ISSA Proceedings 2014 – Climate Scientist Stephen Schneider Versus The Sceptics: A Case Study Of Argumentation In Deep Disagreement

Abstract: Can deep disagreement be managed by argument? This case study examines the 2010 exchange between prominent climate scientist/climate communicator Stephen Schneider and an Australian television audience of self-described climate "sceptics." An analysis of the moves made by audience members, the moderator, and Schneider himself shows that Schneider consistently reframed the interaction emphasize trust, refusing to respond in kind to attacks on his credibility. He exerted firm control on the issues. And at several points, he exercised his authority as a scientist in refusing to engage points that were outside the scientific consensus. Although some of Schneider's moves might traditionally have been classified as fallacies, in this context they served as strategies for managing interactional challenges, and making an exchange of arguments possible.

Keywords: argument, argumentation, disagreement, normative pragmatics, authority, climate communication

1. *Introduction*

Arguments get made when people disagree (Goodwin, 2001; Govier, 1987; Jackson & Jacobs, 1980). But disagreeable interactions aren't necessarily ideal environments for good reasons to flourish. Some argumentation theories try to side-step this difficulty by supposing that arguers' surface disagreements rest on a deeper basis of cooperation. But even if we adopt this idealizing starting point for theory – and certainly if we do not (Goodwin, 2007) – we still have to inquire "how arguers make do under imperfect circumstances" (Jacobs & Jackson, 2006, pp. 123-124), that is, under the circumstances they are actually in. Thus lack of cooperation, fallacious moves and other symptoms of deep disagreement are not just problems for theorists to deal with; arguers in practice have to confront and

manage them. "Argumentation is a self-regulating activity" (Jacobs, 2000, p. 274); it is primarily up to the arguers themselves to construct an interaction where they can use good reasons to get something done.

This case study carries forward the normative pragmatic approach to argumentation by untangling the management strategies adopted by a most skilled arguer in a most disagreeable situation. In 2010 eminent climate scientist Stephen Schneider appeared on Australian television to talk with an audience of climate "sceptics." Schneider's long career as a science communicator had started in 1971, when as the juniormost member of a modelling team whose results had attracted the attention of the press, he was volunteered to be their spokesperson. Schneider found he enjoyed the work, and was good at it, so for the next forty years he placed himself on the leading edge of both climate science – founder and editor of the journal *Climatic Change*, lead author in the IPCC process – and climate science communication. A highly reflective communication practitioner, his working paper on "Mediarology" documents his commitment to thinking through the "oxymorons" or "double ethical binds" confronting scientists who lived up to their obligation of public outreach (Schneider, n.d.). And the very title of his memoir, *Science as a Contact Sport* (2009) documents his willingness to engage broadly with diverse public audiences on the issues he devoted his life to.

It was likely Schneider's general willingness to talk with his fiercest opponents that lead him in to respond positively to an invitation to go on the Australian news/talk show *Insight* to engage with 52 self-described doubters. Australia, one of the early leaders in policy action against climate change was at that time entering a period of backlash, which eventually resulted in the repeal of many important measures. Although outright doubts about the reality of anthropogenic global warming were low (Leviston, Price, Malkin, & McCrea, 2014), the tone of the debate had grown increasingly harsh.

The *Sceptics*, as the episode was called, is thus a promising context in which to study good practices for managing deep disagreement. In the following pages, I first outline specific challenges Schneider faced, before turning to what we can observe of his toolkit for managing these challenges. Quotations are from the show's own transcript (*Insight*, 2010), corrected from the video.

2. *The challenges*

In undertaking to engage with "the sceptics," Schneider was facing several challenges. The first, overarching challenge was whether interaction was possible at all – or at least, whether a reason-giving, argumentative interaction was possible. Schneider himself characterized the wider public discussion of climate issues with a fight metaphor, as a "constant set of *combat.*" The press moderator similarly framed the present interaction in warlike terms, introducing segments by inviting the television audience to watch Schneider "*take on* a room full of climate change sceptics" and "to *win* them over." This framing hardly provided optimism on the ability of good reasons to find traction in the situation.

In addition to the general problem of deep disagreement, Schneider faced two related, specific challenges when interacting with "sceptics." First was the challenge of distrust. Australians have been characterized as having a "not exceptionally high" level of trust in scientists generally (Leviston et al., 2014). Not surprisingly, there is evidence (from surveys in the US, at least) that people who are doubtful or dismissive of the existence of climate change are particularly distrustful, especially of climate scientists (Leiserowitz, Maibach, Roser-Renouf, & Hmielowski, 2012). In meeting with The Sceptics, Schneider repeatedly encountered indications that his interlocutors not only doubted his climate science, but also doubted him, personally. One criticized him for allegedly spinning his science, characterizing him as "exaggerating;" another said he was giving "prevaricative" answers; and Janet—one of his leading opponents on the program – accused him of "alarmism" and "scaremongering." During the interaction, Schneider's perceived bias was twice traced back to its roots in self-interest, either financial:

The only reason you're getting grant money is because climate change, the planet is warming, it's the only reason you're getting grant money. If we didn't have this hysteria there would be no grants, there would be no money – no people making money at all.

or political:

What I find suspicious is that I have not heard, and I watch a lot of media, one of these moderately minded scientists come out and hose down the Doomsday scenarios being pedalled by environmentalists and our politicians. I'm not speaking of you yourself, sir, but your industry, your lobbying, the lobby of which you are a part... I think a scientist in your position could speak up against bias

language even in areas where it actually contributes to your industry.... I would like to hear people in your business admit some doubt.

This second passage occurred relatively late in the event, after Schneider (as we will see below) had built up some trust with his audience, and the interlocutor here tries to exempt Schneider from the criticism he is levelling. But his utterance reveals that he takes climate scientists to be a "business," "industry" or "lobby" group, roughly on par with the fossil fuel industry or environmental advocacy organizations: a typical political actor, using "bias language" to advance self-interest. Obviously, it will be difficult for Schneider to get his interlocutors to take his arguments seriously if they believe he is just a political shill; Schneider must therefore do something to mitigate the distrust in order for the interaction to proceed.

A second specific challenge Schneider faces arises from the fact that climate science is complex, but the time for making arguments is always limited. Those who would cast doubt on mainstream science can take advantage of this fact by adopting a strategy known as the "Gish Gallop," or what American debaters term "spread." Using this strategy, interlocutors raise such a large number of arguments – generally weak or baseless arguments – that their opponents are unable to respond to them all within the time constraints, thus creating an appearance that they cannot respond. Intentionally or not, several of Schneider's interlocutors bombarded him with diverse considerations in a small space of time. For example, early in the interchange one interlocutor – Janet – raised three distinct points over a short set of three turns:

[Janet] The hypothesis that we are currently faced with is that carbon dioxide is the driver of climate change and throughout history we have proven evidence that temperature has been much colder with higher degrees of CO2 in the atmosphere than what we have today and vice versa...

The evidence says that we did have warming, yes, we have [not] been in a long-term warming trend the last 15 years, we haven't had no statistical warming and so I think that's a problem with this hypothesis. I believe that the hypothesis has been shown to be false....

I think we've got a fundamental problem in that we are wanting to change our entire economic structure based on the hypothesis that CO2 is the driver of

climate.

The first concerns how scientists have attributed the current warming to the rise in CO2 ("attribution"); the second concerns the existence of current warming at all ("detection"); the third concerns the correct policy response to climate change. Although the program is long given the television medium (with 45 minutes devoted to talk), and the moderator allows Schneider extended turns, Schneider could legitimately find it difficult to respond fully to even one of these points, much less all three. After all, it took the IPCC 5th Assessment Report 1552 pages to summarize the physical science relevant to points 1 and 2.

3. *Schneider's strategic toolkit*
Having reviewed the challenges Schneider faces, I now turn to examine his responses. What strategies does he have for opening a space for argumentative interaction, managing deep disagreement, distrust, and issue spread? I start with Schneider's responses the two more specific challenges, before taking up the general problem of transacting disagreement between scientists and citizens.

3.1 *Aggressive presumption of good faith*
Throughout the event, Schneider refuses to accept his interlocutors' negative characterizations of his motives. But he equally refuses to reply to them in kind. In this way, Schneider verbally enacts an attitude of trust in his interlocutors, treating them as worthy conversation partners.

Consider first Schneider's management of the open expressions of distrust towards him. When accused of exaggeration, Schneider responds by simply denying the charge and re-explaining the evidence for his figures. When accused of contradicting what he had said in another context, he blames the problem on his "American English" and admits that "if" he said what the interlocutor said he said, "he misspoke" – although it was almost certainly the case that it was the interlocutor who misunderstood. When accused of bias due to membership in the climate science "industry," he either ignores the accusation (helped by the moderator, who shifted immediately to another member of the audience), or explains that the group of climate scientists are quite diverse, including some members who admittedly do "overstate," but many (including himself) who do not.

Schneider is furthermore careful to avoid saying that his interlocutors are

speaking with the kind of "bias" or "exaggeration" they charge him with. Schneider of course is aware of the generally accepted fact that special interests have put substantial amounts of money behind messaging that manufactures doubt of climate science (e.g., Ceccarelli, 2011; Oreskes & Conway, 2010). And it is also clear that Schneider thinks some of his interlocutors have been misled by these messages. But in discussing the misinformation, he distances his present conversation partners from the advocacy. For example,

There are groups which have spent a lot of time – people have made assertions...

Here Schneider starts by a reference to the "groups" doing the distorting, but immediately corrects this already impersonal designation to remove the suggestion of active misleading (it's just making "assertions") and of organization (it's just "people"). Even when pressed, he maintains a distinction between the intentional misleading performed by advocacy groups in the public sphere and the specific utterances of his present interlocutors. Schneider starts his second interchange with Janet, one of his most hostile opponents, by saying:

I'm concerned that you're kind of repeating a mantra from what you've heard from discredited information.... When people try to say that [the "discredited information"] they either do not understand climate science or they polemicizing, because it is an absolutely every single model.

Here we see Schneider reporting not his interlocutor's assertion of faulty reasoning (hedged as "kind of"), but his own "concerns" about it; and he gives his interlocutor an out, allowing that she may just "not understand," not that she is necessarily "polemicizing."

Finally, Schneider responds to distrust by actively expressing trust, specifically denying that people like his interlocutors are moved by anything less than the public good. "I don't know [any] coal miner or any auto worker making a big car who does it to screw up the climate," he explains at one point, "but they may be screwing up the climate."

In sum, Schneider appears to be systematically avoiding any hint that his interlocutors may be guilty of bad argumentative conduct – and specifically, of precisely the bad argumentative conduct some of them accuse him of. There is no "crying foul" against his interlocutor's questionable moves (Innocenti, 2011). Instead, Schneider is implicitly following Sally Jackson's (2008) advice to

scientists in particular: to refrain from questioning others' motives, to avoid opening a meta-debate over possible "politicization" of scientific findings, and instead to stick to critiquing the reasoning itself. Although (as we will see below) Schneider does set limits around what is worth debating, in his utterances he consistently frames his interlocutors as worthy conversation partners.

3.2 *Issue management*
As pointed out above, Schneider's interlocutors (intentionally or not) several times present him with multiple potential issues, threatening to make his replies appear inadequate. Issues are not simply given by the occasion, however; they are the outcome of the discursive work done by all participants in an exchange (Goodwin, 2002). What does Schneider do to manage the complexity he faces?

Throughout the event, Schneider displays some skill at being explicit about the set of issues he is addressing. At a minimum, he often begins his turns with "first of all," priming his auditors to expect additional arguments after the first is finished. He even occasionally manages to mark his later points, with "with regard to" or "the question is" – something that is difficult to do on the fly. Schneider also frequently begins by identifying the specific issue he will address. In an elaboration of his first strategy of aggressive trust, he tends to accomplish this by praising his interlocutor's framing of the "question" as "good," "very good," or even "excellent." At one point he even goes out of his way to explain why the question is a good one – because it aligns with the questions climate scientists themselves have raised:

Yeah, a good question [raising doubts about the integrity of some measurements] and so does the scientific community.... So that very good question that you asked is exactly the same question that climate scientists have been asking themselves for 30 to 40 years.

When faced with a definite "Gish Gallop," Schneider is especially careful to be explicit about the issues in play. Here is Schneider in his first interchange with Janet, the interlocutor whose three issues were quoted above, at the end of taking up her second point:

That's [her first point, attribution] a tougher question which I will be happy, in fact must address which many of you brought that up in your opening comments. [Moderator] We'll get on to that in a moment. Does that answer your question,

Janet?
[Janet raises her first point again.]
[Schneider] Yeah, that's a different question.
[Janet, overlapping] That isn't…
[Schneider] That's what we call detection—[correcting that to] attribution. I promise you I'll talk about that. Right now we're only talking about, is the climate changing? [i.e., detection]

Here we see Schneider doing extensive metadiscursive work to differentiate the potential issues, to identify which he has already replied to, and to promise to reply to the remaining. The moderator never gave him a chance to return to the missing point, but his explicitness here makes clear to the listening audience that it is the constraints of the medium, not his own inability, that prevents a full response to the issues.

Finally, in one extreme case Schneider twice breaks in to secure his opportunity to register a reply. At the end of the second interchange with Janet, Schneider first interrupts the moderator, asking, "can I just quickly answer that?" and then interrupts Janet with "can I please finish?" Despite the politeness devices (asking for permission, minimizing the interruption as "quick," using "please"), Schneider here shows he is willing to disrupt the interchange in order to get his points heard.

Schneider's marking of points is helpful for ensuring that his audience follows his reasoning. But clarity is not the only strategic purpose of his heavy use of metadiscourse. While responding as fully as the medium permits to the points he thinks most important, Schneider's argumentative roadmaps prevent his audience from inferring that he has no answers to the others.

3.3 *Exercise of authority*

As we have seen above, Schneider does a lot to establish his interlocutors as worthy conversation partners – even when they are giving them grief – and also gives strong endorsements to the "questions" they are raising. At the same time, however, he is clear about one thing: there are points that are simply not debatable.

In his first interchange with Janet, Schneider leads off with:

Yeah, okay, that's wrong, sorry – that's not what the evidence says. First of all…

Notice that Schneider mitigates the rejection of Janet's reasoning by shifting from the possible "you're wrong" to the impersonal "that's wrong," and by adding hedges in advance and an apology afterwards. Also, although he does not argue against Janet's point, he does go on to provide an explanation of the science on the topic. Stronger is his response to another interlocutor:

I'm sorry to say that's not true. Please read the Intergovernmental Panel on Climate Change report...

Here we see the same impersonality and apologizing, but coupled with a possibly condescending instruction to the interlocutor to go and read up on the topic – a method for resolving the difference of opinion that doesn't take up precious time in the interaction. Finally, in an exchange with a recalcitrant interlocutor Schneider first offers an out – "perhaps you haven't understood the answer" – before finally concluding:

[Schneider] Oh, then you're totally wrong.
[Interlocutor] I'm saying [repeats point]
[Schneider] I think you need to study this problem.
[Interlocutor] I've studied it—
[Schneider] Obviously not well. Let me give you an example.
[Moderator] Okay, one at a time. Let Stephen respond.
[Schneider] [Gives example.] ... That is completely well established, it's been established for a long time and if you don't accept that you really need to study science. You're just wrong.

Here Schneider's reply is personal – "you're totally wrong" – and the dismissal he gives his interlocutor – to go and "study science" – direct.

It is interesting to note that in all three instances, Schneider is refusing to engage when his interlocutor attempts to play a "scientist" role (e.g., when he is identified as a "Dr.") or to use the language of science (e.g., "hypothesis"). While Schneider finds it praiseworthy for lay interlocutors to raise "questions" – especially when their questions coincide with scientists' own – lay interlocutors aren't worth talking with when they cross over into the terrain of science and maintain positions that he, the scientist, finds unsupportable. In these cases Schneider exercises his authority as a scientist, declares that his interlocutors are "wrong," and directs them to engage in further study (i.e., to become scientists)

before he will engage with them. Shutting down debate is of course commonly accounted as a fallacious move in argumentative interactions. In Schneider's interaction with "the sceptics," it appears to play a vital role in keeping the controversy contained.

4. *Conclusion*
Few raised their hands towards the end of the program, when the moderator inquired whether Schneider had changed any minds. But perhaps changing minds – resolution of the disagreement – was not the point of the interaction (Goodwin, 1999)

Instead, towards the end of the event Schneider and many of his interlocutors find themselves converging with regard to what one in the audience calls "the rhetoric of this" – that is, the way the controversy is discursively transacted outside the present interaction. Schneider echoes an interlocutor's criticism of some of his fellow scientists, who "overstate" the facts about climate change. Another interlocutor picks up with approval Schneider's critique of the media's "sound byte journalism," which she agrees adds to "the problem." When one interlocutor criticizes the "argy-bargy sort of thing" which makes it impossible for laypersons to find credible answers, Schneider approves and goes on to warn against any speaker who claims to be a "truth teller" – on either side of the debate. And most notably, Schneider and two of "the sceptics" exchange stories of receiving threats and ostracism because of their statements on climate issues. Schneider sums up that discussion:

I decry the destruction in civility that's been happening around this issue...because if people can't maintain a civil dialogue how are you going to run a civil democracy?... There's no place for that in civil society because scientists also need to be engaged by helping people understand risk. And when you're in this constant set of combat then how do we have any chance of talking to each other in a civil way? Which is why I agreed to do this program.

To which his interlocutor replies:

I was just about to say the thank you for actually engaging in dialogue sensibly and not— basically not demonising anyone who dares to raise a doubt.

It's become typical advice to offer climate scientists: do not debate with "the sceptics" who doubt your science; stop arguing, and use more effective

communication techniques instead (e.g., Lamberts, 2014). The fact that Stephen Schneider was able to argue with an audience of "the sceptics" for an hour flies in the face of this advice. It took effort to make the interaction happen; as I have shown, Schneider had to use great care in projecting an active trust in his interlocutors, in managing the issues, and, at some points, in closing down debate. But the investment was worth it. As a small enactment of "civil dialogue," this event provided a demonstration to the participants and the wider audience that something like a worthwhile argumentative interaction is possible, even among those who deeply disagree.

References

Ceccarelli, L. (2011). Manufactured scientific controversy: Science, rhetoric, and public debate. *Rhetoric & Public Affairs*, 14(2), 195-228.

Goodwin, J. (1999). Good argumentation without resolution. In F. H. van Eemeren, R. Grootendorst, J. A. Blair & C. A. Willard (Eds.), *Proceedings of the Fourth International Conference of the International Society for the Study of Argumentation* (pp. 255-257). Amsterdam: SicSat.

Goodwin, J. (2001). Henry W. Johnstone's still unacknowledged contributions to contemporary argumentation theory. *Informal Logic, 2*1, 41-50.

Goodwin, J. (2002). Designing issues. In F. H. van Eemeren & P. Houtlosser (Eds.), *Dialectic and Rhetoric: The Warp and Woof of Argumentation Analysis* (pp. 81-96). Dordrecht: Kluwer.

Goodwin, J. (2007). Argument has no function. *Informal Logic*, 27, 69-90.

Govier, T. (1987). Reasons why arguments and explanations are different. In *Problems in Argument Analysis and Evaluation* (pp. 159-176). Dordrecht: Foris Publications.

Innocenti, B. (2011). Countering questionable tactics by crying foul. *Argumentation & Advocacy*, 47, 178-188.

Insight, SBS ONE (Producer). (2010). The Sceptics. Retrieved from http://www.sbs.com.au/news/insight/ tvepisode/sceptics/

Jackson, S. (2008). Predicaments of politicization in the debate over abstinence-only sex education. In F. H. v. Eemeren & B. Garssen (Eds.), *Controversy and Confrontation: Relating Controversy Analysis with Argumentation Theory* (pp. 215-230). Amsterdam: John Benjamins.

Jackson, S., & Jacobs, S. (1980). Structure of conversational argument: Pragmatic bases for the enthymeme. *Quarterly Journal of Speech,* 66, 251-264.

Jacobs, S. (2000). Rhetoric and dialectic from the standpoint of normative

pragmatics. *Argumentation*, 14, 261-286.

Jacobs, S., & Jackson, S. (2006). Derailments of argumentation: It takes two to tango. In P. Houtlosser & A. v. Rees (Eds.), *Considering pragma-dialectics* (pp. 121-133). Mahwah, NJ: Erlbaum.

Lamberts, R. (2014). Facts won't beat the climate deniers – using their tactics will. *The Conversation*. Retrieved from http://theconversation.com/facts-wont-beat-the-climate-deniers-using-their-tactics-will-24074/

Leiserowitz, A., Maibach, E., Roser-Renouf, C., & Hmielowski, J. (2012). *Engaging Diverse Audiences with Climate Change: Message Strategies for Global Warming's Six Americas*. New Haven, CT: Yale Project on Climate Change Communication.

Leviston, Z., Price, J., Malkin, S. C. F., & McCrea, R. (2014). *Fourth survey of Australian attitudes to climate change: Interim Repor*t. Perth, Australia: CSIRO.

Oreskes, N., & Conway, E. M. (2010). *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming.* New York, NY: Bloomsbury Press.

Schneider, S. H. (2009*). Science as a Contact Sport: Inside the Battle to Save Earth's Climate*. Washington, DC: National Geographic.

Schneider, S. H. (n.d.). Mediarology. from http://stephenschneider.stanford.edu/Mediarology/ Mediarology.html