Deliberative democracy and the problem of tacit knowledge

Jonathan Benson
University of Manchester, UK

Abstract
This article defends deliberative democracy against the problem of tacit knowledge. It has been argued that deliberative democracy gives a privileged position to linguistic communication and therefore excludes tacit forms of knowledge which cannot be expressed propositionally. This article shows how the exclusion of such knowledge presents important challenges to both proceduralist and epistemic conceptions of deliberative democracy, and how it has been taken by some to favour markets over democratic institutions. After pointing to the limitations of market alternatives, deliberative democracy is defended by arguing that tacit knowledge can be brought into deliberation through the mechanism of trust in testimony. By trusting the testimony of a speaker, deliberators are able to act on knowledge even without it being explicitly expressed. The article then goes on to discuss the implications of this defence for deliberative theory, and particularly, the forms of reason which deliberative democrats must see as legitimate.

Keywords
deliberative democracy, tacit knowledge, proceduralism, epistemic democracy, trust, markets

Introduction
Over the past few decades, deliberative models of democracy have become a dominant approach to democratic theory. Such models take rational discussion between free and equal citizens to be at the heart of democratic decision-making. It has been objected,
however, that deliberative democracy gives a privileged position to linguistic forms of communication and therefore excludes tacit forms of knowledge (Pennington, 2003, 2011). Tacit knowledge is practical knowledge embodied in experience, skills and know-how which cannot be expressed in propositional form. It is, therefore, said to be excluded from deliberative institutions which are based on verbal dialogue.

This problem of tacit knowledge has been argued to undermine deliberation as a process of social learning. As we will see, however, it actually creates more general and significant problems to both procedural and epistemic conceptions of deliberative democracy. The exclusion of tacit knowledge undermines equal participation and fair proceduralism by showing that deliberation necessarily excludes certain people’s perspectives, while it also undermines the ability of deliberation to make good and effective decisions, by showing an important body of knowledge which deliberation will fail to utilize. This critique of deliberative democracy draws on Fredrick Hayek’s (1948a, 1948b, 2013) epistemic rejection of collective social coordination and defence of a market society. Unlike deliberation, the price mechanism is said to have the potential for extralinguistic communication which can allow tacit knowledge to be utilized for social coordination. The problem of tacit knowledge is, therefore, taken to be an important reason for favouring a market society over one which gives a prominent role to democratic and particularly deliberative institutions.1

The purpose of this article is to defend deliberative democracy against the problems of tacit knowledge and to argue that it does not necessarily give clear reasons to favour market institutions. It also argues that this defence has significant implications for deliberative democratic theory, and particularly for the forms of reason which deliberative democrats see as legitimate. The next section will discuss the problem of tacit knowledge and its challenge to deliberative democracy. It has previously been aimed only at certain aspects of Habermasian deliberation; however, this article brings out its wider significance for both proceduralist and epistemic conceptions of deliberative democracy.2 The article will then argue that market approaches to tacit knowledge face significant limitations, before moving on to develop a defence of deliberative democracy itself. It will be argued that verbal deliberation can incorporate tacit forms of knowledge through the use of ‘trust in testimony’. By trusting the speech acts of others, deliberators are able to act on a speaker’s knowledge even when it is not explicitly expressed. The latter half of the article will then discuss the wider implications of this defence for deliberative theory. The inclusion of tacit knowledge through trust in testimony will be shown to create important problems for influential conceptions of deliberative democracy, such as Habermas, which are based on impersonal reason. Deliberation must involve not only impersonal forms of reasoning but also reasoning about credibility and trust. The article will then end with a discussion of the different ways trust in testimony operates in deliberation, markets and everyday talk.

Deliberation and the problem of tacit knowledge

Deliberative democracy is an approach to democratic decision-making based on a reasoned dialogue. Unlike aggregative models of democracy, which focus on the summing up of given preferences through voting, deliberative democrats emphasize the role of
open discussion between free and equal participants (Cohen, 1989; Dryzek, 1990, 2000; Elster, 1986; Gutmann and Thompson, 2004; Habermas, 1996; Mansbridge et al., 2012; Rawls, 1996; Sunstein, 1991). Preferences are not taken as given to the democratic process but rather as evolving in relation to the decision-making procedures themselves. Through discussion, preferences are not simply aggregated but informed and transformed in relation to each other. Although deliberation may end in a vote, theories of deliberative democracy focus on the importance of a prior discussion and debate. In Chambers (2003) words they are ‘talk-centric’ as opposed to ‘vote-centric’. It involves a process of critical reflection in which preferences and opinions can be considered and challenged, and alternative values and policies can be held up to scrutiny. Decisions are then taken in relation to the outcome of this free and equal deliberation.

Institutions of deliberative democracy can take many different forms. On the one hand, they may involve the formal deliberations of legislative parliaments, or the structured deliberation of citizens in mini-publics, citizen assemblies and consensus conferences (Smith, 2009). Alternatively, deliberation can form the basis of a radical participatory economy where firms and economic planning are controlled on a democratic basis (Devine, 2002). Recent work in deliberative democracy has also moved on to conceptualize deliberative systems, which involve the interconnected deliberation of many different institutions within both government and civil society (Benson, forthcoming; Mansbridge et al., 2012).

It has been objected, however, that such models of democracy cannot account for tacit forms of knowledge. Mark Pennington (2003, 2011), in developing a Hayekian critique of deliberation, argues that theories of deliberative democracy give a privileged position to linguistic forms of communication which present them with significant epistemic challenges. This draws on Fredrick Hayek’s (1948b, 1978) distinction between theoretical and tacit forms of knowledge. Theoretical knowledge is an explicit, abstract or statistical knowledge which can be expressed in propositional form, whereas tacit knowledge is non-explicit and includes practical skills and know-how. Tacit knowledge, unlike theoretical knowledge, cannot be communicated linguistically or statistically. It cannot be expressed propositionally but can only be learnt through participation in a social action or practice. Polanyi (1997) gives the example of our ability to recognize a face among thousands of others despite our inability to explain exactly how or why we are able to do so. Perhaps a better example, however, would be our inability to articulate and explain all the rules of grammar and language which we abide by in our everyday conversations.

The implication of tacit knowledge is that we ‘know more than we can tell’ (Polanyi, 1997: 136). Much of the knowledge we act on day to day we could not express even if called upon to do so. Take, for example, the knowledge needed for conducting many occupations. Such knowledge cannot be fully learnt simply by reading a manual, no matter how detailed, but requires participation in that occupation itself. It requires learning while doing. Although we cannot fully express it, the tacit knowledge we gain through experience is often vitally important to our understanding and ability to make decisions in the complex social systems we occupy. It is also often very important to political decision-making and to public policy.
Take, for instance, environmental policy. It is often recognized that environmental policy can be greatly informed by the tacit knowledge of on-the-spot managers and local communities, who have a deep understanding of their environment (Fazey et al., 2005, 2006a, 2006b; Raymond et al., 2010). People can acquire a large and detailed understanding of an ecosystem through extended experience, living and interacting with it. This understanding can allow them to recognize changes and emergent properties within these systems and even form reliable predictions. Despite the depth of their knowledge, however, these individuals are often unable to articulate or explain how and why they know what they know (Fazey et al., 2005, 2006a, 2006b). Examples of people with this knowledge include indigenous communities whose experiences and learning over generations can greatly inform and benefit environmental management (Raymond et al., 2010). This knowledge is particularly important when dealing with complex ecosystems where theoretical scientific research is often absent or incomplete. Theoretical knowledge also makes generalized claims which may not hold for a particular context-specific decision. Drawing on tacit knowledge alongside explicit knowledge can, therefore, benefit the production of environmental policy. It can fill gaps in theoretical research and provide a specific understanding of particular ecosystems.6

Tacit knowledge is, in fact, inherent to social and intellectual practices. As Polanyi argues, and Hayek (1978) accepts, part of the information that a scientific expert has is based on practical knowledge and skills which they have acquired through years of participating in their discipline. This know-how includes, for instance, the ability to organize, interpret and derive understanding from bodies of information. This knowledge cannot be taught to a student of science in a lecture or book but can only be acquired through their engagement in the practice of science itself. Scientific knowledge is, however, vital to policy areas such as energy, public health and the environment. Medicine, chemistry, climatology, nuclear physics, biogenetics and many other bodies of scientific information are all highly relevant to policymaking, and all involve a tacit dimension.

Many people, such as scientists, indigenous people, farmers, care workers, fishers and civil servants, may all have specific practical knowledge because of their social roles which may be relevant to certain policy areas. However, Pennington (2003) argues that the inarticulate nature of this knowledge means that deliberative institutions will fail to utilize it. Deliberative democracy bases decision-making on a verbal discussion, meaning that its central form of communication is linguistic. Citizens, or their representatives, are to form a conception of the best policy purely on the bases of listening to, and participating in, verbal argument. Such communication, however, restricts the forms of knowledge which can be expressed. It is necessarily unable to articulate tacit knowledge because such knowledge is non-linguistic and cannot be communicated in propositional form. The privileging of linguistic communication, therefore, ignores important kinds of non-explicit knowledge. The inarticulate nature of tacit knowledge means that it is necessarily excluded from deliberative decision-making based on verbal dialogue.

Pennington aims this critique at Habermasian theories of democracy and in particular the role they give to deliberation as the process of social learning. By bringing people together in a forum, values can be exchanged and tested so that participants can learn from each other and have their own values informed and transformed as a result. For
Pennington, however, social learning must also account for tacit bodies of knowledge. Learning via conversation, although able to communicate explicit knowledge, will fail to include information which is by its nature inarticulate and can only be acquired through participation, observation and emulation. There are then epistemic limits to linguistic forms of learning which require that all information be articulated. Forms of social learning, such as the market (discussed further below), which have a capacity for extra-linguistic communication should, therefore, be favoured in order not to restrict the kind of knowledge which can be included.

The problem of tacit knowledge actually has much more general and significant problems for both Habermas and deliberative democracy than those highlighted by Pennington. First, issues of procedural fairness are also threatened by the exclusion of practical knowledge in deliberation. As proceduralists, Habermasians see deliberation as having to meet criteria such as full participation rights and equal voice. This appeal to egalitarian decision-making is, however, undermined as the decision process itself disadvantages and excludes certain kinds of knowledge and therefore certain people’s perspectives. People with relevant tacit knowledge are unable to share their knowledge in verbal decision-making. They are unable to articulate their perspective or their reason for it and are therefore limited in their capacity to participate equally in collective deliberation. Importantly, this challenges not just Habermasians but all deliberative democrats who require equality of voice and participation on grounds of procedural fairness (Cohen, 1989). The process of verbal decision-making itself disadvantages certain people’s knowledge and perspective and therefore limits their participation compared to others. This problem becomes particularly pressing when the holders of tacit knowledge are from social groups which already face marginalization or oppression. Indigenous communities, for instance, not only have important tacit knowledge but are often the most adversely affected by environmental problems. Similarly, women or ethnic minorities can have a unique understanding of social oppression which may also involve a tacit component. Such groups may be unable to fully express this knowledge and are, therefore, disadvantaged by verbal discussion. The problem of tacit knowledge, therefore, undermines the egalitarian defence of deliberation as a process which gives all an equal opportunity to influence the outcome.

Second, the problem of tacit knowledge has epistemic implications for deliberative democracy. In Habermas’ (1984) theory, for instance, deliberation is a process for testing certain validity claims. Speech acts presuppose claims, such as to empirical truth or moral rightness, which aim to gain acceptance. If they fail to gain acceptance in ordinary speech, then they are shifted to a new level of discourse. Discourse is a special kind of speech, conducted in an ideal speech situation, where all claims and assumptions within speech acts are made explicit and are open to criticism. In his consensus theory, the truth or rightness of a proposition consists in the agreement of everyone within a discursive argument, where the reasons given must also able to convince all participants. However, the linguistic nature of discourse limits the kinds of reasons which can be expressed. Tacit knowledge cannot be expressed linguistically so cannot be given in support of any claim. Reasons based on tacit knowledge cannot be given, no matter how idealized the speech situation. This actually undermines the ideal speech-situation itself, as it requires the realization of particular normative conditions; including the requirements of equal
voice and equal opportunity to effectively participate. The realization, or approximate realization, of the conditions for an ideal speech-situation, is frustrated by inarticulate bodies of knowledge.

An alternative approach to deliberation which also has an important epistemic component is epistemic democracy (Benson, forthcoming; Estlund, 2008; Landemore, 2013). Epistemic democrats differ from Habermas in that they take there to be procedure independent standards by which democratic decisions can be judged. Broadly speaking, they advocate deliberation based on its ability to communicate and utilize knowledge in order to arrive at rational, good or correct decisions, where rational, good and correct are defined by some non-procedural standard. Collective deliberation is argued to be the best process to gather, transfer and generate relevant information for effective decision-making. The problem of tacit knowledge, however, underlines deliberation epistemic potential by pointing to a significant knowledge base which will be necessarily absent from its decision process. There will often be relevant tacit knowledge which can inform policy but which is excluded from verbal deliberation, therefore, reducing the quality of its decisions. Deliberation will not, for example, be able to draw on the tacit knowledge of specialist scientists which could aid public policy. Epistemic democracy can only base decisions on explicit forms of knowledge which reduces its epistemic potential.

The problem of tacit knowledge presents an important challenge to deliberative democracy from both proceduralist and epistemic perspectives. By prioritizing linguistic forms of communication, deliberative democracy privileges explicit knowledge at the cost of excluding tacit forms of knowledge. One may reply to this by arguing that deliberation need not include tacit knowledge as deliberation is a process which can make such knowledge explicit. Through deliberation, the assumptions and foundations of different claims can be examined in order that they can be made explicit. To an extent this is true, and it is certainly one advantage that deliberation has over the market approaches considered in the next section. For example, it is observed that when environmental managers talk with each other, they are able to recognize and articulate some of their previously non-articulated knowledge (Fazey et al., 2005, 2006a). However, there are a couple of reasons why this will be limited. First, some of the knowledge that people have, such as knowing how to ride a bike, may have an irreducible tacit component which cannot be made explicit even through extended conversation (Ryle, 1945–1946). Second, some tacit knowledge will be too complex for people to fully propositionize it, especially under the time constraints of real-world deliberation, although it may be theoretically possible. For instance, it may be theoretically possible to express all the rules of language and grammar propositionally. However, this does not mean that I, through conversation with others, will be able to work out all the rules I tacitly follow when I speak. In fact, given the complexity of these rules, it is very unlikely that I will ever be able to do so. Similarly, an environmental manager may not be able to fully propositionize their knowledge of a complex ecosystem under the time constraints of actual deliberation, despite the fact that it may be conceptually possible to do so. So although deliberation may be able to make some practical knowledge explicit, it still needs to show how it can include that knowledge which cannot be articulated if it is to overcome the problem of tacit knowledge.
The market over the forum?

Following Hayek (1948a, 1948b, 2011, 2013), Pennington takes the problem of tacit knowledge to be not just a critique of deliberation but also a positive argument for market institutions. Markets are argued to have the capacity for extralinguistic communication in the form of market prices. Market participants act on their own knowledge and through acts of (or not) buying and selling products influence the formation of prices. The knowledge upon which they act, whether it is explicit or tacit, is then communicated throughout the economy as others adjust to changes in price signals. Individuals who act on price changes will not be fully aware of the knowledge upon which they act. However, this exact knowledge is not required. Prices give signals about the relative supply and demand of goods which allows people to adjust their actions without ever needing to know the reasons behind any particular price change (Hayek, 1948b). As well as price signals, free markets also allow greater opportunity for knowledge transfer through emulation, as people learn from the success or failure of others. This mechanism of emulation is also open to deliberative democracy. Deliberative institutions are able to learn and copy one another, and the opportunity for this will increase with the level of decentralization. However, this opportunity is argued to be greater in markets as a system of individual property rights expands the number of decision points and therefore the number of decisions from which to learn. Market institutions, unlike deliberative institutions, are therefore said to have the potential for extralinguistic communication which can utilize tacit knowledge. The acknowledgement of the importance of tacit knowledge is, therefore, said to give good reason to support markets over democratic institutions.

There are, however, significant limits to the market approach to dealing with tacit knowledge. There are, for example, well-recognized problems with the ability of markets to deal with things such as public goods or externalities, which will often require alternative mechanisms to price signals. However, there are also specifically epistemic problems with price-based communication which affect how markets utilize tacit knowledge. Stiglitz (1996), for instance, has argued that market prices are ‘too coarse’ a signal to communicate all the information required by market actors. A market actor will not, for instance, know whether a price change results from the actions of traders or from actual changes in relative scarcity, nor will they know if these changes are short or long-term. Although Stiglitz does not discuss tacit knowledge, this general informational problem will affect the ability of markets to utilize tacit knowledge as actors will not necessarily know how to adjust to the price fluctuations this knowledge creates.

In addition to the problems highlighted by Stiglitz, inequalities also present in markets can adversely affect the communication of tacit knowledge. A persons’ ability to communicate is dependent on their ability to influence price formation and therefore their ability to buy and sell. The communication of knowledge is therefore open to distortion by inequalities in wealth and income. Even allowing for a certain amount of social mobility, the price mechanism risks amplifying the knowledge of those with large amounts of buying power and property, while ignoring the knowledge of those with fewer resources. The knowledge of people with little property or buying power, such as the indigenous communities discussed previously, may have their knowledge drowned.
out by the large influence wealthy individuals and corporations have on price formation. Furthermore, markets can also struggle to deal with inequalities in the distribution of tacit knowledge itself. Much important tacit knowledge is not evenly distributed but instead only known to certain specific individuals, such as specialist scientists, who have training and experience in a field. The ability of these people, however, to communicate their knowledge through prices is very limited. A handful of scientists, for instance, are unlikely to be able to communicate their unique knowledge through acts of buying and selling. Often the greatest epistemic challenge is getting access to unique or scarce knowledge which is crucial to a given social problem. However, markets will often struggle to deal with this problem as small groups of people with a large amount of scarce knowledge may be unable to influence prices.

Finally, the free-market society which Hayekians advocate can be seen to suffer from the opposite problem to deliberation. The importance it gives to communication through market prices can be seen to reduce the scope for linguistic communication and high-quality explicit knowledge. As Pennington (2003: 732) points out, markets do allow for linguistic communication via ‘advertising and gossip about new prices/products’. However, this will not amount to the communicative potential of deliberative democracy (also see Benson, forthcoming). Deliberative institutions bring dispersed people, who may not otherwise meet, together and into dialogue with each other. Bringing dispersed individuals together means that they can be subjected to forms of explicit knowledge with which they would otherwise not come into contact. People with diverse perspectives, expertise and knowledge can join in structured deliberation where they have the opportunity, through linguistic communication, to share explicit knowledge and learn from each other. Just as deliberation may not have as great a capacity for emulation as private markets, markets also do not have as great a capacity for linguistic communication as institutions of deliberative democracy which can bring dispersed individuals together. Markets could, therefore, be seen to privilege non-linguistic forms of communication at the expense of limiting, relative to deliberative democracy, explicit forms of knowledge and reasoning.

This brief discussion has aimed to show a number of limitations and imperfections in the market approach to tacit knowledge, reducing the strength of the positive Hayekian argument. Although imperfect, markets do at least have some mechanisms for utilizing tacit knowledge, something which deliberative democracy is said to necessarily exclude. It is, therefore, necessary to return to our discussion of deliberative democracy.

**Bringing tacit knowledge into deliberation**

The problem of tacit knowledge argues that non-explicit knowledge is necessarily excluded from deliberative democracy because it is based on verbal dialogue. Contrary to this, it will be argued that a linguistic process does have the potential for incorporating tacit knowledge. The mechanism by which this can be done is that of ‘trust in testimony’. Here, testimony is simply defined as a speech act of an individual saying, telling or asserting something (Searle, 1969). Testimony is sometimes taken to refer only to storytelling or expressions of lived experience. However, it will be taken here to refer to speech acts more broadly. Trust in testimony is then the acceptance of speech acts, or
part of speech acts, on the word of the speaker. It is the acceptance of speech acts on the credibility or authority of the speaker as opposed to solely an evaluation of the propositions of the speech acts themselves.\(^{14}\)

The importance of trust in testimony is that it can allow deliberative decision-making to utilize knowledge even when it is not explicitly expressed in linguistic communication. To see how this is possible, we can first consider ordinary kinds of testimony. Testimony can be given in the absence of trust, and it can be received by an audience who place no trust in, or even mistrusts, the speaker. In such a case, the audience would accept or reject any part of that testimony purely on its propositional content. They would hold the testifier’s words up to scrutiny and evaluate them in terms of consistency, accurateness and correctness. Where the testimony meets the necessary standards, it would be accepted or otherwise rejected by its audience. Because the acceptance of the testimony is based purely on scrutinizing the propositional content of speech acts, any knowledge communicated must be contained within these very speech acts. Any information which is communicated must, therefore, be explicit and not tacit knowledge as it must be contained within speech acts.

Now, we can consider testimony which is accepted, at least in part, on the bases of trust. When receiving testimony under conditions of trust, explicit theoretical knowledge will still be communicated, and the scrutiny of the testimony’s propositional content will remain a necessary and important component of the audience’s acceptance or rejection of it. However, if the audience accepts testimony on the basis of trust, they will also be able to utilize knowledge beyond that which is directly contained within the speech acts of the testifier. Trust allows deliberators to act upon the knowledge of the speaker even when this knowledge is not, or cannot be, explicitly expressed. To see how this is the case, it is useful to consider a non-deliberative example of a doctor and a patient. When a doctor diagnoses an illness and recommends a treatment, she does so on the basis of her explicit and tacit medical knowledge. She draws from her theoretical knowledge acquired through her training and her practical knowledge acquired through practising medicine itself. This wealth of knowledge is never expressed to the patient and in the case of tacit knowledge cannot be expressed to them. However, if the patient trusts the doctor who prescribes them the treatment, they will still be able to utilize that doctor’s knowledge in their own decision-making. If, for example, they decide to accept the recommended treatment, that decision will be utilizing all the explicit and tacit knowledge on which the doctor based that recommendation. Such knowledge was never directly expressed to the patient. However, they are able to utilize it because they place trust in the doctor’s advice. Through this example, we can see that trust in testimony is able to communicate more than just explicit information because it allows people to utilize and act upon the tacit knowledge behind the claims of others.

By this same mechanism, tacit knowledge can be utilized within institutions of deliberative democracy. When someone gives testimony in a deliberative forum, people can act upon and take into account the tacit knowledge which supports their claims, assertions and recommendations without the requirement that it be explicitly articulated. If, for example, a member of an agricultural community or a specialist scientist speaks in a citizen’s assembly about the effects of a policy on a particular ecosystem, they will partly do so by drawing on their non-explicit knowledge. They will draw on knowledge...
which they are unable to express to other deliberators explicitly. However, if other deliberators accept their speech acts on the basis of trust, then they will be able to act upon and utilize this tacit knowledge. They will be able to take the recommendations and opinions of the speaker into consideration and utilize all the knowledge which supports them, without needing that knowledge to be explicitly communicated in propositional form. If the speaker claims that the policy under consideration is changing the ecosystem in some way then by accepting, or partly accepting, this on the basis of trust allows deliberators to utilize the tacit knowledge on which this claim is based and bring it into their decision-making. The speaker will of course also be able to give some linguistic reasons for their claims and draw from their explicit knowledge. In practice then, utilizing tacit knowledge through trust in testimony will rarely, if ever, involve the acceptance of claims purely on trust. However, to the extent that a speaker’s claims are supported by tacit knowledge, trust will be required.

It is important to note that the audience to such testimony will not know the content of the knowledge on which they act. As discussed previously, tacit knowledge can only be learnt fully through participation in a practice or skill. However, accepting speech acts on trust allows people to utilize the tacit knowledge of others without the need to know it themselves. In this respect, it overcomes the problem of tacit knowledge in a similar way to market prices. Price signals are not able to communicate the content of knowledge. However, they do communicate to people the necessary information in order that they can adjust their actions. For this reason, Horwitz (2004: 314) argues that the price mechanism is a ‘knowledge surrogate’ rather than as a mechanism for full communication. It does not convey the content of knowledge so that we ‘know what others know’ but rather makes the knowledge ‘socially accessible’ so we ‘are able to act as if we knew what others knew’. Trust in testimony should similarly be thought of as a knowledge surrogate. It does not allow participants in deliberation to come to know practical knowledge, but it does allow deliberators to utilize the tacit knowledge of others without ever coming to know it themselves.

**Communicating through trust**

Trust in testimony, like market prices, can act as a knowledge surrogate which can allow deliberative institutions to utilize tacit knowledge. How well, however, can trust communicate knowledge in a deliberative setting? Trust requires deliberators to evaluate the credibility of a speaker and then accept or reject knowledge based on this evaluation. It requires a deliberation about the credibility of speakers. The different factors involved in such evaluations will be discussed in the next section. This section will look to address some problems which question the effectiveness of trust in testimony as a mechanism for knowledge transfer in deliberative democracy.

The first problem comes from Sanders (1997) and Fricker (2009), who have pointed to the influence that social positions, gender and ethnicity can have on the acceptance and evaluation of claims. Trust in testimony requires us to accept claims and knowledge based on the credibility of speakers. However, judgments of credibility can be adversely influenced by the social positions of speakers, with those from marginalized groups being seen as less credible than those from more privileged groups. A common example
of such influences would be suggestions of female workers not being considered in professional meetings, while the same suggestions being quickly accepted when expressed later by a man. These social influences can present specific wrongs, or epistemic injustices in Fricker’s terms, to those whose credibility is undermined. However, they also present significant epistemic problems to the communication of knowledge based on trust in testimony. If such influences prevail then knowledge will be accepted/rejected on epistemically irrelevant grounds such as the gender or ethnicity of the speaker. Another somewhat related issue is examined by Mackie (2006). Mackie argues, in relation to work in psychology, that people are unlikely to accept new information or change their minds in deliberation. Part of the reason for this is that people face social influences not to express changes in their positions. It is also because peoples’ beliefs do not exist in isolation but are connected in a network with other beliefs they hold. New information or reasons which would be sufficient to alter a belief in isolation may not, however, alter the belief when it is part of a wider network. In terms of trust in testimony, this means that knowledge expressed even by very credible speakers may still fail to be transmitted if it is inconsistent with deliberators’ prior beliefs. This does not mean that people never accept new information, but rather that it may take a long time for them to do so when it contradicts other beliefs they hold (Mackie, 2006).

There are then a number of social influences and psychological mechanism which question the ability of trust in testimony to communicate knowledge effectively. A number of things need to be said in reply to these problems. First, it is important to note that these problems affect deliberation generally and not just the mechanism of trust in testimony. Both Sanders and Fricker show that people may give extra weight to reasons and argument expressed by people in privileged positions while giving less weight or even ignoring those expressed by people from marginalized groups. Even if trust judgments are excluded from deliberation, prejudicial social influences can still affect the communication of knowledge and arguments. Similarly, Mackie shows how people may not alter their beliefs when confronted with reasons which have nothing to do with trust. The communication of knowledge through trust in testimony may not, therefore, be any worse off than other forms of communication which take place in deliberation. Such problem will also affect markets, to the extent that they also involve linguistic forms of communication.

Despite affecting other approaches, these problems still present challenges the communication of tacit knowledge through trust in testimony. Advocates of deliberative democracy have, however, pointed to a number of ways deliberation can be structured in order to reduce these problems significantly. Fishkin (2009), for instance, has argued that deliberative designs which use trained moderators and place less emphasis on consensus, are empirically much less effected by social positions as compared to the jury deliberation examined by Sanders. Similarly, giving more space to compromise and repeated deliberations can allow people to accept new information and change their minds more easily. In fact, empirical evidence suggests that people actually do often change their minds in deliberation (Fishkin, 2009; Goodin and Niemeyer, 2003; Luskin et al., 2003). Changes in positions are also most often the result of people being introduced to new information which is the particular issue when we are considering trust in testimony. Therefore, although social influences and psychological mechanisms can
affect the communication of knowledge via trust in testimony, there are ways of structuring deliberation in order that they can be significantly reduced.

Finally, trust judgments and explicit evaluations of credibility may help to tackle some of these problems. Sanders (1997: 353) argues that prejudice and privilege do not ‘emerge’ in deliberations as bad reasons as they are too ‘sneaky, invisible, and pernicious’. As a result, they will not typically be opened up to argument or challenge. However, trust in testimony makes evaluations of speakers explicit in deliberation. At least where trust is required, it makes considerations about the credibility of speakers explicit and opens up such considerations to argument. This can help to check the influence of unconsidered or implicit prejudice and privilege by forcing deliberators to consider a speaker’s credentials directly. This will not overcome all such influences. People with strong prejudicial attitudes may not give credibility to certain speakers even when they are presented with good reasons to do so. However, coupled with structural factors, this mechanism can at least help to check the influence of social position on credibility judgments.

This section has addressed some of the challenges facing the communication of knowledge through trust in testimony. The problems are important, and they cannot be completely eradicated from deliberation. However, there are still a number of ways that these problems can be significantly reduced and made less influential. The fact that they cannot be removed completely points to the fact that trust in testimony is an imperfect mechanism for knowledge transfer. As O’Neill (2004) has argued, trust judgments always run some risk that trust will be placed in the wrong people. However, no alternative mechanism for communicating tacit knowledge is perfect, and we have seen the weighty limitation facing its communication through markets and price signals. Trust in testimony then needs to be seen as an imperfect mechanism for communication, although its imperfections can be significantly managed and reduced.

**Forms of reason in deliberative democracy**

It has been argued that through trust in testimony deliberative democracy can communicate and utilize tacit knowledge. This section will argue that this defence has important implications for deliberative democratic theory more generally. In particular, it will be argued that tacit knowledge and trust in testimony create significant problems for certain influential approaches of deliberative democracy. These are approaches which see impersonal forms of reasoning as the only legitimate factors in persuasion and include the work of Habermas and his followers. These accounts of deliberative democracy have been criticized from a number of fronts, such as their inability to account for emotions, self-interest and compromise (Mansbridge et al., 2010). This section will argue that by confining deliberation to impersonal reason, these approaches will also fail to incorporate tacit forms of knowledge through trust in testimony. They cannot, therefore, avoid the significant problems both procedural and epistemic conceptions of deliberative democracy face when they exclude tacit knowledge.

The important aspect of these approaches, for our current discussion, is that they base deliberation on purely impersonal forms of reason. They see the ‘first and most important characteristic’ of deliberative democracy as ‘its reason-giving requirement’ (Gutmann
and Thomson, 2004: 3). Any testimony, claim or fact given within deliberation must be explicitly supported by clear reasoning. Habermas (1976: 108), for instance, writes that deliberators are ‘required to state their reasons for advancing proposals’. They must support their claims with ‘reasons that could convince anyone irrespective of time and space’ (1994: 52). Decisions are then formed in relation to these reasons. As Gutmann and Thomson (2004) argue, reason-giving is common to many conceptions of democracy because of its connection with autonomy. Basing decisions on clear reasoning treats persons as ‘autonomous agents who take part in the governance of their own society’ rather than merely ‘objects of legislation’ (Gutmann and Thomson, 2004: 3). It recognizes that persons are ‘autonomous agents whose capacity for rational judgment must be respected’ (Chambers, 1996: 100). Deliberators should, therefore, ‘attempt to convince each other that there are inherently good reasons to pursue one course of action over another’ (Chambers, 1996: 99). It is only when they do this that they act autonomously as opposed to being swayed by the coercion of others.

This connection between reason and autonomy is closely linked to the distinction between reason and power (O’Neill, 2002). While people may exercise their power to coerce others to support their ends, reason supplies an impersonal force of persuasion. Reason is impersonal in that it convinces others, not because of the authority or position of the individual giving those reasons, but through the adequacy or truth of those reasons themselves. Reason has a force of persuasion independent of any individual or institutional power because it can appeal to abstract propositions, such as claims or statements, as opposed to persons. A discourse based on impersonal reason, therefore, involves only ‘non-coercive persuasion’ which gives protection against ‘manipulation and domination’ (Chambers, 1996: 152). Deliberation between free and equal persons must involve ‘no force except that of the better argument’ (Habermas, 1976: 108). Impersonal reason is seen as the sole legitimate factor in persuasion as it protects individuals’ autonomy. The ‘only remaining authority’ in deliberation should, therefore, be ‘that of a good argument’ (Dryzek, 1990: 15).

The introduction of tacit knowledge, however, is problematic for these approaches to deliberative democracy. This is because claims and proposals made on the bases of tacit knowledge cannot be supported by impersonal reasoning. When deciding to accept or reject testimony made in deliberation, the usual task would be to assess whether there are inherently good reasons to support the claims, assertions and statements given. These propositions should be considered abstractly, and questions should be asked about what knowledge or argument can be given in support of these abstract propositions. However, when testimony is based on tacit knowledge, no such knowledge or argument can be given. Tacit knowledge cannot be expressed linguistically, so it is impossible to articulate clear reasons to support testimony based on such knowledge. In practice, testimony is unlikely to be based on tacit knowledge alone so some explicit impersonal reasons can be made. However, to the extent that this testimony is based on tacit knowledge, no such reasons can be given. As a result, the requirement that deliberators must support their claims with impersonal reasons cannot be met.

This is the reason why trust is required. Deliberators cannot directly evaluate claims based on tacit knowledge so must instead evaluate the trustworthiness of the speaker. As O’Neill (2002) argues, however, trust moves us away from impersonal reason.
Evaluations of trust or credibility require an assessment not just of the propositions of testimony, irrespective of the speaker, but also an assessment of the speaker themselves. An assessment of speakers’ statements may still be important to evaluating trust. Whether speakers’ statements are clear and consistent will impact on whether they are speaking with authority on a subject. However, evaluations of trust also require deliberators to assess speakers’ expertise and character. They need to access whether speakers have the expertise, training and experiences in order to have the knowledge to support their claims and whether they have the good character and intentions in order to make their claims truthfully. For example, an accomplished medical scientist may be judged to have the necessary expertise to testify on the risks of passive smoking, but be thought unreliable if there research funding and salary come exclusively from big tobacco companies. Trust, therefore, departs from impersonal reason. Reasons that appeal to the expertise and character of a speaker ask people to accept testimony not because there are inherently good reasons to support the statements themselves, but because the person giving them has certain qualities. Such reasons ‘attend to persons, not propositions’ (O’Neill, 2002: 256).

Approaches to deliberative democracy based on purely impersonal reason cannot, therefore, deal with tacit knowledge. When it comes to tacit knowledge, the requirement that all deliberates must give impersonal reasons for their claims cannot be met, as such knowledge cannot be articulated to others. Instead, such knowledge requires reasoning which appeals to evaluations of credibility and trust. It requires reasons which attend to speakers, not just speech acts. This is not a problem only for Habermasian approaches to deliberation but any which rejects considerations of speakers. Rawls (1989: 238), for example, has written that in reasonable political discussion we should not ‘readily accuse one another of self- or group-interest, prejudice or bias and of such deeply entrenched errors as ideological blindness and delusion’, and goes as far as to say that ‘accusations without compelling grounds’ can represent ‘a declaration of intellectual war’.

Importantly, this problem is present for such positions even in ideal conditions. Even in an ideal speech situation or an ideal discourse, certain claims cannot be supported by impersonal reasons as the knowledge behind them is non-propositional. Approaches based on impersonal reason will fail to incorporate tacit knowledge even in ideal deliberation. They will, therefore, face the challenges that the exclusion of such knowledge produces in terms of deliberation’s egalitarian value and its epistemic ability. In order to deal with the problem of tacit knowledge, deliberative democracy must include other forms of reasoning. Deliberation cannot involve only impersonal reasoning about abstract propositions but must accept reasoning about trust and credibility.

**Trust, rationality and autonomy**

The discussion of tacit knowledge and trust in testimony has been argued to present important problems for deliberative theories which include only impersonal forms of reasoning. Supporters of these approaches may, however, object to the introduction of trust into deliberation democracy and argue that it produces more problems than it solves. This section will respond to two of most important of these objections.
The first objection to trust in testimony is that accepting propositions on the authority of a speaker leads deliberation in the direction of irrationalism. The problem with this objection, however, is that judgments of credibility are not judgments about the actual truth value of propositions. These judgments do not and cannot directly answer the question of truth value. Whether the proposition ‘Manchester is in England’ is said by someone who is knowledgeable or ignorant, wise or foolish and benevolent or malicious, has no bearing on the truth of that statement itself. These factors do, however, have a bearing on whether we should accept the statement when we are in a position where we cannot access its truth value. Judgments of credibility and character do not determine the actual truth value of statements, but they do act as reliable proxies which give us reason for accepting a statement as true when we do not have direct access to its truth value. It is not irrational to accept testimony based on the knowledge, experience and intentions of the persons giving it as these are not direct claims about the absolute truth value of the testimony. When we cannot access the truth of a statement ourselves directly, it is completely rational to access the credibility of the speaker and base our acceptance of the statement on this assessment.

The second objection is that accepting claims based on trust is incompatible with autonomy. As we have seen, autonomy is a key reason for wanting to keep deliberation confined to impersonal reason, and the acceptance of testimony based on the authority of a speaker may be seen to violate this. However, autonomy should not be threatened by the introduction of trust, as trust judgments are not equivalent to the acceptance of claims based on unquestioned authority or power. To trust someone is not to be coerced or to fail to think for one’s self. Rather it is to determine in accordance with reasons that it is justified to accept certain things given the credibility of those who express them. Trusting an epistemic authority does not involve surrendering one’s judgment but rather the use of one’s judgment to evaluate and scrutinize whether someone, in fact, has such epistemic authority (Warren, 1996). When trusting the diagnoses of a doctor, for example, we do not give up our judgment to the authority or power of the doctor, but rather use our judgment to determine that the doctor has the kind of expertise and intentions to suggest they are communicating correct knowledge. Accepting knowledge on trust requires scrutiny and considered judgment; two things are inherent to a deliberative process where people reflect collectively on reasons. Accepting testimony on trust does not then compromise autonomy, but actually requires people to make considered judgments about a person’s status as an epistemic authority.

In fact, seeing trust as inconsistent with rationality or autonomy would seem to create an unreasonable condition for their achievement. A large amount of our knowledge is not obtained through direct experiences but rather the testimony of others. Information acquired via friends, books, documentaries and academic papers all rely on the acceptance of testimony through trust and credibility. David Hume (2007: X.iV) goes as far as to argue that ‘there is no species of reasoning more common, more useful, and even necessary to human life, than that which is derived from the testimony of men and the reports of eye witnesses and spectators’. To take the acceptance of testimony on trust as incompatible with rationality or autonomy would, therefore, require us to give up much of the knowledge we possess and create too high a burden for their achievement. It would mean, for example, that someone in a city unknown to them, who follows the directions
of a stranger or a map to the local train station, acts irrationally or relinquishes their autonomy by doing so.

**Deliberation, markets and everyday talk**

It has been argued that trust in testimony can allow deliberative institutions to incorporate tacit forms of knowledge and that deliberative theory needs to include more than purely impersonal forms of reasoning if it is to do so. As the passage from Hume quoted above suggests, trust in testimony is actually a significant source of much of our knowledge. When we gain knowledge in our day to day lives this is often, if not mostly, through trusting the claims of some authority rather than through our direct experience. Trust in testimony is an important part of knowledge acquisition in everyday life and in everyday talk. As a result, it is also important to knowledge in markets. As we have already mentioned, markets have space for linguistic forms of communication, although this was argued to be less significant than in deliberative democracy. People do not just respond to price changes but also make decisions in relation to the knowledge they require through their everyday talk with others. The last part of this article will, therefore, consider and compare the ways that trust in testimony operates in everyday talk, markets and deliberation.

An account of knowledge in everyday talk is given by Hardin (2009). Hardin puts forward a ‘street-level epistemology’ which analysis people’s ordinary knowledge and how it is mostly gained through accepting the claims of others. A key aspect of this account is that it is of personal or private knowledge. To the extent that it is concerned with justified beliefs, it is concerned with how it is justified to the individual who accepts it. It does not aim at justifying knowledge *tout court* but looks at how and when it is justified for a particular individual to acquire certain knowledge, given its possible benefits and costs to that individual (Hardin, 2009: Ch. 1). In terms of acquiring knowledge through trust in testimony, this suggests that people will accept the knowledge of others when it benefits them to do so. This leads Hardin to be rather pessimistic about how individuals evaluate the credibility of authorities. Although people may invest time in such evaluations when it is particularly important, people are mostly said to have little concern for the credibility of sources and accept knowledge on little more than ‘faith’ (Hardin, 2009: 10–13, 28, 90, 108). Hardin seems overly pessimistic in this respect. Often making judgments about someone’s credibility can be done with little cost or can rely on easily available heuristics such as someone’s profession. However, the aspect of Hardin’s account which is of particular interest here is how ordinary knowledge is justified in everyday life and talk. They accept the testimony of others when it benefits them as individuals. In the sphere of everyday talk and markets, people will accept the testimony of others when it is justified for them as individuals.

This, however, is markedly different to how knowledge is accepted in the formal institutions of deliberative democracy. When people deliberate together about collective decisions knowledge is not, and should not, be accepted because it is justified to any one individual. Rather knowledge in deliberation must be justified to others. If someone makes a claim in deliberation, people must give reasons to their fellow deliberators for why they should accept it. When testimony is given on the basis of tacit knowledge,
deliberators must justify to others why it should be accepted given the expertise and intentions of the speaker. The acceptance of knowledge in deliberation must be justified not to any one individual but to others. Knowledge in deliberation is, therefore, not personal but public. This is not to say that it is at the level of scientific knowledge. Deliberators do not apply, nor could they apply, the methods of empirical science to knowledge claim in deliberation. However, knowledge in deliberation is public in the sense that its acceptance has to be justified to others with reasons, reasons which include the credibility of speakers. This public justification is built into a deliberative process as people must look to convince others in order that their views gain acceptance.

The different way trust in testimony operates within formal deliberation, as compared to everyday talk and markets, has both normative and epistemic significances. First, when people accept and act upon knowledge in the market, they are not required to justify this to anyone else. In many cases, this may be unproblematic. However, when market decisions significantly affect others, this becomes normatively significant. If someone decides to pollute because they have accepted some authorities claim that climate change or air pollution are not real or harmful, they are never required to justify this acceptance to others who will be affected by their actions. Formal deliberation is a process where people must justify the acceptance of knowledge on which they base decisions which affect their lives. People must justify why certain knowledge should be accepted and form the basis of decisions which affect others. Second, this kind of justification also has epistemic significance as it shows how trust in testimony goes through a more rigorous process in deliberation than in other settings. Although people’s everyday evaluations of credibility may not be as poor as Hardin often suggests, they are not equivalent to those within formal deliberation where reasons must be given to convince others to accept knowledge. People must justify the acceptance of knowledge to others and, therefore, give greater consideration to the credibility of epistemic authorities. This highlights deliberations advantages over markets when it comes to trust in testimony, but also over everyday talk. Some deliberative theories, such as systems approaches, see the everyday talk which happens in democracy as an important part of deliberation (Mansbridge et al., 2012). However, given the difference in how trust operates in different settings, the quality of knowledge transfer will likely be greater in the formal deliberations of representative parliaments or citizen assemblies than in everyday talk in society.²¹ Formal deliberation, therefore, also has particular epistemic qualities when it comes to utilizing knowledge through trust in testimony.

Conclusion

This article has defended deliberative democracy against the problem of tacit knowledge. Through trust in testimony, non-explicit knowledge can be brought into deliberative institutions even though they are based on linguistic communication. The problem of tacit knowledge does not, therefore, produce a clear case for supporting markets over democratic institutions, as has been argued by Hayek and his followers. Both institutions have mechanisms for utilizing such knowledge, and both face their respective imperfections when doing so. The article also brought out the wider implications of this defence. It was argued that the acceptance of tacit knowledge through trust could not be accounted
for by deliberative theories which involve purely impersonal forms of reason. The result of this is that even in ideal conditions, these approaches will exclude tacit knowledge and risk undermining the procedural and epistemic value of deliberation. Instead, deliberative democrats should accept evaluations of credibility and trust as legitimate forms of persuasion, and they should do this without fear that it will compromise either autonomy or rationality.

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Notes
1. As well as the tacit nature of knowledge, Hayek’s and Pennington’s defence of markets is also based on the dispersed and distributed nature of social knowledge. For a reply to these arguments, see Benson (forthcoming).
2. In the beginning of the article, no one conception of deliberative democracy will be advocated. Instead, it will examine the implication of tacit knowledge for a variety of deliberative theories. Later, however, it will be argued that tacit knowledge highlights certain limitation with particular accounts of deliberation.
3. The tacit knowledge problem is one of three key Hayekian arguments Pennington (2003) makes against deliberation, which include critiques of conscious social coordination and egalitarianism. He also makes similar claims elsewhere (Pennington, 2001, 2005). For a more general defense of democracy against Hayekian critiques, see Benson (forthcoming).
4. This distinction is similar to Polanyi’s (1962) distinction between ‘tacit’ and ‘explicit’ knowledge and Gilbert Ryle’s (1945–1946) distinction between ‘knowing what’ and ‘knowing how’, both noted by Hayek (1978: 38). There are also similarities Oakeshott’s (1962) distinction between technique and practical knowledge, and the broader Greek concepts of ‘metis’, as used by Scott (1998), which includes tacit knowledge.
5. This article will use the terms ‘theoretical’ and ‘explicit’, and the opposite terms ‘tacit’, ‘non-explicit’ and ‘practical’, interchangeable to describe the two different forms of knowledge.
6. For general critiques of Hayekian approaches to the environment, see Benson (2018, forthcoming) and O’Neill (2012).
7. The type of discourse will differ depending on the type of validity claims being tested.
8. In later work, Habermas moves away from seeing these as conditions to which real discourse should approximate but rather as ‘pragmatic presuppositions’ which deliberators must implicitly accept. See Habermas (2008: 82) for a list of the most important of these.

9. Epistemic democrats often support vote aggregation as well as deliberation (Landemore, 2013).

10. This is of course not a democratic form of deliberation as it involves only similarly experienced experts who are able to draw out knowledge from each other. The process may be much less affective when fellow deliberators do not have a similar experience or training.

11. This will be dependent on the level of market concentration.

12. For a Hayekian reply to Stiglitz, see Pennington (2017).

13. Hayek (2011: 494) claimed that general scientific knowledge could be communicated downward to market participants by other means than prices. However, as O’Neill (2012) has argued, this proposal also suffers from the problem of tacit knowledge which cannot be communicated to market actors linguistically.

14. There is an epistemological debate over testimony as a source of knowledge. This debate is conducted between non-reductionist accounts, which see testimony as a foundational source of knowledge equivalent to perception (see Coady, 1994), and reductionist accounts, which see testimony as a non-foundational source which requires appeals to other sources (see Fricker, 1995). The argument here is agnostic on this debate and merely assumes that testimony can be a source of knowledge in some way.

15. Sanders’ solution to these social influences also appeals to a form of testimony. Importantly, however, her definition differs from that used here. Here, testimony refers to expressions of speech acts generally, while for Sanders it refers particularly to expressions of lived experiences, such as those found in black churches in the US. Sanders (1997: 371) takes this kind of testimony to be distinct from deliberation as it aims to represent certain critical voices rather than at pursuing commonality. This distinction, however, is somewhat less clear in relation to more recent work on deliberative democracy where the role of experiences, consensus and dissenting voices has been challenged. Furthermore, although Sanders’ alternative may help deal with the unequal speaking time these social influences may create, it does not directly deal with the credibility problem in focus here. Even in these forms of testimony, there are still problems of whether an audience will accept them as true or weighty, given the social position of the speaker.

16. It is not in tension with other accounts. Trust is, for instance, given a prominent role in Aristotelian or Athenian accounts of deliberation (O’Neill, 2002; Remer, 2008; Yack, 2006). Alongside applies to reason (logos) and the emotions (pathos), Aristotle (1991) saw the ethos of a speaker to be an important mode of persuasion. Trust in testimony is also not ruled out by epistemic accounts of democracy.

17. Aristotle (1991) noted these epistemological and ethical components of trust.

18. For a wider discussion of the importance of trust in testimony, see Coady (1994).

19. On this account, there is little distinction between a person’s knowledge and their beliefs as both are justified from the perspective of the individual.

20. Hardin also discusses Hayek’s case for markets. However, this is only in reference to Hayek’s analysis of the distribution of knowledge and benefits of decentralization, and does not discuss it in relation to either testimony or authority. Hardin (2009: 3) also doesn’t consider the role of tacit knowledge which he excludes from his analysis.
21. In replying to Sanders and Fricker, we saw how the structure of deliberation also affects the quality of credibility judgments. This gives additional reason to think trust in testimony will be more effective in formal structured deliberation. These points do not reject a systems approach, but do point to the importance of formal deliberations within a deliberative system.

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**Author biography**

**Jonathan Benson** is a PhD Candidate in Politics at the University of Manchester and is a member of the Manchester Centre for Political Theory. His research interests include political and democratic theory, environmental politics and political economy.