Some things are said to be evidence for communities. For example, rising temperatures are evidence for climate change and some fossils are evidence for evolution theory for the mainstream scientific community. How should we understand that? Usually, epistemologists analyze evidence for communities in terms of evidence for individuals. For example, one might argue that something is evidence for a community when it is evidence for most of its members. I take the opposite route. I start by defining evidence for communities, and then use it to define evidence for individuals. In a nutshell, I argue that both communal and individual evidence is constituted via certain communal interactions. I argue that this approach is compatible with phenomenology and is helpful in understating testimony and conversions. In addition, I argue that this approach is compatible with both realist and anti-realist perspectives on evidence and knowledge.

1. Intro
What is evidence? I follow Achinstein (2001) in understanding “evidence” to mean “good reason for belief”. To further precisify, in the sense I have in mind, when e is evidence for h, h may be false. For example, red spots may be evidence of measles even if the patient doesn’t in fact have measles (this is similar to what Achinstein calls “potential veridical evidence”).

In some cases, determining what is evidence for what, or what is evidence at all, seems straightforward. However, in general, determining what is evidence is complicated due to various epistemic puzzles. For example, consider the Duhem problem. When faced with a conflict between hypothesis h and some observation, it’s not necessarily the case that the observation is evidence against h. The observation might instead be evidence for or against some other hypothesis. For example, a sound produced by a measurement device might be evidence that the device is defective rather than evidence that the hypothesis being tested is false. From a different perspective, this is closely related to Harman’s criticism on the relation between deductive logic and reasoning (1986). The fact that P entails Q and ¬Q is observed does not necessarily mean that we should reject P. We could also reject the entailment relation. To put things in evidential terminology, ¬Q may be evidence (or a good reason to believe) that ¬P, but also evidence that ¬(P → Q). In other words, the point that Duhem and Harman are noticing is that inconsistencies only present us with choices, and not with directives on how to address them.

Higher order evidence also presents us with complexities. Broadly speaking, higher order evidence is evidence about other evidence or about one’s ability to respond to evidence (often attributed to Kelly, 2005). The prime examples are peer disagreements and evidence that one’s sense perception or reasoning abilities have been compromised (e.g. by being drugged). Is information of this sort evidence? And how should it influence the status of the supposed first-order evidence? E.g. is it the case that, in light of the higher-order evidence, the first-order observations are a weaker reason to believe h? Options are split (for some discussion, see Christensen, 2010; Feldman, 2014; Fitelson, 2012; and Lasonen-Aarnio, 2014).
Determining that e is evidence for h, or evidence at all, involves addressing questions of this sort. I argue that the answers to such questions, and thus the status of evidence, are constituted by communal deliberations. Thus, communal deliberations constitute evidence for communities as well as individuals. This paper builds on the work of Longino (especially 2002) and Street (especially 2008). Longino (2002) argues for putting the community first in understanding knowledge, and Street (2008) presents a constitutive definition of reasons. I explain in what ways my view is similar to and different from theirs in due course.

2. Stating the social view of evidence
I’ll start with stating my view, and argue for it in the next section.

2.1 Evidence for communities

This is how I propose to understand evidence for communities:

\[
\text{The fact that e is evidence for h for community C is constituted by}
\]

\[
\text{the fact that the judgment that e is evidence for h does or would withstand proper scrutiny of community C}
\]

A few clarifications are in order.

First, this definition is constitutive, rather than descriptive or normative. A descriptive definition would say what kind of things communities in fact take to be evidence, or what the processes in fact lead communities to accept certain things as evidence. A normative definition would say what communities ought to consider as evidence. My definition, however, is about the process through which something becomes evidence, or about what evidence is. To borrow an analogy from Street, we can use the concept of a parent to understand what constitutive definitions are: being a parent is constituted by having children. It’s not that those who are parents happen to have children, or that those who are parents ought to have children. Rather, having children is just what being a parent is. Similarly, being evidence for communities just is withstanding proper communal scrutiny.

One implication of using a constitutive definition is that it leaves room for errors – we can be wrong about what is in fact evidence because we can be wrong about whether a certain judgment would in fact withstand proper scrutiny (just as we can be wrong about whether someone has children).

Second, there are various ways to spell out what “withstanding proper scrutiny” might mean, and I don’t want to commit to any one of them in particular. One version follows a Rawlsian model. In this version, withstanding proper scrutiny means being the result of the deliberation of an ideal group of people in ideal circumstances. In Rawls’s case, the principles of justices are the principles that would withstand scrutiny in deliberation from behind the veil of ignorance. Applying this approach to the question of evidence, “proper scrutiny” is the scrutiny that would be carried out in ideal settings. Kitcher (2011) seems to use a model of this sort with regards to deliberations about the goals of science. While some say that the goal of science is to discover
“The Truth”, Kitcher argues that it would be more accurate to say that the goal of science is to discover significant truths. What is "significant"? The scientific agenda should be assessed by comparing it to the agenda that would result from an ideal hypothetical scientific procedure. This procedure requires that representatives from various perspectives (including non-scientists) are included, that non-scientists are first tutored to better understand the scientific complexities and options, and that agreement is preferably attained through deliberation rather than a vote.

Another version of withstanding scrutiny puts constraints on actual, rather than ideal, scientific deliberations. Longino (2001) has a view of this sort when it comes to the production of knowledge in science. She argues that only certain communal deliberations can give rise to communal knowledge. In order to produce communal knowledge, communal deliberations must satisfy four norms. First, there must be recognized avenues for criticism, such as conferences and peer-review journals. Second, there must be shared standards critics can evoke. Third, the community must be responsive to criticism when it is given. Fourth, equally qualified practitioners must have equal intellectual authority. When communal deliberations conform to these norms, the community can produce knowledge. We can apply this view to the case of evidence as well. On a view of this sort, the fact that e is evidence for h is constituted in communal deliberations that satisfy Longino’s norms.

Third, this definition is inspired by Street’s (2008) metaethical constructivism, according to which:

\[
\text{the fact that X is a reason to Y for agent A}
\]

is constituted by

\[
\text{the fact that the judgment that X is a reason to Y (for A) withstands scrutiny from the standpoint of A’s other judgments about reasons (p. 223)}
\]

One difference between my definition and Street’s is that in my view the process of scrutiny is interpersonal. Street could theoretically accommodate interpersonal scrutiny by taking "agent A" to be a community rather than an individual. However, her discussion mainly focuses on the individual case. Taking the agent to be a community would require explaining how communities can be taken to be agents. In addition, in the next subsection, I use my definition for communities to derive a view of evidence for individuals that diverges from Street’s.

2.2 Deriving evidence for individuals from evidence for communities

This is how I propose to understand evidence for individuals:

\[
\text{The fact that e is evidence for h for a member of community C}
\]

is constituted by

\[
\text{the fact that the judgment that e is evidence for h did or would withstand scrutiny of community C}
\]

A few clarifications are in order here too.

First, a person is a member of community C in virtue of accepting the norms of deliberation of that community. Because of this reliance on the acceptance of norms, one may wonder whether this view collapses to expressivism in some way. However, unlike expressivism, the social view
of evidence is not about what the agent expresses when they say that e is evidence, but about what constitutes evidence.

Second, this perspective on evidence for individuals is different from Street’s view of reasons. On Street’s view of reasons, the point of view from which the scrutiny takes place is the point of view of the individual’s other normative judgments. I think of evidence as a type of reason, but on my view the point of view from which the scrutiny takes place is of the community.

Third, this perspective on evidence for individuals is also different from Longino’s view on knowledge for individuals. Longino uses communal interaction, but in a different way. On Longino’s view, one of the conditions for an individual S to know p is that:

S’s response to contextually appropriate criticism of p or of S's accepting p is or would be epistemically acceptable by C [the community], and would itself be so evaluated by the relevant subgroup of C, in situations characterized by the conditions of effective criticism (2002, p. 138)

As we can see, on this definition, whether an individual knows p depends on how they do or would respond to proper communal scrutiny. I’ve already mentioned that I am not committed to Longino’s version of proper scrutiny. Moreover, on my view it doesn’t matter how the individual does or would interact with criticism. On the social view of evidence, e is evidence for a member of a community whether or not that agent is epistemically responsible or actually abides by the norms they accept.

2.3 Anti-realism/realism

All I’ve said so far is compatible with both realist and anti-realist perspectives. I have emphasized that the social view of evidence is constitutive, but it also has a normative aspect because evidence is constituted via “proper” scrutiny. I have briefly overviewed different ways “proper scrutiny” could be spelled out. Either way, some norms are involved – they are constraining either an ideal or actual deliberation. What is the status of these norms? Realists and anti-realists may respond differently.

For a realist, some norms are true, correct, right, or objectively better than others. Those privileged norms are the ones that really constrain communal scrutiny. Evidence that is constituted in deliberations that abide by them is "really" evidence, and others are not. Anti-realists will deny that one set of norms is privileged in these ways. For example, for a constructivist, the norms themselves are constructed by the communal deliberation and different communities may legitimately construct different norms giving rise to different evidence.

The upshot is that the social view of evidence can accommodate both realist and anti-realist readings, and give rise to realist and anti-realist notions of evidence. As a result, the view is not necessarily at odds with realist and anti-realist conceptions of other epistemic notions which build on the concept of evidence, such as knowledge and justification.
I now turn to motivate the claims I’ve stated in this section.

3. Why put the community first in thinking about evidence?

3.1 Why put communal interaction first in understanding evidence for communities?

One advantage of putting communal interaction first in understanding evidence for communities is that doing so doesn’t appeal to a mysterious “community-agent”. An alternative way to define evidence for communities is:

\[
e \text{ is evidence for } h \text{ for community } C
\]

\[
\text{when}
\]

\[
e \text{ is a reason to believe } h \text{ for community } C
\]

But what is it for a community to have a belief? One way to parse this definition is to argue that there exists some sort of “community-agent” to which we can attribute beliefs and other cognitive states. We do sometimes casually speak of communities as agents, but it is unclear how to cash this out if we were to take such talk seriously.

Another alternative way to account for evidence for communities is by using aggregation. For example:

\[
e \text{ is evidence for community } C
\]

\[
\text{when}
\]

\[
e \text{ is evidence/a reason to believe for most members of community } C \text{ (or some other aggregation procedure)}
\]

However, first, doing so would require settling on an aggregation procedure. Settling on an aggregation procedure may be very difficult due to voting paradoxes such as Arrow’s theorem. According to Arrow, any aggregation procedure would fail to satisfy at least one of the following intuitive constraints: that the social ranking is not cyclical, that all agents are allowed to have any preference, that two options are tied in the social ranking when they are tied for all individuals, that if everyone agrees that one option is better than another it has a higher social ranking, and that the social ranking does not mirror the preferences of just one individual. (For an overview see Morreau, 2016).

Second, reducing communal evidence to aggregation doesn’t fit the phenomenology. Sociologists of science, such as Shapin, Bloor, Knorr-Cetina, and Latour, argue that social interactions are central in the production of scientific knowledge, justification, acceptance of hypotheses, and other epistemic notions. Longino (2002) points out that we need to respect these findings when theorizing about scientific knowledge, and the same is true for evidence. This is one of her motivations in using communal interactions in her definition of scientific knowledge. Similarly, reducing evidence to aggregation would ignore sociologists’ reports on the importance of interactions between scientists. However, we don’t need to buy into any sociology of science to notice that the aggregative definition is incompatible with phenomenology. In science, as well as in other fields, we don’t typically take votes or conduct surveys to determine what is evidence.
for what. What matters is what comes out of the communal deliberation. Aggregation alone misses out on this interactive aspect.

3.2 Why derive evidence for individuals from evidence for communities?

Even if we put the community interaction first in understanding evidence for communities, why should we also use it to understand evidence for individuals? We could keep understanding evidence for individuals in individual ways. However, deriving evidence for individuals from evidence for communities is helpful in understanding testimony and conversions.

Let’s start with testimony. Why do I accept rising temperatures as evidence for climate change? I didn’t do any research or read any papers on the topic. Superficially, I accept it as evidence because it is reported as such by mainstream scientists. On some views, I accept their testimony based on some sort of argument from authority. However, the social view of evidence makes available another explanation- I accept the claim 'rising temperatures as evidence for climate change' because I accept the norms of deliberation of mainstream science and I believe that this claim survived scrutiny which satisfies these norms. Similarly, why do I accept an instructor's/textbook’s claim that the Michaelson-Morley experiment is evidence against the existence of ether? On some views, I accept it based on the authority of the instructor/textbook. On the social view, I accept the claim that this experiment is evidence for certain theories because I accept the mainstream norms of deliberation and believe that this claim survived them. If I take anything on authority, it’s only the report that this claim survived the right kind of scrutiny.

This way of understating testimony avoids puzzles on expert testimony. Some, like Hardwig (1985) and Goldman (2001), point out that assessing expert testimony is tricky because laypersons are not in a position to understand the relevant complexities. Consequentially, adjudicating between disagreeing experts is also tricky (this is what Goldman calls the “novice/2-experts” problem). On the social view of evidence, these problems do not come up. The only thing laypersons need to assess is whether the experts conform with the norms the agent is committed to. This can be done without technical expertise.

Second, the social view of evidence is helpful in understanding conversions. On the social view, different sets of communal deliberation norms constitute different evidence. Thus, e may be evidence for community A and its members but not for community B and its members, and vice versa. We often see such differences between scientific and religious communities, for example. What is evidence for one religious community is not necessarily evidence for another, and what is evidence for some religious communities is not necessarily evidence for some scientific communities. Moreover, in many cases, members of community A do not change their mind about the issues at hand when they are exposed to the evidence offered by community B. More commonly, what we see is that members of different communities reject each other’s evidence. One way to explain this is by questioning the rationality, epistemic integrity, or background knowledge of one or more sides of the debate. However, the social view allows a more charitable reading of such situations. Members of community A do not accept evidence offered by community B when the norms of deliberation of the two communities differ. The evidence of
community B is simply not evidence for community A. Thus, we should not expect converting from one community to another upon the presentation of evidence. Rather, conversion is a process which involves embracing new norms of deliberation. As an agent comes to embrace these new norms, they also come to embrace new evidence and new hypotheses based on this evidence.

4. Conclusion

I propose to understand evidence for communities and individuals using social interactions. On the social view of evidence, the fact that e is evidence for a community and for members of this community is constituted by the fact that the judgment that it is survived or would survive proper communal scrutiny. This communal scrutiny involves resolving epistemic puzzles regarding evidence (e.g. the Duhem problem or issues around higher order evidence) in the case at hand. I argued that this view is compatible with both realist and anti-realist perspectives, and is helpful in understanding testimony and conversion.
References