearing how others approached their research will help you think about how to approach yours. Third is that you shouldn't feel that you have to become an expert. Sometimes you only need to know enough about a method to collaborate with someone. I am pretty poor at coding, but I know enough about it to talk to proficient coders. That is often enough.

Where can we learn more about your research?

The best place is my website: https://jumblygrindrod.wordpress.com/

Find out more

- Jumbly Grindrod (staff profile)
- Jumbly Grindrod (personal website)