## Q & A after lecture 2

#### Yeon:

May I ask three questions?

Today we learned importance of considering quality of reasons. However, there are numerous reasons we can find and discuss. How can we evaluate the quality? How can we improve the quality of reasons?

Quite simply by being careful and meticulous. Was there something I did not consider? Was the fluffy animal really a sheep? What is behind the rock?

Can diversity be lost/diminished by positivism?

Diversity of research approaches most certainly can, if only "one science" is allowed.

In philosophy of social science, is generalization aim to test or to predict something?

If we want to predict future events – "There will always be sheep in the field" – we have to generalize. For that, in the field example, we would need (a lot of) more observations.

#### Thu:

Regarding the 3 approaches (coherence, correspondence and pragmatism), how are they related to each other? If they are complementary, are they used independently to verify different types of knowledge or also used together to triangulate the result?

They are competing theories of how truth should be defined. There may be cases in which they overlap – give the same result. That happens when there is a sheep in the field, this coheres with everything we believe, and we can make good use of the knowledge of it.

### Jukka:

My question for today is:

"Snow is white is true iff snow is white"

I might understand well the content of three methods to justify propositions, but wonder this example (must be a legend).

Colour, as it is understood, is electromagnetic radiation and white colour can be defined by its frequency. So this can be verified as the truth without any hesitation. Why we don't have a sentence like "man can walk is true iff man can walk"?

It is important to write the examples like this: "Snow is white" iff snow is white. The point is that a proposition (the one in parentheses) is true when what is states prevails in the world outside the language in which it is expressed.

What you are referring to is a stipulative definition. "Let 'white' mean frequency X in the Y scale." Then snow's whiteness can be verified by checking that it has the stipulated frequency.

By the way, the proposition in the original form is blatantly untrue. Snow comes in many colors. The reference would have to be specified further (pure, fresh, new, etc.).

The same analyses apply to man and walking with the same precautions. "Man" and "walking" would have to be defined.

### Perttu:

Positivism rejects the metaphysical, legal positivism rejects morality as a necessary basis for a law.

The word "positivism" means almost opposite things in these two. In positivism, from the French "positivisme", it means "imposed on the mind by experience". In legal positivism, it means rejecting

the natural law/s (whether in its theological or scientific sense) and positing rules for humans by human interactions.

Can laws made by nature and laws made by human beings be compared from an epistemological point of view?

Our method of acquiring knowledge about natural law is philosophical and theological. If humans have a telos (goal) and if that is surviving, seeking shelter, reproducing, and seeking knowledge of God (Thomism), (good) human laws must observe and protect these. Our method of acquiring knowledge about natural laws (laws of nature) is scientific. If humans are, without their own fault, under the influence of substances that make them harm others, this may provide a (half-) scientific excuse in the eyes of the law ("half" because we still need to determine whether or not we accept the excuse). Our method of acquiring knowledge about positive laws is documentary research. All require different epistemological approaches, so I doubt that comparisons would amount to much.

If laws are seen as a reflection of the needs and values of a society, can they be separated from morality?

It depends on the morality. If it denies the significance of the needs and values of the society, these are two different things.

Is there an objective morality or something similar that could be used to assess whether a law is justified from, perhaps, a coherentist or pragmatist point of view?

There are several. But none of them is universally accepted.

#### Hanh:

I have some questions related to the pragmatic view:

If the proposition cannot be put to good use in some endeavour, is it not the truth? For example, if the fact that "snow is white" cannot be put to good use anywhere, "snow is white" is not the truth or "snow is white" is neither confirmed or rejected? Or is it totally rejected that "snow is white"?

In my previous quantitative research, the relationship between the variables was not statistically significant with p-value of 0.09 (>0.05) which means that the relationship was neither confirmed nor rejected and more research is needed for the relationship to be verified or falsified. Is it the same in pragmatic view that when a hypothesis cannot be proved to be useful for anything, it is neither confirmed nor rejected?

Classical pragmatists did not deny the validity of the correspondence theory of truth – they just thought that it was too simplistic, a truism, trickery with words. They wanted "truth" to be "more important". And this importance they found in a proposition's, or idea's, ability to be put into good use. So no, no connection to the p-value situation, really.

#### Miriam:

Does the Gettier problem only apply to sciences that are not exact by Mill's explanation? In the example you gave about the sheep behind the rock, I was immediately thinking that if there was perfect knowledge (e.g., you had a drone to look over the field) the problem of not knowing a sheep is there would be resolved. Or am I wrong to apply the problem to exact/not exact sciences?

The point of the Gettier problem for me is simply to remind us that we have to keep looking for known and unknown unknowns. Even after the drone scan, the one camouflaged as a sack of hay would go unnoticed. I think that the problem is the same for all sciences.

#### Katri:

I am thinking about value and the idea that one should try to avoid influencing the researched not to place own values onto them. But when a researcher observes without interaction, does he/she not interpret what happens through his/her own values?

They do. But they should be aware of their values and report them in the publications etc. emanating from the research. A very good job of this was made by Simo Vehmas and Reetta Mietola in this open access book:

https://www.stockholmuniversitypress.se/site/books/m/10.16993/bbl/

Take a look!

### Anoop:

Q1. Can I say the rationalism of Kant corresponds to theoretical or conceptual research we do without collecting empirical data, while Empiricism corresponds to inductive or hypothesis testing kind of research?

You can, sort of. But Kant understood that both are needed. He said, famously: "Perception without conception is blind; conception without perception is empty." Look it up!

Q2. You had mentioned that there are three kinds of knowledge. I wanted to ask about the "Technical". I find this as something that might be problem-solving in nature. Why do you say it should be positivist? Can't I use ethnographic or interpretive methods to understand and explain practical phenomena, including proposing causal relationships? Wouldn't it be also Technical Knowledge?

These three are the "interests in knowledge". By definition, if you go for the technical, you are *not* interested in meaning. You are interested in prediction and domination, i.e. social engineering in our fields.

#### Sakke:

My question is related to Niiniluoto's three-stage world view concept (maailmankuva, tieto-oppi ja arvot/asenteet). What do you think, to what extent it is consistent with different epistemological paradigms or is it totally independent of such? (Bonus question: Is Niiniluoto's concept unique in the world of philosophy?)

This division by Niiniluoto simply refers to the categories of ontology, epistemology, and ethics. His paradigm is "external scientific realism". There is something out there, we can improve our knowledge of it by scientific inquiry, and we can fight out our differences in ethics in our spare time on the Letters to the Editor page of our favorite newspapers. Luckily, the world has moved on, and we understand now that the third category can be studied quite rationally.

# Misa:

In slide 68 "What constitutes propositional knowledge" the properties of the justified true proposition are depicted (coherence, correspondence and pragmatic). It was stated that all three forms have some pros and cons. I noticed a mechanism related to external validation is not embedded in any of the approaches. Would it not make sense to use more than one approach to make a stronger case for the validity of truth?

These are attempts to define the concept of "truth" and they are as such incompatible with one another. If you choose one, you cannot choose the others. You are right, though, when it comes to research. It would be clever of us to think about all three – say, empirical evidence of correspondence, the coherence with our beliefs, and the possible use of our results.

### Patricija:

During last lecture, you talked about the idea of the perfect white. How do we know what the perfect idea of some colour is? Between the philosophical colour theories I am aware of, there seems to be some agreement that we have to agree on the names of at least the most basic colours but we usually think of other colours as mixes. For example, what is the perfect idea of purple? What about the colours some languages do not have the names of?

Good questions. As a philosophical idea, perfect whiteness can exist without our knowing the criteria for defining it. For any research etc. purposes, we need to stipulate what we mean by "white" and then stick with the stipulation. Or we can borrow one of the existing stipulations: <a href="https://en.wikipedia.org/wiki/White">https://en.wikipedia.org/wiki/White</a>

## **Udyant:**

Epistemology is applicable for qualitative research only or can be used with quantitative research also?

Epistemology asks how we can know about things. This applies to quantitative and qualitative research alike.

#### Lauri:

**Abduction** is a favored methodology in many applied sciences and also used in Aalto. How does it fit with induction and deduction? Why is it used in your opinion?

There are many revolutions that occur outside science, for instance, the historical developments leading to the establishment of Finland in 1918; the development of Facebook by a business; the US efforts in space research etc. These are revolutions (that have a pragmatic influence and reflect how the world works), but not necessarily scientific revolutions (that contribute to our knowledge of the world) - or are they? What is their relationship?

Abduction is formally equivalent to the reasoning fallacy of affirming the consequent, or, in Wikipedia's words, "of taking a true conditional statement (e.g., "If the lamp were broken, then the room would be dark"), and invalidly inferring its converse ("The room is dark, so the lamp is broken"), even though that statement may not be true. This arises when a consequent ("the room would be dark") has other possible antecedents seen as less likely (for example, "the lamp is not plugged in" or "the lamp is in working order, but is switched off")." I do not know why it is used. If you find out, tell me.

The word "revolution" in Thomas Kuhn's "scientific revolutions" is metaphorical, as are your Facebook and space examples. A real revolution is when the heads of the former leadership roll in the gutter. The rest are original developments (Facebook), leaps in technology (space, possibly), and intellectual upheavals (science). Or something like that. These are words, after all, and we can define them in many ways.