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What do you know off your own bat?

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Abstract

Testimony is a ubiquitous source of knowledge that has received very little attention in the history of Philosophy. The epistemology of testimony reveals the tension between realism and relativism and how morality and the theory of knowledge are connected in an inextricable way.

Keywords: analytic philosophy, empiricism, epistemology.

Riassunto

La testimonianza è una fonte onnipresente di conoscenza che ha ricevuto pochissima attenzione nella storia della filosofia. L'epistemologia della testimonianza rivela la tensione tra realismo e relativismo e come la morale e la teoria della conoscenza siano collegate in modo inestricabile.

Parole chiave: filosofia analitica, empirismo, epistemologia

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1. Do we have direct knowledge of the roundness of Earth?

One question that I get often during my introductory Physics classes is about how we know that the Earth is round: '*why, that is kind of obvious, we have photographs of the Earth taken from Space*', to which my students replied that, actually, the problem was that they were arguing with some other students (sic), who maintained that a photograph from Space is hardly a proof of anything as it can be counterfeited, and that they needed to present a *direct* evidence of the fact that the Earth was round. Now, one can be appalled by the existence of university students that think the Earth is flat - though one might add that beliefs just slightly less ludicrous can be held by university professors who engage in some *studies* - but the flat-earth students were posing a serious epistemological problem: what do you know off your own bat? And, if you have to rely on someone else, when and how can you trust this knowledge based on *testimony*? The goal of this little essay is to clarify some questions about the epistemology of *testimony*, that is, how we know things that are reported by others. In order to do that, though, we must first clarify what types of knowledge do we have, and how the distinction of these types is related to testimony.

2. Knowledge by Acquaintance and knowledge by description

The very first distinction to be made when talking about knowledge is that we can have knowledge of *things* and knowledge of *truths*. Knowledge of things is the knowledge that we obtain by direct

experience, e.g., through perception. Knowledge of things is, in this case, knowing the sense-data. Knowledge of truths is knowing *that* something is the case. The distinction between these two types of knowledge is well expressed in French (or other romance languages) by the verbs *connaître* and *savoir*. These two types of knowledge are slightly entangled as one could make the case that every time one is acquainted with some thing, one also knows some truth about them. On the other hand, though, it is definitely possible to know truths about something we are not acquainted with; for example, I know *that* Napoleon was defeated in Waterloo in 1815 and *that* Mars is the second-smallest planet in the Solar System, in spite of not having been acquainted with any of them. This is a knowledge that I have by *description*. The distinction of knowledge by acquaintance and knowledge by description was clarified beautifully by Bertrand Russell (Russell 1911; 1912) whom I am following closely here. Knowledge by acquaintance is knowledge I am directly aware, like the presence of the table before me, its color and its rigidity. It is worthwhile to quote Russell's words from the *Problems of Philosophy*:

We shall say that we have acquaintance with anything of which we are directly aware, without the intermediary of any process of inference or any knowledge of truths. Thus, in the presence of my table I am acquainted with the sense-data that make up the appearance of my table—its colour, shape, hardness, smoothness, etc.; all these are things of which I am immediately conscious when I am seeing and touching my table. Knowledge by acquaintance is something that we can obtain without any

intermediation at all, including inference. Knowledge by acquaintance is non-inferential. Knowledge through perception is always knowledge by acquaintance, but not all knowledge by acquaintance consists in sense-data. Other forms of knowledge by acquaintance is the knowledge we have from memory and from introspection, like the knowledge of feelings or - perhaps - of the self. We are also acquainted with the awareness of perception. And finally, we are acquainted with some kind of things that are not particular things, but *universals*, things like *redness, equality, brotherhood* or other things like *doing, taking, see-ing*, that is, what in language are verbs. Notice that every meaningful sentence must contain at least a universal. The activity of becoming aware of such a universal is called conceiving and the universals of which we are aware are called *concepts*, but here we digress. The knowledge of some basic logical truths like *all bachelors are unmarried* or mathematical truth like $2 + 3 = 5$ is also considered to be by acquaintance.

This is actually a very complex point, as it is hard to consider the truths of higher math as something we have direct acquaintance of. They are inferential, to start with. Then where to draw the line between simple and complex mathematical truths seems also a very hard problem: whether $2 + 3 = 5$ is an inference or an acquaintance seems to me a complicated question. I could make sense of how mathematics partitions in acquaintance and description if I took an intuitionist point of view on mathematics, which Russell definitely does not have.

Now, also some truths can be known by acquaintance. We said that it is the case that perhaps it is impossible to have any

knowledge of things without knowing some truth about it; for example, I know *that* this table is quite hard: this is some truth about the table. However, not all truths that we know by acquaintance is truth about things that are in perception, as we saw in the case of Mars and Napoleon.

It might seem that, when thinking of what we know off our own bat, only knowledge by acquaintance counts. Actually, there is also private knowledge by description, that is the case of inferential knowledge. It is not a direct acquaintance, and it works through description, but it is part of that personal knowledge that can be entirely private. A very important case is the the knowledge of truths by logical analysis. We know that a rectangle triangle *is such that* the square on the hypotenuse is equal to the sum of the squares of the other two sides. This knowledge comes by description, but it is direct knowledge - this is a point that Russell seems to have missed. Even though we can be taught math, we only acquire a certain mathematical truth when we are ourselves convinced with it. As Socrates said, a teacher is but a midwife.

While every knowledge by acquaintance is intrinsically private, knowledge by description can be both private and something we obtain by testimony. We saw that we know the table by acquaintance, however, my knowledge of the table as a *physical object* is knowledge that is not direct, and therefore is by description. The table as physical object is that thing that causes the sense- data of which I have direct acquaintance. Here, we said 'table is the thing that causes...' and this is an example of a description. All the knowledge one has of the table as the cause of our perceptions is some knowledge about truths. In another

example, when we say 'Napoleon was defeated in Waterloo' we see that knowledge by description is always the knowledge of some truth, as it is a true fact that *Buonaparte* did lose that battle.

A typically empiricist point of view is that in the acquisition of knowledge there is a strong hierarchy, as most knowledge by description has to be founded on some sense-data, e.g., the sense-data we say are caused by the table. Knowledge by acquaintance is foundational, and that by description needs to be grounded in direct experience. The theory of descriptions and their distinction in the so-called *ambiguous* and *definite* descriptions is one of the most beautiful aspects of logical analysis, but it would take us too far from our present concerns. According to Russell - and in a form or another this doctrine is the main tenet of Empiricism - every belief, every knowledge, ultimately has to be founded on knowledge by acquaintance. This is a very problematic doctrine, however empiricists must hold it dear to their heart and have a very strong faith in it. How indeed one can justify all beliefs on the basis of these foundations - e.g. the correspondence theory of truth is something that empiricists have always fallen short to provide a definite answer to. Without some correspondence theory of truth, it may seem that no matter what, some beliefs always depend on some other beliefs, and there is a vicious circle of justification. The fear of all empiricists is this might lead to relativism. This is a point we will touch upon in the next section.

The main importance of knowledge by description is exactly because it allows us to go beyond direct knowledge, and thus transcend the limits of our experience. What we know off our own bat is very little, for most

of us not even that Earth is round (by the way, one can indeed have knowledge of the roundness of Earth off one's own bat, just think of a sail disappearing at the horizon). It is not very clear in Russell how knowledge by description based on the accounting of other people - the testimony indeed - is grounded in one's acquaintance. Russell glides over this point. Somehow, Russell takes for granted that testimony can be relied upon and that is justified from the empiricist point of view, in the spirit of a long standing empiricist tradition since Hume. As we shall see, this is a point that is not convincing already in Hume.

This very fundamental fact of epistemology begs the question of understanding the epistemology of testimony. It is very strange that testimony has not been the subject of an infinite literature. I am aware of only three contributions - all recent - to this topic, and while there may be many more, I am sure there are not so many more. Although this is a topic that I discussed many times in my life, though in a pretty informal way, I became aware of the interest of scholars in it recently, through the paper by Lipton (Lipton 1998), which is a critique of two recent books on the same topic, by Coady and Shapin (Coady 1990; Shapin 1994). Now we are ready to tackle the main topic of this little essay.

3. Testimony: Relativism vs Realism

Lipton's essay is a critique of two recent books on the epistemology of testimony, which, according to the author, are also the only ones devoted to the topic. Lipton justly praises Coady and Shapin for their showing how ubiquitous knowledge by testimony is. Curiously, Lipton includes in this knowledge

the very roundness of Earth. Lipton agrees with the other two authors that testimony is ubiquitous. This is all the authors have in common. Shapin is a social constructivist, and, as Lipton notices, has no interest in truth, just in how truth is socially constructed. Obviously, the consequence of this is relativism. Both Lipton and Coady, on the other hand, are realists and thus very hostile to relativism - and so am I. The epistemology of testimony is just another example of the struggle between realism and relativism. We will summarize how relativism and realism enter this topic, and how these questions are inextricably related with our outlook on morality.

Shapin's book is about the inception of the Royal Society and how testimony was accepted in those circles. It is noteworthy that the motto of the Royal Society was *Nullius in verba*. The meaning was that one should not accept authority of the past - Aristotle in particular - as a validation for truth. These gentlemen, though, had to accept each other's testimony and Shapin is concerned with the sociological mechanism of such testimony. Shapin convinces us that members of the Royal Society were all *gentlemen*, and that the social standing and expectations attached to being gentlemen was the rock upon which that society founded the acceptance of testimony. Shapin is concerned with the problem of how in a society it is decided which testimony should be accepted? His main concern is management of testimony. Shapin's main argument is that testimony is a moral issue, that validation of testimony is nothing else than accepting the promise that one's word is trustworthy. As such, the epistemology of testimony inherits the ethical background in how trust is placed. Shapin recognizes that

these criteria are moral, based on notions of honor, virtue and the like. Moreover, testimony is intrinsically moral as it is foundational for social order itself. At this point if one has a relativistic approach to morality, the whole epistemology of testimony just becomes a description of how people choose to believe what to believe and call it 'true', but has nothing to do with *truth*, as a realist would like to call it. Shapin's position is interesting but in the end it boils down to Protagoras (as reported in the *Theaetetus*) (Plato):

Man is the measure of all things, of the things that are that they are and of the things that are not that they are not

As we said, this is just social constructivism with the obvious outcome of relativism. Shapin talks of a liberal notion of truth: truth is nothing but consensual belief. What is true (we should say, what is considered true, as all we are talking about here is a social history of belief) will be historically determined in different communities. Shapin tries to advocate his position - which is remarkable for a social constructivist, who usually has no patience for philosophy and thinks that being assertive suffices - and makes several points. First, that relativism has two advantages: the first one, is that relativism encourages the historian to adopt a healthy historicism and put things in context. Second, that realism creates a bias towards our own knowledge. Relativism keeps us open minded and this is seen by Shapin as an obvious advantage. There is a lot to tell about these two points. The first attitude is indeed very healthy. If relativism means to try to put things in their historical context, and suggest moderation and restraint in our judgement, this is

definitely a good thing. This has a lot to do with the philosophy of morals that we adopt. My general point of view is that Morality is complex, and one should not be too hasty in judging others - which does not entail, though, the logical impossibility of a judgement. In other words, Morality - or, for the same reasons, an epistemological system - is something *holistic*. Morality can be judged, but it should be judged as a whole. The analytic philosopher or the realist get very nervous when confronted with this point because they realize that such judgements and validation become nearly impossible. They protest 'when do I get to judge then?' We must admit the possibility that restraint I am advocating will make many if not most judgements impossible. But this is not the same thing than saying that everything is the same. For a relativist, on the other hand, there is no moral or epistemological (nor any other kind of) truth. For what I called a healthy historicist there must be restraint in claiming to have found one. These two attitudes may sometimes coincide in practice, but are philosophically very well distinct. Shapin's second argument is very cheap and it is indeed the kind of arguments I have little patience for. How much of an open mind is a good thing? One could argue that Relativism also keeps you so open minded that you never make any step in any direction. We should always remember that understanding always means that thought is somehow *constrained*. Moreover, Lipton raises a very important remark on this point, and I quote:

[...] epistemic relativism does not entail epistemic tolerance, any more than moral relativism entails moral tolerance. I may accept that what you believe to be morally right is indeed right for you even if it differs

from what I take to be right, yet decide that one of the things that is right for me is ruthlessly to oppress you.

There is more to add. In fact, in what way being a relativist *really* means that we are open minded? If we reject the usage of reason in order to find a common truth, but we remain confined in *this is my truth*, and that is *yours*, in what way this will not lead to sectarianism, and, consequentially, to conflict?

The arguments against relativism are as old as Protagoras and found in Plato their strongest - and I should say, unsurpassed - advocate. In the *Theaetetus* (171d- 172c, 177c-179b) Plato shows us that applying relativism to judgements about the future is just incoherent. If one makes a claim about the future, one might be in the position of having to admit that he was wrong as there is no way that a relativist can argue that one's beliefs and methods of validation will stay the same already the next day. We see that a relativist can never completely divorce from some kind of correspondence theory of truth, unless, of course, we claim that everyone is just always mad. Secondly, relativists that write books are in some strange predicament: they want definitely to convince us of something, that what they say is *true*. They deploy hundreds of pages to this task, while they maintain that being true requires no argument because everything one believes is true as truth is just what one believes.

Realism - especially naive realism - has also several problems, especially realism based on empiricism. I must say that I find naive realism as infuriating as relativism: they are two faces of the same coin, that of a lazy mind. things are complicated and both

relativism and naive realism offer an easy explanation that allows us to stop thinking. The relativist says there is nothing to think about when we think about truth, and the naive realist says that the solution to the problem of truth is easy - like Ayn Rand argues. Non naive realism, though, is all but simple, and realists have employed a lot of philosophical sophistication to try to make realism coherent. If that makes it less infuriating, it is not any less problematic. We have elsewhere commented on how the doctrine of founding knowledge on experience lead to the failed enterprise of logical empiricism. The issue is: can we reduce every knowledge to what we know by acquaintance? To be more precise, in a description, will every term have to relate to something we know by acquaintance? Do we really have raw sense-data or whatever way we organize the material of our perception already includes something that is not just perception? This can be a Kantian category, or something cultural (and at this point a social constructivist will attack any realist position on truth). When it comes to testimony, a realist finds himself in a similar position. How can one rely on testimony in terms and with a justification that is eventually testimony free?

The main proponent of justification of testimony in terms of one's own experience is Hume (Hume 1748). Hume is skeptical about one's own experience, as induction is just a Pavlovian habit. His main point is that reliance on testimony is a Pavlovian habit as well. To what extent the induction from what other people tell us and our experience tie together is very debatable, and it seems to me very plausible that, as Coady holds, there is a very thin evidential base on our part to determine what kind of testimony we are

going to accept. Definitely I do accept the results of experiments in quantum mechanics based on the testimony of the experiments, but the reason why I do accept these results is hardly based on my own set of evidences. Eventually, we have to admit that even a skeptic like Hume cannot reduce testimony to the already feeble theory of knowledge based on sense-data plus habit and assumptions.

4. For whom the Bell Tolls

The solution to this kind of philosophical problems is not independent from the more general philosophical problem of truth. What the epistemology of testimony reveals, though, is that epistemological and moral problems are connected in a very profound way. Testimony is only an example of that. I have discussed in another essay how the way we organize the material of our perception relies on the notion of *importance* which is fundamentally a moral notion. Of course, this is a doctrine that is at odds with realist philosophies - especially of the empiricist kind - as a clear cut distinction between facts and values is considered to be fundamental. The social constructivists will not mind, because, well, anything goes.

The epistemology of testimony is a very important topic because testimony is at the foundation of social order. What will we do if we do not trust authorities that say we have to wage war because there are hidden weapons of mass destruction somewhere? And how would we obey strict limitations to personal freedom if we do not trust a scientific organization in case of a pandemic? The justification for testimony is thus also at the basis of political freedom. We see that a passive social constructivist approach to the epistemology of testimony

is perfectly compatible with prone obedience to a corrupt government that demands to be believed just because. Testimony is fundamental for knowledge. Knowledge is fundamental for life, so trust is fundamental for life. When and how this trust should be accorded, is something that goes beyond the scope of this essay. In any case, we cannot rely just on what we know off our own bat. There are no better words to express this than the immortal verses of Donne:

No man is an island entire of itself; every
man is a piece of the continent, a part of the
main; if a clod be washed away by the sea,
Europe is the less, as well as if a promontory
were, as well as any manner of thy friends or
of thine own were; any man's death
diminishes me, because I am involved in
mankind. And therefore never send to know
for whom the bell tolls; it tolls for thee.

References

- Coady T. (1990). *Testimony : a Philosophical Study*, Oxford University Press.
- Hume D. (1748). *Enquiry concerning human understanding*, Chapter 10
- Lipton P. (1998). *The Epistemology of Testimony. Stud. His. Phil. Sci.*, Vol. 29, 1, : 1-31.
- Plato. "Theaetetus", (171d-172c, 177c-179b). Ed.
- Russel B. (1911). Knowledge by acquaintance and knowledge by description. *Proceedings of the Aristotelian Society*, 11: 108-128.
- Russel B. (1912). *The Problems of Philosophy*, Ch. V, London: Williams and Norgate.
- Shapin S. (1994). *A Social History of Truth*, Chicago: Chicago University Press.

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