

Are You Thinking What We're Thinking? Group Knowledge Attributions and Collective Visions

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Most accounts of what social epistemology is and what social epistemologists do will include, in some form, the study of how knowledge is produced or acquired within a group or community: a collective. This could mean, in its weakest form, that individuals depend on the efforts of others for their own knowledge or, in its strongest form, that the group, rather than the individual, is the proper bearer of knowledge.

The title of this series is *Collective Visions* and so it seems appropriate that we, as social epistemologists, look at what it might mean for a collective to have knowledge and, through that, what it might mean for a collective to have visions. The question of group knowledge has received a lot of attention recently amongst epistemologists. (Giere 2002a, 2002b, 2007; Gilbert 2004; Goldberg 2010; Goldman 2004; Hakli 2007; Lackey 2012; Lahroodi 2007; List 2005; Mathiesen 2006; Pettit 2003; Tollefsen 2002, 2007; Tumollini & Castelfranchi 2006; Tuomela 2004) Sometimes this is motivated by concerns over what kind of organism or organization can know things (Gilbert 1987, 2004; Hutchins 1995, Pettit 2003; Rupert 2005) — a metaphysical problem — and sometimes by observations about ordinary language use (Gilbert 2002; Goldman 2004, 12; Hakli 2007, 249; Quinton 1975/1976, 17; Schmitt 1994, 257-258) — an ordinary language problem. Let's begin with the latter by considering the following headlines:

BP and Halliburton knew of Gulf oil well cement flaws.¹

Google's vision of the future of journalism.²

We are familiar with this kind of talk but, on reflection, it sounds a little odd. BP, Halliburton, and Google are corporations. Doesn't knowing and envisioning only apply to living organisms with minds, brains, eyes, and so on? So who or what are we referring to when we say 'BP' knows and 'Google' envisions? It seems like there are a few possible answers:

- We don't mean that the legal entity, the corporation, the group, the collective knows. It is a metaphorical way of talking about collectives *as if* they behaved like organisms to explain, describe or predict certain events. Call this the *Metaphorical View*.
- We don't mean that the collective knows. It's just a useful shorthand for saying that an appointed representative or authority within the corporation knows. Companies have CEOs, directors, and so on who make decisions on behalf of the whole organization and talk about 'Google's vision' is a way of talking about Larry Page or Eric Schmidt's (or someone else's) vision. Call this the

¹ Goldenberg, S. and Kollwe, J. 2010. BP and Halliburton Knew of Gulf Oil Well Cement Flaws. *The Guardian*, 29th October 2010. <http://www.guardian.co.uk/environment/2010/oct/29/bp-oil-spill-bp>.

² Bunz, M. Google's Vision of the Future of Journalism. *The Guardian*, 7 October 2009.

Spokesperson View.

- We don't mean that the collective knows. We mean that the individual members of the collective know. This could be just one individual if they are important enough or it could be a majority or it could be all or some other quorum. Call this the Aggregation View.
- We do mean that the collective knows. Knowledge does require mental states such as beliefs but some groups have mental states under certain conditions. Call this the Extended Mind View.
- We do mean that the collective knows. Under certain conditions it is more appropriate to credit the group rather than the individual or any set of individuals with acquiring knowledge. Call this the Group Credit View.

Let's look at each of these in turn. We'll see whether they give social epistemologists who wish to make sense of either the metaphysical problem or the ordinary language problem any hope and whether it can make sense of the idea of 'collective vision'.

Metaphorical View

At first glance, the simplest explanation is that we are speaking metaphorically. Of course groups don't know things but talking about them as if they did can be useful for explaining, describing or predicting certain events that the group might cause or be otherwise involved in. We often attribute mental states to groups but it is useful to note that not just any metaphor will do. No one has ever said, for example, that Google is depressed or that BP experienced great joy following the wedding of two of its employees. At least, if someone did say such a thing it would be clear they were not talking literally. Joshua Knobe and Jesse Prinz (forthcoming) distinguish between phenomenal states and non-phenomenal states. Phenomenal states for some agent, S, include 'S feels depressed', 'S experiences joy', 'S feels happy', 'S feels pain', 'S feels angry', 'S feels scared'. Non-phenomenal states include 'S intends', 'S decides', 'S tries', 'S wants', 'S believes', 'S hopes', 'S loves', 'S hates'. We are far more likely to ascribe non-phenomenal states to groups than phenomenal ones. A google search revealed that non-phenomenal states attributed to Microsoft numbered up to 135,000 (for 'Microsoft wants') whereas they found mostly no hits at all for phenomenal states attributed to Microsoft.

Here, it is worth voicing an objection to Knobe and Prinz's study. The way one couches one's search terms is critical here. If one searches for 'Microsoft was happy' rather than 'Microsoft feels happy' one gets around 76,200 hits (at time and place of writing), presumably because the former is a much more natural way to convey a similar meaning. Even so, one cannot do this with all of Knobe and Prinz's examples and it does seem that we are more comfortable attributing some mental states to groups and not others. 'Microsoft envisions' was not part of their study although my own search returns around 12,300 results so it seems 'envisions' might be closer to the non-phenomenal group than the phenomenal.

What about ‘BP knows’. Is this metaphorical? This answer would solve a lot of our worries, however, Jennifer Lackey argues (Lackey 2012) that the force of this explanation may depend on the context in which the attribution is made. If, for example, I’m having dinner with a friend and tell her that on my way home a cat was walking in front of me and that, ‘It seemed to know where I was going and was leading me to my house,’ my friend may well interpret me as speaking metaphorically: I don’t literally think that the cat knew where I lived or that it had any intention to lead me there. If I was speaking in court however, where, for some reason, there may be issues over whether the cat had visited my house before, then I may be pressed to clarify my statement and I might rephrase it in less ambiguous terms or I might clarify that I really did think the cat knew where I lived. We can’t reasonably say the same thing about uses such as the headlines above.

If such statements were made in court, where issues of legal and moral responsibility would be central, the reasonable interpretation could not be metaphorical. Lackey notes that group knowledge attributions are made ‘systematically and in a widespread fashion even in contexts where there is a heightened concern for speaking precisely.’ (Lackey 2012, 4) There is more to it than mere metaphor.

Spokesperson View

Another option is to say that such attributions are a shorthand for saying that a particular individual within the collective knows the proposition in question. According to this view, when the journalist writes about Google’s vision, he is really talking about Larry Page’s vision (or some other member who has the authority to speak on behalf of the corporation). When we talk about what BP knew prior to the Deepwater Horizon disaster, we are really talking about what Tony Hayward, for example, knew. The Spokesperson View works well for some types of groups — chiefly those where the collective judgments are always those of some antecedently fixed group member (Pauly and van Hees 2005). However, it does not appear to work at all for groups where there is no clear individual who fits this description.

Aggregation View

Aggregation (or summative) views state that when we attribute knowledge or beliefs to groups we are attributing it to its members (Quinton 1975/1976, 17. See also Gilbert 1994, List 2005, List and Pettit 2002, 2004). In other words, we are asserting that the beliefs of some or all of its members are believed by the group as a whole. Again, such a view sounds promising but runs into several problems. Firstly, there are circumstances under which a group may not achieve consistent collective judgments even when all group members hold individually consistent judgments (Pettit 2003). List describes a ‘discursive dilemma’ under which a majority of members of a group endorse a proposition, p , and the premise $p \rightarrow q$, but do not endorse q . The dilemma is rendered thus,

	P	$p \rightarrow q$	q
Alice	TRUE	TRUE	TRUE
Bob	TRUE	FALSE	FALSE
Carol	FALSE	TRUE	FALSE
Majority	TRUE	TRUE	FALSE

List and Pettit (2002) show that no aggregation procedure can generate consistent collective judgments i) for any logically possible combination of complete and consistent individual judgments on the propositions, ii) where each individual judgment has equal weight in determining collective judgments and iii) the collective judgment on each proposition depends only on the individual judgments on that proposition, and the same pattern of dependence holds for all propositions. There are alternative available to those who wish to preserve aggregation procedures but we won't pursue them any further here. One strong argument that they may be flawed is that it sometimes seems appropriate to attribute knowledge to groups where none of the individuals believe the proposition in question.³

Extended Mind View

We now move onto some of the positive answers to our original question. The first, which we might call the Extended Mind View, is that some groups have beliefs in an analogous way to individual minds. The idea has been pursued extensively in, for example, Gilbert 2004; Goldman 2004; Hutchins 1995; Pettit 2003; Rupert 2005; and Theiner 2009, 2010 and I won't regurgitate the arguments for and against here. It has a certain intuitive force that can be made plain if one considers the Parity Principle due to Clark and Chalmers (1998, 8):

If, as we confront some task, a part of the world functions as a process which, were it done in the head, we would have no hesitation in recognizing as part of the cognitive process, then that part of the world is (so we claim) part of the cognitive process.

³ In Kerr and Gelfert (2014), we discuss a number of circumstances where groups can have evidence and yet no individual member of the group has the same evidence. For example, in double-blind trials it may not be appropriate to attribute any of the individual scientists with possessing the evidence that, say, the drug is safe (since none of them would be justified in believing this) and yet it does seem appropriate to say that 'there is evidence that the drug is safe' and that the most appropriate bearer of this evidence is the group itself (cf. Magnus 2007). It seems plausible that the same could be said for knowledge although it would be in need of argument. In cases where researchers, for example, collect data about different aspects of some phenomenon but who are not aware of each others results, and where this data is compiled and processed to generate new knowledge, it seems that there is knowledge even though no one believes it, although this does not demonstrate, *per se*, that it is the group that knows. Another option might be so-called 'third-person epistemology' or Karl Popper's objective knowledge where it is more appropriate to say 'it is known that p ,' than ' S knows that p ' (Stevenson 1999).

Clark and Chalmers discuss this as it pertains to technical artefacts that can extend certain cognitive processes but it is still compelling when applied to other individuals (Theiner 2009). If, in other words, a process carried out by two or more individuals is analogous in the right way to a process carried out by one individual, there is no obvious reason why one should draw a line around the individual and call that which takes place within its limits ‘cognitive’ whereas anything outside of that line is to be called ‘non-cognitive’. Again, the arguments for and against this position are far more extensive and subtle than can be addressed here (Clark 2010 and Adams and Aizawa 2010 provide summaries from each side of the fence).

Group Credit View

What I am here calling the Group Credit View is beginning to be explored by epistemologists interested in the implications of the Extended Mind thesis for epistemology and, in particular, for credit theories, virtue reliabilism, and the ability intuition (e.g. Carter et al. 2014; Goldberg 2010; Hetherington 2012; Kelp 2013; Kerr and Gelfert 2014; Palermos and Pritchard 2013; Pritchard 2010; Vaesen 2011). The central idea here is that if you think that knowledge is something to do with an ability, achievement or is, in the relevant sense, creditable to an agent then it looks like you are committed to either endorsing group knowledge or distinguishing group and individual knowledge because of ‘biological’ (i.e. non-epistemic) considerations. Given that there are many instances where it does not seem appropriate to credit any individual within a group with knowledge (e.g. her knowledge depends too much on the cognitive work of others) and yet it does seem that *someone* or perhaps *something* should be credited with knowledge, then it looks like there are also many instances of group knowledge. Again, due to space restraints I cannot go further into this complex debate, which is in its early stages, but consulting some of the work cited above will be of help to anyone interested.

Do Groups Have Visions?

Some account explaining both the metaphysical concerns outlined above and the ordinary language attribution of knowledge and mental states to groups is required and we are only in the early stages of a burgeoning interdisciplinary research project that seeks to address both issues. Whilst explanations for group knowledge, belief, cognition, and so on, abound, so far none of that research, to my knowledge, has considered how plausible these arguments are in relation to a specific type of mental state: visions.

Visions are a kind of mental imagery sometimes referred to as ‘quasi-perceptual experience’. In essence, a vision is similar to other perceptual experiences, but occurs in the absence of the appropriate external stimuli (Thomas 2013). The Extended Mind thesis (and related theories such as Embodied Cognition) have been considered in relation to perception (Clark 2008a, 169-179, 2008b; Kerr and Gelfert 2014; Ward and Stapleton 2012; Wilson 2004, 2010) but here we are concerned with ‘seeing in the mind’s eye’, ‘visualizing’, ‘envisioning the future’, ‘imagining the feel of’, and so on. If anything, this would be the one kind of perception that is immune to extended mind-type arguments. After all, what marks mental imagery out as distinctive is precisely that it takes place, and can only take place, within the head and that it’s about things in the head not things

outside the head.

So here we have a problem. On the one hand, whilst it seems fairly plausible that knowledge, belief-formation, and many other kinds of mental states could be socially extended, it seems implausible that visions could. And yet it is very common to talk of collective visions and it seems not too far-fetched to suppose that one or more individuals can envision the same goal, for example, and many activities are pursued under this assumption. Of course, there are the phenomena of mass hallucinations (if such things exist) and the more verified phenomena of shared psychosis (sometimes called *folie à deux*) where symptoms of a delusional belief are transmitted from one individual to another. But we are looking for something more substantial and *intentional* than a hallucination and transferrance of a belief doesn't quite seem to do the job either.

Perhaps the most promising area for our purposes is psychological and philosophical research on joint intentions. This is the phenomena where one or more individuals both or all intend to perform a particular activity (such as playing chess or figure skating or moving a piano). Here, agents envision goals and set about, jointly, to realise them. According to Michael Bratman, for two individuals to have a shared intention to perform a particular activity, *J*, each of us must intend that we (continue to) *J* (Bratman 1992, 1993). Olle Blomberg (2011) considers the, fairly platitudinous, idea that such intentions are subject to an 'exclusivity constraint'. According to this principle, one cannot intend to perform another agent's action, even if one might be able to intend *that* she performs it. For example, whilst I can intend *that* you leave my company at 8pm, I cannot intend *to* leave my company. Blomberg argues, in contrast, that there are some cases where one may intend to perform an activity that belongs both to oneself and to another agent.

He does this by first noting that intentions-in-action can be technologically extended. For example, a blind man using a cane extends his ordinary capacities through the technology of the cane. The cane becomes 'transparent' in the sense that he is no longer aware that he is using it as a tool in order to find out what the ground is like (Merleau-Ponty 1945, 165-166; Maravita and Iriki 2004). Blomberg argues that a similar 'phenomenon of transparency' is present in joint activity. Consider two skilled ice skaters, Alice and Bob, performing a figure dance. Here, it is not that Bob experiences himself as being in a position to determine Alice's actions. Rather, the experience is a 'joint interface with the world.' (Seeman 2009, 508) Just as, in the case of technologically-extended activities, the tool user is no longer aware of the affordances of the tool, in socially-extended activities, the agents are no longer aware of what they can intend the other does but are jointly intended to do it.

Collective Visions

If metaphorical, aggregation, summative, and spokesperson views about group knowledge were not convincing, there is even less reason to suppose that they should be convincing with regards to visions. The same objection applies to the metaphorical view in both cases and aggregation, summative, and spokesperson views will be difficult to apply to perceptions which are not made 'vocal'. It would certainly be possible for each 'visionary' to sign some document endorsing a particular statement of the vision but this

would be a ‘mission statement’ and not the vision itself. This rules out three of our five options. If we wish to preserve the idea, we are left with adopting either an extended mind theory or a credit theory of collective visions. In writing a series of ‘Collective Visions’ it doesn’t seem very plausible that we ever reach the level of joint intention attained by the figure skaters, at least not when it comes to specifics. However, neither is it the case that we are entirely disconnected minds and brains with our own self-contained ‘visions’.

By being part of the collective of social epistemologists, we cannot fail to be involved in some joint activity even if we do not know precisely where it is headed, influencing each others’ ideas, and modifying our own beliefs when we think it appropriate. At the same time, we know from psychological studies on conformity and peer pressure that we modify our own perceptions and visions to align with a majority (exemplified in Asch’s experiments in the 1950s) and this is intellectually undesirable.⁴ We are left with a tension between wishing to engage in a collective vision and wishing to preserve our own internal visions. Both are admirable goals, but we should be wary of falling too far to one side or the other.

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⁴ Asch’s participants consistently advanced false claims and if the goal of academic research was conformity then it would be difficult to make progress.

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