

The Public and Geoengineering Decision-Making: A View from Confucian Political Philosophy

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Climate Geoengineering Governance

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ABSTRACT

In response to the Royal Society report's claim that "the acceptability of geoengineering will be determined as much by social, legal, and political issues as by scientific and technical factors" (Royal Society 2009, ix), a number of authors have suggested the key to this challenge is to engage the public in geoengineering decision-making. In effect, some have argued that inclusion of the public in geoengineering decision-making is necessary for any geoengineering project to be morally permissible. Yet, while public engagement on geoengineering comes in various forms, the discussion in geoengineering governance and the ethics of geoengineering have too often conceptualised it exclusively in terms of public participation in decision-making, and supported it by various liberal democratic values. However, if the predominant understanding of public engagement on – or, the role of the public in – geoengineering decision-making is indeed *only* grounded on liberal democratic values, then its normative relevance could be challenged *by* and *in* other ethical-political traditions that do not share those values. In this paper, I shall explore these questions from a Confucian perspective. I argue that the liberal democratic values invoked in support of the normative importance of public participation are, at least, foreign to Confucian political philosophy. This presents a *prima facie* challenge to view public participation in geoengineering decision-making as a *universal* moral requirement, and invites us to reconsider the normative significance of this form of public engagement in Confucian societies. Yet, I contend that the role of the public remains normatively significant in geoengineering governance and the ethics of geoengineering from a Confucian perspective. Drawing from

recent work on Confucian political philosophy, I illustrate the potential normative foundation for public engagement on geoengineering decision-making.

Introduction

In response to the Royal Society report's claim that "the acceptability of geoengineering will be determined as much by social, legal, and political issues as by scientific and technical factors" (Royal Society 2009, ix), a number of authors have suggested the key to this challenge is to engage the public in geoengineering decision-making (see, e.g. Royal Society 2009; Corner & Pidgeon 2010; Corner et al. 2012; Rayner et al. 2013). In effect, some have argued that inclusion of the public in geoengineering decision-making is necessary for any geoengineering project to be morally permissible (see, e.g. Jamieson 1996; Svoboda et al. 2011, 171-173; also, see Preston 2013). While public engagement on geoengineering comes in various forms, the discussion in geoengineering governance and the ethics of geoengineering have too often conceptualised it exclusively in terms of public participation in decision-making (henceforth, public participation), especially ones that generate or enable (informed) consent; and, its importance for geoengineering governance and in ethics of geoengineering is often supported by various liberal democratic values.¹ However, if the predominant understanding of public engagement on – or, the role of the public in – geoengineering decision-making is indeed only grounded on liberal democratic values, then its normative relevance could be challenged by and in other ethical-political traditions that do not share those values. One immediate question, therefore, is whether public engagement, so understood, ought to be taken as a moral requirement for geoengineering decision-making even in non-liberal societies; and, relatedly, what, if any, values in a non-liberal tradition can help to justify it as a moral requirement if public participation is to be

¹ A notable exception is the Oxford Principles, where the authors explicitly note that "[d]ifferences in political and legal cultures will shape the mode and extent of public participation around the world. Different ideas about democracy and the relationship between individuals and society will engender different understandings of consent... Principle 2[, i.e. public participation in geoengineering decision-making,] thus does not (and should not, in deference to cultural differences) specify exactly what measures must be taken to secure public participation. Rather it highlights the need to develop them alongside the technological research being pursued" (Rayner *et al.* 2013).

introduced as a normative requirement for geoengineering decision-making. The answers to these questions are pressing for geoengineering governance and the ethics of geoengineering, as the impacts of geoengineering is expected to be global, and, therefore, geoengineering governance and the ethics of geoengineering will inevitably be global in nature, too. Hence, unless one is prepared to assert liberal democratic values as the only normative foundation for geoengineering governance or the ethics of geoengineering, fundamental values in other ethical-political traditions need to be taken more seriously in the discussion.

In this paper, I will explore these questions from a Confucian perspective. I argue that the liberal democratic values invoked in support of the normative importance of public participation are, at least, foreign to the Confucian ethical-political tradition. This, I argue, presents a *prima facie* challenge to take public participation in geoengineering decision-making as a universal moral requirement, and invites us to reconsider the normative significance of this form of public engagement for Confucian societies. Yet, I contend that the role of the public would remain normatively significant to geoengineering governance and the ethics of geoengineering even from a Confucian perspective. Drawing from recent work on Confucian political philosophy, I illustrate the potential normative foundation for public engagement on geoengineering decision-making from a Confucian perspective.

Geoengineering Decision-Making, Public Participation, and Liberal Democratic Values

Different authors have argued that public engagement on geoengineering decision-making, in the form of public participation, will be a key element in geoengineering governance and the ethics of geoengineering. For instance, Dale Jamieson has argued for “the importance of democratic decision-making [about geoengineering]”, and has asserted that “no decision to go forward with [geoengineering] could be morally acceptable that did not in some way represent all of the people of the world. Even if people in poor countries would benefit from [geoengineering], it would still be wrong to change their climate without their consent” (Jamieson

1996, 329).² Likewise, in discussing the ethical problem of unilateral sulfate aerosol geoengineering, Toby Svoboda and his colleagues note that “a policy is procedurally just only if all persons affected by that decision have the opportunity to contribute to that decision process. This condition is not met in the case of unilateral sulfate aerosol geoengineering, because many persons who are affected by [it] have no opportunity to contribute to the decision process whereby [it] is enacted” (Svoboda et al. 2011, 173).³ Whereas both Jamieson and Svoboda et al. have not specified how the public ought to be included in geoengineering decision-making, they seem to have in mind public participation, with an emphasis on (informed) consent, in geoengineering decision-making. For instance, Jamieson emphasises “democratic decision-making” and, at the same time, asserts that “no decision to go forward with [geoengineering] could be morally acceptable that did not in some way represent all the people of the world” (my emphasis). Similarly, Svoboda et al. argue that unilateral sulfate geoengineering to be morally problematic because “many persons... have no opportunity to contribute to the decision process whereby [geoengineering] is enacted”.⁴ For them, the difficulty to introduce institutional architecture(s) for (global) public participation in geoengineering decision-making appears to be sufficient to preclude the moral permissibility of geoengineering (also, see Preston 2013).

² In the paper, Jamieson has specified four conditions for any geoengineering proposals to be morally permissible, i.e. (1) the project is technically feasible; (2) its consequences can be predicted reliably; (3) it would produce states that are socio-economically preferable to the alternatives; and (4) implementing the project would not seriously and systematically violate any important well-founded ethical principles or considerations, including (a) the importance of democratic decision-making, (b) the prohibition against irreversible environmental changes, and (c) the importance of learning to live with nature. As my focus is on the role of public in geoengineering decision-making, I shall focus only on (4a), which is explicitly about the normative significance of public participation in geoengineering decision-making.

³ Svoboda *et al.* examine the ethical problem of unilateral sulfate aerosol geoengineering from the perspective of procedural justice via both the Rawlsian notion of ‘pure procedural justice’ and an account of procedural justice proposed by Norman Daniel and James Sabin. However, since the two accounts do not differ significantly in their emphasis on the importance of public participation, so I shall only discuss Svoboda *et al.*’s discussion of Rawlsian notion of ‘pure procedural justice’, which provides a more straightforward example

⁴ It is unclear what Svoboda *et al.* count as an “opportunity to contribute to the decision process”. In effect, contrary to what they claim, it seems relatively clear that there are, or can be, various ways to contribute to geoengineering decision-making even for non-citizens. For instance, they can contribute to the decision process through NGOs, (international) protest campaigns, etc. Hence, I believe Svoboda *et al.* use the term ‘opportunity’ very narrowly to refer only to formal mechanisms for public participation in geoengineering decision-making.

Similarly, Adam Corner, Nick Pidgeon and their colleagues have argued for the importance of involving the public early in debates about geoengineering, i.e. “upstream engagement” (Corner & Pidgeon 2010; Corner et al. 2012; Pidgeon et al. 2012). As Corner, Pidgeon and their colleagues note, there are various methods for upstream engagement, but common to these exercises is that “the public [is encouraged] to play an active role in deliberating a scientific or technological issue throughout the entire process of scientific research and development, and particularly before significant commercial realisation has taken place” (Corner & Pidgeon 2010, 32). In this respect, the call for upstream engagement in geoengineering governance belongs to the broader ‘participatory turn’ in science and technology (see, e.g. Jasanoff 2003). The question remains, however, what are the rationales for public participation? Andy Stirling has succinctly summarised three rationales for public participation, they are “normative”, “instrumental”, and “substantive” respectively, i.e. “[f]rom a normative view, participation is just the right thing to do. From an instrumental perspective, it is a better way to achieve particular ends. In substantive terms, it leads to better ends” (Stirling 2004, 220; original emphasis). Yet the moral foundation for public participation is often unclear in the discussion, that is – why public participation is a morally right thing to do?⁵

Of course, public participation – either at a local or at the global level – is, or can be, instrumental in ensuring various ethical considerations to be met in geoengineering decision-making.⁶ For instance, properly conducted, (global) public participation can ensure concerns from vulnerable and marginalised people to be included in decision-making

⁵ This question is also raised by Kusch in his criticism of the participatory turn (Kusch 2007, 146-147). On this question, Stirling has provided an interesting answer, as he notes that “the narrow involvement, limited remits, constraining structures, privileged institutional interests and opaque technical procedures associated with expert analysis are all intrinsically problematic... [because t]hey conflict with Habermasian principles of ‘ideal speech’, with Rawlsian notions of ‘public reason’ and with a multitude of derived evaluative criteria held ideally to be associated with effective engagement in social appraisal... In short, under [the] normative democratic view, participation is self-evidently a good thing in its own right, without the need for further justification” (Stirling 2004, 221). Stirling’s answer, however, does not tell us whether public participation is too “self-evidently a good thing in its own right” in non-liberal democratic traditions. For another account of the normative foundation of the participatory turn, see Durant (2010, 2011).

⁶ This is not to say that public participation is *only* instrumentally valuable for ethical purposes. Indeed, public participation might well be instrumentally valuable for other purposes, e.g. political, commercial, etc. purposes. My focus, however, is on the public participation as a *moral* requirement for geoengineering decision-making

processes, which is of paramount importance to the moral permissibility of geoengineering (Corner & Pidgeon 2010; Preston 2013). However, if public participation merely serves an instrumental purpose, then it seems reasonable to question if it is the only mean to satisfy those ethical considerations, e.g. inclusion of the concerns from vulnerable and marginalised people, and thus if it really is a necessary condition for the moral permissibility of geoengineering and/or indispensable in geoengineering governance.

The moral foundation of public participation in geoengineering decision-making, I argue, is grounded more fundamentally on a specific view of personhood, i.e. the liberal democratic view of personhood, which conceptualises persons as independent, rational, and self-determining beings.⁷ According to this view of personhood, persons are separate and distinct individuals (from other individuals, the community, the society, etc.), who are capable of rational decisions and behaviours, and thus are the best and only candidates for determining their own course of lives with their own visions of a good life. Important to such a view of personhood, therefore, is that each and every individual ought to be treated as free and equal. This view of personhood, in turn, is perhaps best understood as persons being right-bearers.

From the liberal-democratic perspective, public participation becomes a moral requirement in geoengineering decision-making, because individuals have a right to be free, and thus any decisions and actions that interferes their ways of life ought to be consulted with and justified

⁷ As Stephen Gardiner notes to me, the label of “*the liberal democratic view of person*” is inevitably overgeneralised. Indeed, debate such as the liberal-communitarian debate has demonstrated that there are various ways to conceptualise personhood even within the liberal democratic tradition. However, I think Nussbaum has rightly pointed out that “at the heart of [the liberal democratic] tradition is a twofold intuition about human beings: namely, that *all, just by being human, are of equal dignity and worth, no matter where they are situated in society*, and that *the primary source of this worth is a power of moral choice within them, a power that consists in the ability to plan a life in accordance with one’s own evaluation of ends...* [T]he moral equality of persons gives them a fair claim to certain types of treatment of debate within the tradition, but the shared starting point is that this treatment must do two closely related things. It must respect and promote *the liberty of choice*, and it must respect and promote *the equal worth of persons as choosers*” (Nussbaum 1999, 57; my emphasis). Yet, even if one is unconvinced by the claim that liberal democratic values are derived from a specific view of personhood, my argument can be reformulated using *only* the liberal democratic values of freedom and equality.

to them; and, such a right is best manifested in public participation, because it prioritises individuals, and allows them to take decisions to be genuinely theirs through participation (also, see Scheffler 1985). At the same time, since individuals are viewed as equal, each of their voices is to be weighed equally, too. This means that individuals' views ought to be actively sought after in decision-making processes, and also that the policy-makers ought to respect their views in decision-making.

Interestingly, the liberal democratic view of personhood also entails a specific mode of public engagement, i.e. public engagement ought to be neutral (or, value-free) exercises. Accordingly, in this mode of public engagement, the public has to be free from pre-existing views of what is good (and/or bad) about geoengineering, and individuals have to voice their own concerns. Indeed, as Corner et al. suggest, "[public engagement] should not be undertaken as part of an attempt to: 'sell' new technologies; to 'legitimise technological choices'; or to 'close down' public contestation about new technologies. The full value of upstream engagement – as a critical window for eliciting and taking on-board the concerns and perspectives of wider societal opinion – cannot be realized if engagement activities are (or are perceived as being) exercises in securing acquiescence to new technologies before they emerge" (Corner et al. 2012, 456).

So far, I have attempted to show that the normative significance of public participation is grounded on a specific view of personhood from the liberal-democratic tradition. Particularly, I argue that freedom and equality are the central values that provide the moral foundation for public participation. If my analysis is correct, however, it seems to pose a challenge to those who regard public participation as a universal moral requirement for geoengineering decision-making, because the liberal democratic view of personhood and the values it gives rise to are not shared universally by all ethical-political traditions. Accordingly, it seems reasonable to question whether public participation is, or will be, normatively relevant in other ethical-political traditions that conceptualise personhood differently.

The Confucian View of Personhood and Public Participation: A Mismatch?

*A Brief Review of the Confucian View of Personhood*⁸

One way to explore the conundrum presented above is to look at a notion of personhood different from the liberal-democratic view. The Confucian notion of personhood is useful for this purpose, for it presents a very different account of what a person is. As Erika Yu and Fan Ruiping aptly summarise, the Confucian view of personhood is characterised by its relational, developmental and virtue-based nature (Yu & Fan 2007, 175-176).

Relationality is a central characteristic of Confucian view of personhood, as Confucians believe that human beings are inherently social and interdependent. David Wong points out that Confucianism presupposes a “social conception of the persons”, which views human beings as “biological organisms and become persons by entering relationship with others of our kind.” He adds that Confucians see human beings to be interdependent by nature, as they “need the help of others to develop as agents” (Wong 2004, 420-421).⁹ In short, Confucians think that human beings are inescapably born into a web of social relationships, and that they can only mature within this web of social relationships. Of course, there are similar relational views of personhood in other philosophical traditions. What distinguishes the Confucian notion of personhood from them is the weight it places on familial relationships and on social role.

Familial relationships are of utmost importance in Confucian ethics and political philosophy.¹⁰ From the Confucian perspective, family is the very first social context where human beings learn to relate to and interact with others properly; and, at the same time, the natural familial affections of parent-child relation form the basis of ‘love’ towards others. For Confucians, therefore, family plays a principal role in shaping one’s personhood. Moreover, the importance of familial relationships in

⁸ This section is drawn from my discussion of Confucian ethics of technology, see Wong (2012).

⁹ David Wong labels the interdependent nature of personhood as “the developmental sense of relationality” (Wong 2004, 421). However, his use of “developmental” differs significantly from the use of the term by Yu and Fan (2007), where they use it to characterise the *processual* nature of Confucian personhood. Here, I follow the use of “developmental” by Yu and Fan.

¹⁰ For an overview of Confucian filial morality, see Sarkissian (2010).

Confucianism is further illustrated by its effort to model all socio-political relationships upon the familial relationships. Also important to the Confucian notion of personhood is the social roles. From the Confucian perspective, to be a person is to stand in some relations to others appropriately; and, to stand in some relations to others appropriately means that one assumes and fulfils the responsibility required by those relations. For instance, Confucians have denoted five cardinal human relations (Wulun): parent-child, sibling, husband-wife, ruler-minister and friendship; and, each pair of human relations embodies a set of proper conducts and attitudes, e.g. whether one is properly a parent is determined by acceptance and fulfilment of the responsibility to one's child through following the set of proper conducts and attitudes prescribed by the parent-child relation. The same holds for other cardinal human relations too. In short, to be a Confucian person is to stand in some relations to others, and those relations are to be understood prescriptively. As such, a Confucian person cannot be identified independently from others (or, from the web of social relationships the person is situated in), and Confucian personhood must be ascribed via the roles a person occupies. It is for this reason A. T. Nuyen argues that Confucian ethics should be understood as a form of role-based ethics (Nuyen 2007, 2009).

To describe the Confucian view of personhood as developmental is to highlight its emphasis on personhood as an on-going process. From the Confucian perspective, personhood is neither static nor given. It is not static, because persons are not to be identified by a given set of characteristics of human beings, e.g. rationality. It is not given, because, while every human being is endowed with the potential to become a person, whether or not human beings become persons depends on their own efforts to cultivate the potential bestowed on them. In other words, human beings are not born as persons, and they only learn and practise to become persons. Roger Ames and David Hall have aptly labelled this aspect of the Confucian notion of personhood as "person-making" (Hall & Ames 1987). Since each and every human being is endowed with the potential to become a person, individuals only need to cultivate their potential to become persons. Hence, "person-making" is essentially about self-cultivation. Given the relational nature of Confucian personhood, self-cultivation is, therefore, about learning and practising to relate to and interact with others properly. Here, it is helpful to note that human beings can learn and practise to become persons, but they can too be degraded

into non-persons (or, sub-persons) when they fail to assume and fulfil the responsibility prescribed by their social roles. For example, to Confucians, a parent who fails to provide adequate love, care, and guidance to his or her child is merely a beast. Since there is a possibility for individuals to degrade from persons to non-persons, being – or, more accurately, becoming – persons is literally an on-going process.

Finally, Confucians think that personhood is defined in terms of virtue(s). As it is stated in *The Doctrine of Mean* 20 that “[h]umanity (Ren) is [the distinguishing characteristic of] man” (Chan 1954: 104). Ren, often translated as ‘humanity’, ‘benevolence’, or ‘goodness’, is viewed as the ultimate virtue in Confucianism (Wong 2013). It should be remembered that having the virtue in itself does not suffice for Confucian personhood, what is necessary is the realisation of the virtues through and within one’s web of social relationships. So construed, Confucian virtues are not independent from the social roles individuals occupy. More importantly, they are not independent from the rites (Li, sometimes also translated as “rituals”), which provide thick instructions, not just thin principles, as to what counts as proper conducts and attitudes in various contexts with respect to different social relationships. Since Confucians believe that the realisation of Ren requires human beings to live a specific way of life informed by rites, the Confucian notion of personhood is essentially a thick notion of personhood, which includes a substantive account of the good.

Public Participation versus Confucian Person

The characteristics of the Confucian view of personhood I have just outlined, i.e. relationality, developmentality, and virtuousness, appear to be at odd with the liberal-democratic view of the person as an independent, rational, and self-determining being. In the following, I argue that the Confucian view of the person could indeed be seen as hostile to the liberal democratic view of the person as well as the fundamental values of freedom and equality so central to it, which, at the same time, serve as the moral foundation for public participation. Accordingly, Confucianism presents a *prima facie* challenge to the normative relevance of public participation in geoengineering governance and the ethics of geoengineering.

I have pointed out that the value of freedom arises from the liberal democratic view of the person grounds the normative significance of public participation, because individuals, qua free individuals, have the right-claim against decisions and actions that could interfere their way of life. It is through public participation individuals can take decisions and actions to be their own. To the extent that the Confucian view of personhood is relational, i.e. social and interdependent, the value of freedom does not provide the same moral foundation for public participation. Indeed, the emphasis of Confucian personhood has primarily been on the responsibility prescribed by social roles, and the rites that specify how the responsibility is to be properly assumed and fulfilled. Accordingly, the relational nature of the Confucian personhood seems to relegate the value of freedom of the individual, and thereby weakens the moral foundation for public participation. Of course, the Confucian ethical-political tradition does have an understanding of autonomy (and, freedom), which is substantiated with a particular vision of the good in Confucianism. As Wang Yunping nicely illustrates the difference between the liberal democratic and Confucian understanding of freedom, "the [liberal democratic] of freedom means to free oneself from dominance (of authority and of any other external sources), whereas the Confucian concept of freedom is to free oneself from anything (advantage, selfishness, weakness of mind, corrupt society) that may be an obstacle to the good life. In other words, whereas the [liberal-democratic notion of autonomy requires us to be very critical and cautious with any substantive conception of the final ends, the Confucian moral person holds steadily onto the very conception of the good and never falls short of it" (Wang 2002, 264). At the very least, then, unlike the liberal-democratic understanding of autonomy and freedom, the Confucian understanding does not provide a strong moral ground against interference of their lives provided that the interference in question is regarded as good from the Confucian perspective.

A more serious challenge to the normative relevance of public participation, however, comes from the view of (in)equality in Confucian ethical-political tradition. As I have argued, equality provides the moral foundation for public participation: when each and every individual is viewed as equal, all voice ought to be treated equally; and, therefore, there is no legitimate ground to exclude any of them in processes of

decision-making. Yet, the Confucian notion of personhood proffers a different understanding of equality, which is at odd with the liberal democratic understanding. While the Confucian ethical-political tradition does presume an understanding of equality that is similar to the liberal democratic understanding, namely every person is born with the same potential to be moral, its emphasis nonetheless is on the differentiation by individuals' virtuousness and capacity; or, in Li Chenyang's term, the emphasis of the Confucian ethical-political tradition is on "proportional equality", i.e. "equality relative to people's due" (Li 2012). As Li rightly notes, an ideal Confucian society is based on division of labours in terms of individuals' actual abilities, and that the more virtuous and capable persons ought to be more responsible in decision-making.

As I have pointed out, the Confucian view of personhood is developmental and virtue-based, which implies that individuals may indeed be different in their degree of virtuousness and capability. Hence, the power of decision-making will be distributed unevenly in a Confucian society. For Confucians, in effect, it ought to be distributed unevenly according to individuals' degree of virtuousness and virtuous. Accordingly, the Confucian view of the person does not vindicate the idea that each and every individual is viewed as equal, and his or her voices is to be treated equally; instead, it aligns virtuousness and capability as the criteria for being decision-makers, and necessarily weighs the virtuous and capable persons more heavily in decision-making processes. The Confucian understanding of equality, therefore, does not serve as a moral foundation for public participation. In effect, it seems to go against it. Indeed, Daniel A. Bell (2006), Joseph Chan (2007), and Bai Tongdong (2008) have recently argued that Confucian political philosophy is inherently meritocratic, which presupposes a distinction between the virtuous (and capable) superior and inferior; and, in turn, it entails an asymmetric ethical and political responsibility between the virtuous and capable persons and the public. Since the priority is always given to the virtuous and capable persons in a Confucian society, public participation is unnecessary unless the virtuous and capable persons deem it to be good. So construed, public participation does not seem to have the same normative appeal in a Confucian society as in liberal democratic society, and it is questionable whether public participation can be generalised into a universal normative requirement for geoengineering decision-making.

To summarise, I have presented a challenge to the normative relevance of public participation from a Confucian perspective. More specifically, I have argued that the Confucian notion of personhood engenders a different understanding of freedom and equality that does not provide moral ground to take public participation as a normative requirement in decision-making.

Reconsidering Public Participation in Geoengineering Decision-Making

My discussion so far seems to paint a rather bleak picture for public participation as a universal moral requirement for geoengineering decision-making. Indeed, if my argument is correct, one might wonder if there is any place left for public participation in a Confucian society. Before proceeding, however, it is important to note that the lesson from the discussion so far is not that public participation will always be unimportant in a Confucian society. Instead, the lesson I want to draw is that liberal democratic values do not provide sufficient normative ground to view public participation as a universal moral requirement. In other words, if public participation is morally important in geoengineering governance and the ethics of geoengineering, then it must be grounded on values that are locally rooted, and thereby can be recognised and accepted by ethical-political traditions different from the liberal-democratic tradition. In this respect, the discussion here can be conceived as a part of the on-going debate on the compatibility between Confucianism and democracy.¹¹ There are various positions one can take on this debate, but emerging from this debate is a general consensus that a “Confucian democracy” but not a “liberal democracy” is more favourable to Confucian societies. In the following, I will look at two different proposals suggested by scholars of Confucian political philosophy, and review their relevance to the debate on the importance of public participation in geoengineering decision-making.

A Confucian Fall-back Plan: Public Participation as a Second-best Option

¹¹ Unfortunately, the debate on the compatibility between Confucian political philosophy and democracy exceeds the scope of this paper. For an overview of various positions in this debate, see He (2010), Tan (2012)

In his analysis of the prospect of democracy in Confucian societies, Joseph Chan carefully distinguishes between liberal democratic values and democratic institutions, and points out that even if liberal democratic values are foreign to Confucian values, Confucian societies could nonetheless accept democratic institutions. Moreover, he argues that democratic institutions can be considered as a “second-best option” for realising Confucian values, because the best option, i.e. leadership by virtuous and capable persons, is almost certainly impossible in a non-ideal world (Chan 2007). Following Chan’s strategy, it is possible to justify public participation in geoengineering decision-making on similar ground: public participation can be accepted as a “second-best option”, because the virtuous and capable persons, who will can in principal discern and take into account numerous ethical considerations associated with geoengineering, are hard to come by in reality. Accordingly, public participation can be understood only as institutional arrangements to help realise Confucian values in a non-ideal world.

Confucian Self-Restriction and Public Participation

A more interesting way forward, I think, is to explore if Confucian political philosophy has its own resource to justify public participation. Recently, attempts have been made to dispute the meritocratic interpretation of Confucian political philosophy (see, e.g. Kim 2013, Angle 2013). Particularly interesting for the purpose here is Steven Angle’s account of contemporary Confucian political philosophy. Angle has developed an argument for the inclusion of the public in policy decision-making processes, which could be extended to the inclusion of the public in science and technology policy too. He argues that public participation is, in effect, a necessary condition for human flourishing from the Confucian perspective. Angle’s argument, however, seemingly runs against the Confucian notion of personhood I have summarised. For instance, it appears to run against the idea that a person is defined exclusively in terms of their social roles and the responsibility prescribed by those roles by ascribing responsibility that goes beyond what is prescribed by one’s social roles; or, it appears to run against the idea of (in)equality in Confucianism and the differentiated ethical and political responsibility between the virtuous and capable persons and the public by giving more

decision-making power to the public than they might deserve from the Confucian standpoint.

Yet, I think Angle has provided us an interesting reinterpretation of Confucian political philosophy, which enables us to reconsider and reimagine the role of the public in policy decision-making. Central to Angle's argument is the idea of "self-restriction" proposed by New Confucian thinker Mou Zongsan. By "self-restriction", Angle (and, originally, Mou) refers to "the limitation of one thing by something else of a fundamentally distinct kind" (Angle 2013, 25). This idea offers a uniquely Confucian reason to separate the political realm from the ethical realm, and thereby allows the political realm to operate differently from the ethical realm. The key here, however, is not that politics (or, political questions) has priority over ethics (or, ethical questions and/or questions concerning the good life) as it is often assumed by liberal democratic theories, but that the Confucian vision of the good can only be achieved through politics. In this respect, politics (or, political questions) remains an integral part of the larger Confucian ethical project, but yet operates independently from it. This is so, as Angle pervasively argues, because

- (1) Confucians are committed to seeking full virtue
- (2) Full virtue must be realised in the public world
- (3) The public realisation of full virtue requires objective structures that are independent from claims of virtues. (Angle 2013, 29)

Accordingly, the realisation of Confucian virtues requires restricting (or, at least, temporarily subordinating) virtues and the pursuit of virtues to objective structures that made it possible, i.e. "self-restriction". This line of reasoning, then, offers an interesting argument in favour of public participation in policy decision-making: it requires virtuous and capable persons – or, even Confucian sages – to restrict themselves in the political realm, and to suspend their moral and political superiority and refrain from imposing their view(s) of the good to the public. It is also helpful to note that Confucian virtues are to be realised via one's web of social relationships, therefore, virtuousness in and of the web of social relationships too matters to the realisation of the virtues as well. In short, the realisation of Confucian virtues is not independent from the virtuousness of the public. Moreover, as Angle notes elsewhere, public participation can serve as an exercise that enables the public (to learn) to hear concerns and demands of each other, and thereby engenders a truly

harmonious context (Angle 2009). Accordingly, public participation can too be viewed as essential to human flourishing from the Confucian standpoint, because it is necessary for the realisation of Confucian virtues.

Yet, it should be careful to point out that even if contemporary Confucian political philosophy does offer an argument in support of public participation, it is likely that public participation will be understood differently in a Confucian society. Particularly, it is unlikely for Confucians to see public participation to be an entirely neutral exercise. After all, central to Confucian political philosophy is that it is driven by a substantive vision of the Confucian good. Of course, it does not necessarily entail a Confucian regime will use public participation “to ‘sell’ new technologies; to ‘legitimise technological choices’; or to ‘close down’ public contestation about new technologies” as Corner et al. want to avoid painstakingly. However, it is predictable that public participation in a Confucian society would be likely be guided by a specific Confucian vision of what is good (and bad).

Conclusion: Challenges of Global Geoengineering Governance and Global Ethics of Geoengineering

The major aim of this paper is to re-examine the normative relevance of public engagement, understood as public participation, in geoengineering decision-making. I have attempted to show that the moral foundation of public participation is derived from the liberal democratic view of personhood, which is not necessarily shared by other ethical-political traditions. I illustrate this argument with the Confucian notion of personhood, and show how a different conceptualisation of personhood could raise challenge to take public participation as a universal moral requirement for geoengineering governance and in the ethics of geoengineering. This, however, does not imply that public participation is morally irrelevant in a Confucian society, or that it cannot be grounded on values other than the liberal democratic values of freedom and equality. Indeed, I have attempted to demonstrate that contemporary Confucian political philosophy does have its own resource to justify the moral importance of public participation.

So far so good, however, I think a more important lesson could be learned from this analysis, namely if various ethical-political traditions have different values, and those values are on par with the liberal democratic values, then these ethical-political traditions ought to be taken more seriously in research on geoengineering governance and the ethics of geoengineering. Unfortunately, all too often, the discussion in the fields has presumed a false sense of universality, and has ignored peculiarities and particularities in different ethical-political traditions. In this paper, I have looked at public engagement from a Confucian perspective, but similar topics, such as distributive justice, intergenerational justice, etc. also require a more serious attention at other ethical-political traditions, too. This paper, therefore, should be seen as a call for a more interculturally and cross-culturally diversified ethical-political analysis on geoengineering.

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