

# STS, symmetry and post-truth

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[journals.sagepub.com/home/sss](http://journals.sagepub.com/home/sss)**Michael Lynch**

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## Abstract

This essay takes up a series of questions about the connection between ‘symmetry’ in Science and Technology Studies (STS) and ‘post-truth’ in contemporary politics. A recent editorial in this journal by Sergio Sismondo argues that current discussions of ‘post-truth’ have little to do with conceptions of ‘symmetry’ or with concerns about ‘epistemic democracy’ in STS, while others, such as Steve Fuller and Harry Collins, insist that there are such connections. The present essay discusses a series of questions about the meaning of ‘post-truth’ and ‘symmetry’, and the connections of those concepts to each other and to ‘epistemic democracy’. The essay ends with a series of other questions about STS and contemporary politics, and an invitation to further discussions.

## Keywords

bullshit, epistemic democracy, lies and lying, post-truth, symmetry, Trump administration

This essay addresses a few questions about Science and Technology Studies (STS) in the so-called ‘post-truth era’, and raises some others. These questions arise through a reading of recent editorials, essays, and postings in this and other STS journals and blogs, particularly Sismondo (2017), Collins et al. (2017), and Fuller (2016a, 2016b, 2017). In his editorial in this journal, Sergio Sismondo (2017) takes issue with an essay by Steve Fuller (2016a) that closely identifies ‘symmetry’ in STS with ‘post-truth’ in contemporary politics. Contrary to Fuller’s insistence that STS should take responsibility for the ‘post-truth era’, Sismondo argues that ‘symmetry’ and ‘epistemic democratization’ in STS have little to do with current ruminations about ‘post-truth’ in connection with the Trump campaign and administration, the 2016 Brexit vote in Britain, and the upsurge of white-nationalist, anti-immigrant, and authoritarian movements. Although Collins and

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Fuller rarely align in their agendas, in this case they appear to agree that Sismondo is wrong to dissociate STS from direct responsibility for, or indirect resonance with, an alleged 'post-truth era'. At least some readers of this journal may question why anyone would think that STS is associated with, let alone responsible for, the barrage of accusations and counter-accusations about lies, fake news, and junk science that fill the newspapers and airwaves these days. In this brief essay I take up this question, if only to sort out my own thinking in the face of a blizzard of hyperbolic and confusing claims. I will deal mainly with some questions of conceptual meaning: What is meant by 'post-truth'? What is meant by 'symmetry' in the context of STS? How is 'symmetry' related to 'epistemic democracy'? And what, if anything, does STS have to do with current discussions of 'post-truth'?

### **What is meant by 'post-truth'?**

Given the fact the *Oxford Dictionaries* (2016) designated 'post-truth' as the 2016 word of the year, it is worth starting with their definition: 'Relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief.' Wikipedia (2017) gives further detail about the history of 'post-truth politics', tracing the term back to 1992 and citing a playwright's reference to the Iran-contra scandal in the USA. That scandal featured efforts by staff members of the Reagan White House to conduct covert operations that strategically pursued the 'deniability' of presidential authorization. These efforts were so successful that, after being exposed to an official Congressional investigation that threatened to embroil the presidency in 'another Watergate', the operatives who were summoned to testify were able to disclose that they had destroyed key documents in the interest of plausible deniability, while in the same testimony they professed not to recall what those documents would have revealed about presidential authorization (Lynch and Bogen, 1996). The Wikipedia entry goes on to say that political media journalist Eric Alterman (2004) wrote about post-truth in connection with routine deceptions practiced in the interest of statecraft, which became intensified during the Reagan and G.W. Bush presidencies. So the term has had sporadic use for at least the past quarter century.

The recent revival of the 'post-truth' idiom is associated with accusations of recurrent lies and false promises in the Trump and Brexit campaigns. Designating a 'post-truth era' has become a despondent complaint about the widespread, blatant, unapologetic, and often-successful deceptiveness promoted by powerful agents. Importantly, the accusations in question are not only about matters of public concern in which scientists have prominent roles, such as climate change, but also about ordinary matters of fact, such as the size of the crowd and the timing of rainfall during Trump's inaugural address, and whether or not one of Trump's tweets distorted what the Mayor of London said following a terrorist attack in that city. An ascendant view among Trump's critics is that charges of 'bullshit' might be more apt than of lies and lying, since the latter charges presume specific intent and awareness rather than a more constant tendency to exaggerate and deceive, sometimes for no apparent reason (Yglesias, 2017). Experts, such as 'crowd scientists', 'fact-checkers', and meteorologists, may participate in the resulting disputes, but as that famous poet Dylan asserts in *Subterranean Homesick*

*Blues*, ‘you don’t need a weather man to know which way the wind blows.’ A conception of truth is presumed in denunciations of ‘post-truth’ and ‘alternative facts’, but the epistemic opposition between correct and erroneous accounts of ‘the facts’ is less salient than the moral opposition between speaking and acting truthfully versus blatantly lying and making false promises.

## What does ‘symmetry’ mean in the context of the field of STS?

The concept of ‘symmetry’ is not much discussed in STS circles these days, and a reminder of what it once meant is in order. Both Fuller (2016a) and Collins et al. (2017) dust off the term, but use ‘symmetry’ in a very general way that has no clear relationship to its original meaning. In their essay, Collins et al. refer to SSK (the Sociology of Scientific Knowledge) – a field, subfield, or intellectual orientation that many in STS today would now consign to pre-history. Symmetry was a key term for SSK, but later it was subjected to an ironic twist through the introduction of ‘generalized symmetry’ in Actor-Network Theory (Latour, 1993: 94ff.), which deconstructed the distinction between human and non-human orders of things that had been crucial for SSK’s effort to explain natural order as a contingent product of (human) social ordering. Although Fuller (2017) and Collins et al. (2017) may be correct that *some* notion of ‘symmetry’ remains fundamental for STS, they do not make clear what sense they are now making of the concept.

David Bloor (1976) introduced *symmetry* as a key ‘postulate’ (p. 7) for research in the sociology of knowledge that would fully engage with the contents of science and mathematics. Symmetry pertained to a ‘style of explanation’ in which the ‘same types of cause would explain, say, true and false beliefs’. Importantly, the salience of ‘social’ explanations would not be precluded by the acceptance of a scientific theory or the establishment of a scientific fact as *true*. Another of Bloor’s postulates – *impartiality* ‘with respect to truth and falsity, rationality and irrationality, success or failure’ (p. 7) – is often lumped together with symmetry. Accordingly, it would *not* be necessary to show that a candidate ‘belief’ is false, irrational, or self-defeating in order to set up the salience of a ‘social’ explanation. No ‘belief’ – including mathematical and scientific axioms, theories and facts, which are bound up in conceptual grammar in a much different way than are ‘beliefs’ (Coulter, 1989) – would be off limits. Bloor attempted to circumscribe the relativistic implications of symmetry by insisting that it was not a metaphysical position, but was more of a procedural maxim that encouraged efforts to seek social-historical explanations of any and all beliefs, regardless of whether they are currently held to be true, successful, and rational, or not. Collins (1981) also attempted to circumscribe the ‘empirical relativism’ he advocated by distinguishing it from philosophical relativism. Neither Bloor nor Collins saw any need to discount the truth, success or rationality of a given ‘belief’ in order to set up a social explanation of how it became ascendant and why adherents continue to hold to it. Although such explanations are consistent with a fallibilist philosophy of science, they do not aim to undermine or promote the relative credibility of the particular ‘facts’ or ‘truths’ they explain.

It is crucial to keep in mind that a symmetrical explanation of an historical controversy explicitly suspends any convictions the present-day analyst may hold about the

relative strengths of the factual or evidential support for one or another of the contending ‘beliefs’ being explained. Consequently, the analyst remains free to maintain such convictions, as long as they do not enter into the terms of the explanation. Whether or not an analyst can (or would want to) succeed in such a challenging task is an open question, but the point is that, unlike the current wrangling about fake news and junk science, the explanation is not designed to prosecute the controversy or to resolve it. The conditional possibility that Sismondo (2017) recites – ‘it could be otherwise’ (or, in an historical study, ‘it could have been otherwise’) – does not amount to a declaration of an ‘alternative fact’ that ‘it *was* otherwise’, or commit to a normative position that ‘it should have been otherwise’, or provide a forecast that ‘it is inevitable that it will be otherwise’.

### **How is symmetry related to epistemic democracy?**

Following what I argued in the previous section, Bloor’s proposals about symmetry and impartiality have to do with an analytical effort to deploy a broadly similar (and not substantively identical) ‘style’ of social explanation for the acceptance and establishment of particular theories, doctrines or facts, regardless of their current epistemic status. This style of explanation clashes with explanations that presuppose the validity of one or another of the truth claims featured in a controversy, but it does not require or imply *disbelief* in any of them; otherwise Bloor’s program would amount to a generalized ‘sociology of error’ – an explanation that debunks the purported ‘facts’ in question as uncertain, and based in myths, superstitions, popular delusions, or other products of ignorance, error and mass persuasion. The logic of Bloor’s symmetry postulate allows for compatibility between continuing to accept a given fact as true and also giving a social explanation of its acceptance and resilience. The issue is that the acceptance of the fact does not enter into the explanation. This postulate thus imposes a severe limitation on the scope and epistemic implications of such an explanation.

Collins et al. (2017) closely identify ‘the logic of symmetry’ with ‘the democratizing of science it spawned’, which ‘invites exactly the scepticism about experts and other elites that now dominates political debate in the US and elsewhere’. Collins and his colleagues oppose the wholesale democratizing of expertise that they assert is now widespread in STS, but they partly agree with Fuller (2016a), who goes further to declare that symmetry has been ‘universalized’ and thoroughly politicized in STS to the point that ‘[e]xpertise appears as a repository of corrupt judgement designed to suppress promising alternatives to already bankrupt positions’ (Fuller, 2016b). Collins, Evans and Weinel aim to reverse the general scepticism toward expertise and the unconditional embrace of ‘epistemic democracy’ that Fuller claims is an ‘inevitable’ development within and beyond STS. What remains questionable, however, is the apparently easy move from symmetry as an analytical orientation to symmetry as a polemical tool for democratizing the sciences. In the previous section, I suggested that Bloor’s symmetry sets up studies of historical controversies, but does not resolve (or even attempt to resolve) the questions about truth and falsity that are raised, settled, or unsettled by the historical agents involved. It is a misunderstanding to suppose that such studies

encourage an inverted ‘sociology of error’ that denigrates the truth, rationality, and success of ‘establishment’ science while elevating the epistemic status of one or another ‘promising alternative’. If *that* version of symmetry is indeed widespread in STS, then it is fair to say that a misunderstanding runs through the field. Given the lack of discussion of symmetry in recent years, it seems at least as likely that much of the research in the field has abandoned symmetry in favor of more engaged and particularistic positions that have little to do with a generalized ‘post-truth’ mentality.

### **What, if anything, does STS have to do with ‘post-truth’?**

The *Oxford Dictionary* definition of ‘post-truth’ may or may not provide an accurate characterization of the populist appeal of the Brexit and Trump campaigns, but it surely is at odds with the treatment of ‘objective facts’ in STS. And, as Fuller (2016a) himself points out, that definition is antithetical to treatments of objectivity in STS. If, for example, an undergraduate student in an STS seminar on public understanding of science were to state, ‘in the present era, objective facts are less influential in shaping public opinion than appeals to emotion and personal belief’, I would expect the instructor to question the student’s dichotomy between objective facts on one side and emotion and belief on the other. I also would expect others in the seminar to critically discuss what the student glossed as ‘emotion and personal belief’ and ‘objective facts’. And if, following Fuller, our student substituted ‘power’ for ‘emotion and personal belief’, we would want to interrogate the student’s undifferentiated and reductionist conception of power.

Aside from definitions and etymologies of ‘post-truth’, the context of the term’s use in contemporary politics has no obvious (or, I would argue, non-obvious) relation to the way STS scholars tend to treat scientific knowledge. Nevertheless, Fuller (2017) forthrightly insists that post-truth is ‘the offspring’ of STS, despite efforts by Sismondo, among others, to disavow responsibility for it. And, while Collins et al. (2017) are not aligned with Fuller’s agenda (whatever that agenda might be), they also criticize Sismondo for failing to acknowledge the debt that post-truth owes to STS: ‘science studies opened up the cognitive terrain to those concerned to enhance the impact of democratic politics on science but, in so doing, it opened that terrain for all forms of politics, including populism and that of the radical right wing.’ Many of us in STS are concerned about selective uses of scepticism to foster political action or inaction, but it is the height of hubris to suggest that our field gave rise to, or is otherwise responsible for, the rhetorical means through which controversies have been ‘manufactured’. If STS is to be credited and/or blamed for the ‘post-truth era’, a more convincing case needs to be made.

### **Some further questions**

It is perhaps appropriate, given the topic, to close this essay with more questions than it addresses. My take on these questions should be obvious from the way they are formulated, and from what I have said already.

1. Is STS unified by a single, coherent political epistemology or, like many fields of activity we study, is it marked by heterogeneity, loose and partial affiliations, and recurrent and unresolved debates?
2. Are there any causal chains that lead from STS to the approaches or tactics of climate skeptics, proponents of intelligent design, and others who are currently accused of manufacturing scientific controversies?
3. Does a professional field such as STS provide a strong *source* for the political views and reactions to current events that many members of the field apparently share?
4. Does (or should) our ability to recognize fake news, junk science, spam, phishing, and other instances of systematic bullshit substantially depend upon our professional expertise as STS researchers?

Partly in hopes that these and other questions about the relevance, irrelevance, or irreverence of STS to ‘post-truth’ and other contemporary topics will touch off further commentary and debate, *Social Studies of Science* is inaugurating ‘Transmissions’, a companion blog. In order to keep pace with contemporary developments and ongoing arguments, accepted postings – of 1000 words or less – will be published on line.

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