

LECTURE 2 Q&A

Ali:

Given the inevitable prevalence of statistical analysis in pretty much all areas of hard and soft sciences today, and given the fact that it is often this statistical analysis that determines whether our models correspond to the data sampled from the real world, could we say statistics is a practice in epistemology today?

We could say that, but we would only be giving a partial answer, or limiting epistemology to “exact” sciences. If, on the other hand, we believe that cultural anthropology, gender studies, and philosophy (among many others) are sciences, then we probably would not say that. (I do not think that philosophy is a science, except for funding purposes.)

To be clear, I wasn't implying that statistical analysis is the ONLY exercise in epistemology today. However, statistics seems to be enjoying a status it did not enjoy before, because it has become an instrument of verification / falsification that any discipline with the slightest empirical orientation has to employ. – There is this world-class statistician and political scientist named Andrew Gelman who, in his spare time, takes a proverbial walk around the web and picks one or two random studies in prestigious journals and then proceeds to find serious flaws in them on methodological grounds—sometimes enailing corrections by the journals and sometimes full retraction. Heaven knows how many papers in psychology and social psychology and economics he has dismantled. He even corrected two of his own older papers. – If there is a method to determine "what we can know", and if this method is inevitably intertwined with statistical inference, then statistics seems to be the gate-keeper of epistemological justification today, even for cultural anthropology (which, by the way, makes extensive use of statistical analysis). Only purely theory-driven disciplines are exempt from paying homage to this new god. – Would you disagree with me?

I would not necessarily disagree with you. There are, however, disciplines that do not think that they need statistical analyses. A nursing scientist, who for their PhD interviewed seven fatally ill patients and concluded something about the meaningfulness of their lived experience, would probably not fully agree with you. Would you fully disagree with them? And if you would, on what grounds? Theirs is not exactly a theory-driven discipline. Is it non-science, then, in your view? Just asking.

Claire:

Is it ethical to use a positivist approach when researching the diversity of human behavior/human experience?

I am not quite sure why not. Surely there is measurable knowledge to be gained about the differences, once identified? And surely it would be good to know something about the prevalence of ways of behaving and experiencing? Am I somehow totally off here?

Jiancai:

Do you think that positivist people are happier than other people? Because they hold a belief that there exists something true in the world and particular social phenomenon have certain level of predictability or reproducibility.

I'm not sure if the matter has been studied, so I don't know. But your reasoning makes sense to me. It might also explain the phenomenon that I mentioned during facilitation, namely, that "exact" scientists tend to turn to religion in their old age. Perhaps this is because, as they mature, they become more and more aware of the uncertainty of their premises, and must assume a new foundation for their thinking. But this is speculation.

Yian:

How to distinguish between empiricism & rationalism as they relate to epistemology in philosophy?

One relies on observation, the other on intellectual processes. Neither can survive by itself. Most empiricists have confessed that we also need reason. Sane rationalists have admitted that they also need observation. The "truth" is in a combination, whichever way we look at the matter.

Ronja:

In propositional knowledge, or in a broader sense, is there a case that false beliefs or lies would actually be the better option?

In propositional knowledge, when the criterion is coherence, correspondence, or pragmatism, not really, no. In real life, often. When your elderly aunt proudly shows you her (in your opinion) hideously ugly new hat, I would not necessarily advise you to share your honest opinion with her. On the level of more important lies, the question is contested. But now we are in the area of ethics and etiquette, not philosophy of science.

Zhiqiang:

*Are we get stuck in the linear improvement of scientific progress nowadays?
Can we achieve a revolution again in the next 100 years, and how?*

People keep saying that there will be a digital / IT / Big Data revolution. Maybe it happened already. But I am not an expert in these things. A more revolutionary turn in the social sciences has been the turn from “logies” like sociology and psychology to “studies” as in indigenous / gender / disability / difference / postcolonial. This could be a paradigm shift. Or a fad that blows over. You never know with these things. Time will tell.

Elizaveta:

Can historical approach in conducting research (in business) be considered positivist?

I wouldn't think so, because there are very few quantifiable and measurable objects of study.

History is not an exact science, but at the same time it operates with facts, which were observed and were (we suppose) real.

Yes, but as said, the facts are mostly incommensurable and random (not in a bad way, just challenging). The result is in their reconstruction and interpretation, isn't it?

The other point is that then those facts were interpreted somehow by someone, but if we assume that the scientist himself/herself participated in observation, what will be the answer?

Would that be autoethnographical research, then? That is so far beyond my knowledge that I dare not answer.

Floris:

We talked about epistemology and knowledge from a very ratio-, or word-oriented point-of-view, touching upon the constructs of different languages, and how that shapes, guides what we know, how we can formulate thoughts and express ourselves, reinforcing or then challenging certain paradigms. I was wondering how philosophy interfaces with, treats, incorporates other knowledge areas based on non-verbal descriptions such as art and music?

Badly. But it could have better responses. I know of two from the history of philosophy. They are about understanding more generally.

Between the World Wars one dominant aesthetic theory stated that art is expression of emotion. Not spitting out a feeling – the “emotion” here is more like an idea or realization. When artists express themselves honestly, they enable their audiences to find the/some expression, too, and to learn something. Something that cannot be put to words. (-> Benedetto Croce, R. G. Collingwood) – My own example is that when in Louvre I see in a seventeenth-century battlefield painting that only the dying horse has a human look in its eyes, I “get” something. Difficult to put to words what, but something.

In eighteenth-century British ethics, an influential idea was that human beings have “internal detectors” such as a sense of beauty, a moral sense, and a sense of justice. These can direct us into correct judgements and right choices in a non-propositional way. David Hume emphasized the message by pointing out that knowledge alone does not move us into action, only some kind of sentiment or feeling can do that. – Our major example of Hume’s rightness could be climate change. We know, but the knowledge does not move us into action. Emotions might, and that is what Extinction Rebellion is trying to utilize.

Martta:

Who decides what is a paradigm shift?

Since Thomas Kuhn invented the concept, he could be a logical choice. If we accept, however, other interpretations, then whoever has an interpretation can also decide. The validity of the decision, of course, is limited to those who believe in the same interpretation. Here is an account by some social scientists: <https://pressbooks.bccampus.ca/jibcresearchmethods/chapter/1-5-research-paradigms-in-social-science/> These are not really shifting, though, in Kuhn’s original sense, as they all still exist. They are what we might call fundamental methodological choices.

Karelia:

Thank you for last Wednesday’s lecture. I was wondering if you would recommend a book/article that you have found particularly insightful in establishing the ‘real scienceness’ of social sciences or qualitative research methods? Mill makes a solid case for social sciences as a distinct field of

scientific inquiry, but I am curious to hear of another perspective and reasoning that might differ from or complement Mill's take on the question.

Our reading materials should offer some guidance. Other than that, I would recommend a no-nonsense of-course-it-is-science-and-let's-get-on-with-it attitude. I was "researching" (= googling) constructivism and positivism and found this: <https://research-methodology.net/research-philosophy/epistemology/constructivism/> It is a sales pitch, but it represents the spirit that I mean. "We have this, this, and this, and they are all respectable. End of story." – Whoops, I usually reveal this only at the end of the course, after you all have wriggled a bit with the question.

Meng:

Should presuppositions be justified through ontological evaluation before they are considered in deductive reasoning? Whether presuppositions should be taken into account in inductive reasoning or hypothetico-deductive reasoning?

Yes to both. In deductive reasoning, we have to check that the entities that we postulate exist – that there are workers in Turku (of course there are) who commute to Helsinki (more uncertain) in the morning. In inductive reasoning, we have to make sure that our observations are correct, i.e. that our presuppositions about our skills of observation are correct. That we can make reliable observations before six o'clock in the morning (I am not sure that I could) and so on. And hypothetico-deductive reasoning is a combination of the other two.

Outi:

Your lecture gave again a lot to think about and it is so useful to be able to listen them again!

First some thoughts. I started wondering what you said in the end about justification of our own research and leveling up the science.

In our field (business studies) there seems to be a lot of discussion on two things

- *justifying the research via problematization*
- *generalization potential of the research results (or actually lack of it)*

It seems that quite often even when the researchers have found a relevant problem which levels up their research they then downplay it in the

conclusions. I do understand why this is done, but on a wider perspective and outside our field we should instead level up like you said.

My actual question is regarding Habermas's reasoning for knowledge seeking. You said that according to him one of the aspects (technical, practical, emancipatory) always overshadows the others. Does this mean that it is difficult (or impossible) to balance the reasoning? That we always end-up focusing on one. I was wondering about all the cross disciplinary studies. (e.g. my field behavioral accounting).

I am so happy to hear that the recordings are paying off. Thanks for telling me!

As for the leveling up, I am no expert, but I can readily see the downplaying happening. But is that not a good thing, too? Not claiming more than you have proven. Perhaps the more "exact" scientists – economists pop to mind – could do with a little humility, as well, so it might be a lesson to them? Or am I thinking somehow wrongly here?

As to your question, I think that there are two answers. (1) Colleagues claim that it is sometimes almost impossible to get funded if the research is not for the "technical interest". Society (meaning a loud voice on Twitter) want results. (2) I am not sure how this will work remote, but in the classroom, I have been able to pose this question time and again. "OK, you say that your research is interpretive or critical and that your aim is understanding or emancipation. But understanding for what? Emancipation for what? Are you not just, in the end, catering for the Man? Is not that understanding and partial emancipation, eventually, a part of perpetuating global capitalism, with its known track record of keeping us on the course of inequality and environmental decay?"

If that sounded like a disillusioned (I am) rant by a post-modernly ironic parlor anarcho-communist operetta major (I am), do not despair. I will explain my thinking in there in my next lecture (after Johanna's first). ;)

Thank you again for eye-opening answers (and in real time!)

Regarding leveling up - I agree that this is tricky question. What is a right portion – I guess nobody knows! But maybe sometimes it would not harm if the less exact sciences would make a bit more noise about themselves ("Kukas kissanhännän nostaa paitsi kissa itse" ja tarkoitan nyt ylpeyttä omasta työstä positiivisessa mielessä)

Regarding the motivation and aims - I still need to work on mine (Luckily I am my own funder)

As a consultant I have tried to help companies to make better decisions and sustainability & environmental aspects have always been in the focus (with which I have tried to justify my profession)- Somehow I would like to have these aspects to guide my research as well, so that my research would benefit not only the academia (and give me a hat) but at least as a tiny practical contribution for a better world.

Yes, it is a balancing act, all right, and a major one. All the best for your endeavors! I'm looking forward to your reactions re my extended rant in lecture 4 (my lecture 3) on Wednesday next.

Mostafa:

In the presentation, you described that propositional knowledge is what coheres with our beliefs. I was thinking who has the authority to evaluate if a subject is cohered with our beliefs or not. When subject is the whiteness of snow, there are no conflicts amount people. But when we consider more complicated phenomena - the correlation between inflation and liquidity, for instance - hardly we can declare that at least all economists in the world have a same belief. So, who should or can evaluate the coherence of a subject with our beliefs?

We are talking about two different kinds of coherence here, I believe. When economists disagree on the correlation, they disagree on the correspondence of the proposition "Correlation X prevails between inflation and liquidity" with how inflation and liquidity actually behave in the real world. A "higher" kind of coherence is what the theory is about. If we believe that statistics are never a reliable source of information, the proposition does not cohere with our "set of beliefs". – The "deciders" are those who hold the same set of beliefs. We cannot enter other people's "circles of coherence" and criticize them for not cohering with our belief set.

Elizabeth:

Much thinking has been done on emancipatory motivations for science since 1968, including on the subject of epistemology (e.g. feminist epistemologies, indigenous epistemologies). If there was room in the course schedule for Epistemology Part 2, are there any key developments in thinking on

epistemology from the past half century or so that you would be sure to include? These could be on the topic of emancipatory epistemologies or not – perhaps there have been other epistemological developments as well.

The course is aimed at (1) giving a rudimentary overview of issues in ontology, epistemology, and philosophy of science and (2) providing the participants with a opportunity to think about their methodological choices. In view of (2), the Epistemology 2 session would concentrate on whatever burning questions consume the participants' minds. If a sufficient number had their issues in the direction of emancipation in its contemporary forms, the session could be prefaced with this as reading <https://plato.stanford.edu/entries/feminism-epistemology/> and proceed from there.

P.S. Forgot to mention that Facilitation 4 on Positionality is intended as an opportunity to go exactly to that direction.

Sahar:

You wrote "Even if something could be known about the things that you are studying, it is possible that it should not be known." – So, shouldn't we stop the journey at this point?!

Can you be a little bit more specific? The sentence means that there are things – how to kill everyone on Earth in one blast, for instance – that are probably best left unknown. I doubt that any of the course participants is planning anything on that scale. So, which journey do you think should be stopped?

Siddhant:

- 1. Ethnography and its analysis have observations, theoretical frameworks, some inference, yet what is it that makes it an "interpretive method" rather than "positive", is it the lack of mathematics, or the lack of predictive power? Some may argue that induction from ethnography can be used to predict what may happen in a given condition.*

It studies meaning, cultural or otherwise, and mistrusts simple quantitative methods – these make it interpretive. You already were a part of explaining this yourself, right?

- 2. Do you think the word "science" is a political / rhetorical word, loaded with power and legitimacy concerns? Anything and everything wants to be called a science, while having none of the predictive and explanatory*

power of the original sciences . Shouldn't other ways be given due importance and their own respectful place ?

Maybe the solution would be to call the other ways something else? Like they are in English. Social sciences. Humanities. Philosophy. You already know what you will get.

3. Humans, who are beings that give meanings to things, are conscious, intelligent, reactive and reflexive, will the nature of social science enquiry be always situated or contextual ? If yes , do you think all the social science theory is a lot of pretension ? Busy work for the sake of it ? Or there are things that hold on average many times but still its impossible to right about a particular instance / event all the time . Also , given the performative nature of the social theories , increasing tech automation and globalisation , will social science be better in predictions?

It will always be situated, but that does not mean that it cannot produce predictions. If our interest in knowledge (Habermas) is technical and we wish to control events, we can, I believe, quite safely predict people's consumption habits and guide them. If we want to understand or emancipate, then not so much.

4. Do you think a lot of social science is a cultural / social activity , where we give frames / ways of thinking about a phenomena , but little consistent prediction ? Therefore rather its more of an ethics , than a science ?

Good point! During my time in Aalto (before that Professor of Bioethics and Philosophy of Law at Manchester University) I have from time to time thought that the work done here is often what I would call "applied ethics". – I am, in fact, currently editing, with my colleague Tuija Takala, an *Encyclopedia of Applied Ethics in the Social Sciences* for Edward Elgar Publishers.

Jukka-Pekka:

How clear or relevant is the division between continental and analytic philosophy in today's mainstream philosophical scholarship? Do you have any reading suggestions that give a good overview of how philosophy scholarship has developed over the most recent decades?

It is relatively clear:

https://philosophynow.org/issues/74/Analytic_versus_Continental_Philosophy

It is also extremely influential in academic politics and policies concerning philosophy. The two are seen to make up the whole of philosophy, and although they disagree theoretically, both benefit from keeping Real Philosophy (= My Kind of Applied Moral and Political Philosophy) in the margins. (I have survived by pretending to be analytic, as per my Alma Mater's – University of Helsinki – tradition.) – There is no unified history of philosophy scholarship over the most recent decades. Analytic philosophers have buried themselves deeper and deeper in their Gettier paradoxes. Continental philosophers either worship last-century German and French thinkers who may or may not have a Nazi or otherwise *Übermensch* past (which is ignored) or steer feminism from the liberal second-wave version toward new heights. – Then, again, what do I know? I last worked in a philosophy department in the last millennium.

Tejas:

I come from an IT background so, I sometimes wonder how artefacts (if I am classifying it correctly) like a piece of technology, in the sense developed for a specific cause through say the inventor's worldview of critical theory could overtime evolve into an interpretive artefact. For example, in the late 20th century when AI was starting to develop the conversations around it were so different about how it would revolutionize the industries and so on (which I believe is a standpoint of a critical theorist) and how we have used manual labor for tasks of repetition for so long, whether or not we should use it but fast forward to now, we have kind of used accepted that AI is here to stay and have more to a more interpretivistic approach to it where we try to better understand the sociotechnical relationship. Another interesting thing here with AI is that it as an artefact is more positivistic in nature which huge scope for reproducibility and prediction.

Similar recurring patterns can be seen through many other technologies and so on and I personally believe many of these theories overlap and may overtime form a complete grand theory. In which critique plays an important role not just in the relevance of the research but also find the areas where the research is lacking. In the same process is it correct to say that a researcher could be looking at a study/artefact both from an objective and subjective (positivistic and interpretivistic) viewpoint at the same time?

Techological items are artefacts from the very beginning - they are humanmade. – The theories that I (and most others) call critical are often

against them, or warn against their dominance. – This was the case with automation, which was believed to make workers unemployed. – Artificial intelligence has faced the same criticism. Additionally, it has been accused of taking things out of human control. In the attached, I deal with this theme from the viewpoint of LAWS - Lethal Autonomous Weapon Systems [NB! I have added this to the Course materials -> Homework assignments]. Take a look. – The long and short of it is, AI started life as an artefact open to interpretation. This is not something that emerged later.

Toan:

Should the discovery of empirical knowledge be the ultimate of science? Then how do we justify whether a field is "mature enough"? In other words, can we say that as a field increasingly filled with empirical studies (e.g., simulation, econometrics, etc.), it becomes increasingly mature as compared to when it was filled with most qualitative studies (e.g., interview case studies). Additional suggested reading on the topic would be appreciated.

What you describe was the idea of nineteenth-century positivists, albeit that they tried to get rid of philosophical speculation rather than methodical qualitative research. Here is a fairly balanced defence of quantitative methods in that spirit: <https://www.formpl.us/blog/quantitative-qualitative-research>

Marjukka:

Positivism seems to be still rather prevalent and fundamental approach (despite the good progress on getting qualitative methods equally appreciated and valued) so I wonder how have positivist researchers behaved when (or IF) they have faced hesitation on how to justify the existence of one single truth and the usage of quantitative methods on human behavior?

Badly, I'm afraid. But here's a fairly balanced view of quantitative and qualitative approaches, that you could check out: <https://www.formpl.us/blog/quantitative-qualitative-research>

Emilia:

Perhaps a very simple question but something I wondered about: would the "trialism" of social sciences reflect on epistemological stances of positivism (objective), critical realism (intersubjective) and interpretivism (subjective)? I find the "spontaneous trialism of social sciences" in your lecture quite interesting, as usually one hears about and discusses just the purely objective

and subjective perspectives, while the intersubjective perspective would make a lot of sense also.

Yes, I think that the way you connect the things works. In theory, there is the danger of conflating ontology and epistemology – the question of what is and the question of what and how we know about what is. But since Immanuel Kant's epistemic turn ("We cannot know how the world in itself is, because we always observe it through the lenses of our own intuitions – time, space, and causality") these have converged, anyway, so it's all right. And as critical realism is a direct descendent of Kantian thinking, it is fitting that it resolves Kant's dichotomy = "being in itself" (supposedly objective) vs. "being as an object of my knowledge" (supposedly subjective) by postulating "being as our best theory describes it" (intersubjective).

Aleksandra:

Do you think that the positivistic approach has any future for the social sciences? I mean, even now, a lot of studies seem to be close enough to the positivistic point of view. Though to achieve the goal of positivism researchers often have to simplify real-life into constructs and throw away numerous conditions, so that they have these beautiful pictures of how one thing affects another. Is it the type of knowledge we are looking for when studying people and societies?

I see your point. Big data might give positivism a lifeline, though. Mill worried about the complexity of things. What if the Algorithm catches up with the Human Mind? Do you see what I mean?

Tejas:

*I am looking at Digital ownership of digital artifacts (namely, NFTs). To support my hypothesis of justification about ownership in the digital world, I was thinking on relying on deductive reasoning from the fields of arts and human psychology (bibliographic study: *A Rationale of Collecting*). In my opinion, Occam's razor, Kant and Hume principles are few of the many guiding principles in the paradigm of deductive reasoning, in such a case does deductive reasoning contribute to science in the same magnitude as inductive or experimental research. While deducing or citing a theory, where should we draw a line between proven theory (in a similar or broader context) and testing the hypothesis?*

If I understand you correctly, you are trying to justify the ownership of NFTs. You are thinking about doing this by showing that NFTs are analogous to existing artefacts (maybe artistic, maybe technological) and that since ownership has been established in the case of the latter, ownership should also be granted in the case of the former. – It is perfectly feasible to do this by reasoning deductively. “Since artefacts of type X have properties ABC and since ownership has been established in their case, it follows that ownership should be established for NFTs, which also have properties ABC.” – There are a few caveats, though. (i) You need to show that artefacts of type X can be owned exactly because they have properties ABC. It could be a coincidence that they have both properties ABC and established ownership rules. (ii) You also need to show (and this is tricky, because it means “proving a negative”) that some other properties DEF, not present in artefacts of type X but present in NFTs, do not cancel out the ownership connection. This is where your original idea, based on the Nice Sources, becomes a hypothesis that you must test in the light of Nasty Sources, trying, against your idea, to find counterarguments. (iii) And then you face Hume’s guillotine. Yes, artefacts of type X can be owned, but this facts does not imply the norm that they should be owned. – The list of caveats goes on. But as I’m not sure that I’m addressing the right question, back to you. Was this the question? If not, what was?