

EDITED BY CHELSEA MIYA
OLIVER ROSSIER AND GEOFFREY ROCKWELL

MODELLING SUSTAINABLE

RESEARCH PRACTICES

IN THE ANTHROPOCENE



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17. Online Conferences

Some History, Methods and Benefits

Nick Byrd¹

Academics have probably been organizing conferences since at least the time of Plato.² More recently, academics have brought some of their conferences online.³ However, the adoption of online conferences is limited. One might wonder if scholars prefer traditional conferences for their ability to provide goods that online conferences cannot. While this may be true, online conferences outshine traditional conferences in various ways, and at a significantly lower cost. By considering the costs and benefits of both conference models, we may find reasons to prefer online to traditional conferences in some circumstances. This chapter shares the methods, quantitative results and qualitative results of the Minds Online conferences of 2015, 2016 and 2017. The evidence suggests that the online conference model can help scholars better understand their profession, share the workload of conference

¹ This project was improved by Cameron Buckner, Richard Brown, Pete Mandik, Thomas Nadelhoffer, Eddy Nahmias, Madeleine Ransom, Bruce Rushing, John Schwenkler, Justin Weinberg and Markos Valaris.

² Jonathan Barnes, 'Academy', in *Routledge Encyclopedia of Philosophy* (London: Routledge, 2016), https://doi.org/10.4324/9780415249126-A001-1.

See, for example, Richard Brown, *The First Online Consciousness Conference* (2009), https://consciousnessonline.wordpress.com/program/; Cameron Buckner et al., 'Minds online 2017—program', *Minds Online* (2017), https://mindsonline.philosophyofbrains.com/minds-online-2017-program/; Fabrizio Calzavarini and Marco Viola, 'Neural mechanisms online conference', *Neural Mechanisms* (September 4, 2018), https://neuralmechanismsonline.wordpress.com/webconference-2018/; Thomas Nadelhoffer, *First Online Philosophy Conference* (*OPC* 1) (2006), https://philosophycommons.typepad.com/opc1/.

organizing, increase representation for underrepresented groups, increase accessibility to attendees, decrease monetary costs for everyone involved, sustain conference activity during states of emergency and reduce their carbon footprint. So, the advantages of traditional conferences might be outweighed by their higher costs after all.

Philosophers have not been shy about doing philosophy online. The commercial online service DIALOG was created around 1972.⁴ Before the end of the decade, philosophers were using DIALOG for bibliographic indexing.⁵ Later, the distributed discussion system Usenet, was established.⁶ And, by 1983, philosophers and other academics were discussing philosophy on Usenet.⁷ With the advent of email, online philosophy discourse continued via listservs like the PHILOS-L.⁸ In the 1990's philosophers brought philosophy to static webpages. So many philosophy webpages were created that by 1993, a website was created to catalogue philosophy webpages.⁹ Soon enough, philosophy had online encyclopedias,¹⁰ online journal articles,¹¹ online article reviews,¹²

⁴ Susanne Bjørneer and Stephanie Ardito, 'Online before the Internet: Early pioneers tell their stories', *Information Today*, 11.6 (2003), https://infotoday.com/searcher/jun03/ardito_bjorner.shtml.

⁵ Philosophy Documentation Center, 'History', Philosopher's Index (1979), https://philindex.org/about-us/history/

⁶ Michael Hauben and Ronda Hauben, *Netizens, On the History and Impact of Usenet and the Internet* (Los Alamitos: Wiley, 1997).

⁷ S. Vestal, 'Have you a good paradox?', net.Philosophy Newsgroup Discussion Thread (April 29, 1983), https://ia800404.us.archive.org/zipview.php?zip=/13/items/usenet-net/net.philosophy.mbox.zip

⁸ Stephen Clark, *Making Use of PHILOS-L* (1989), https://listserv.liv.ac.uk/cgi-bin/wa?A2=ind8908&L=PHILOS-L&P=1323.

⁹ Dey Alexander, *Philosophy in Cyberspace: A Guide to Philosophy-Related Resources on the Internet* (Bowling Green: Philosophy Documentation Center, 1995).

¹⁰ See, for example, Liesbeth De Mol, 'Turing machines', The Stanford Encyclopedia of Philosophy (1995/2018), ed. by Edward N. Zalta, https://plato.stanford.edu/entries/turing-machine/; Edward N. Zalta, 'Gottlob Frege', The Stanford Encyclopedia of Philosophy (1995/2019), ed. by Edward N. Zalta, https://plato.stanford.edu/archives/sum2018/entries/frege/.

¹¹ See, for example, Norman Swartz, 'Can existence and nomicity devolve from axiological principles', *Electronic Journal of Analytic Philosophy (EJAP)* (August, 1993), https://ejap.louisiana.edu/EJAP/1993.august/swartz.abs.html.

¹² See, for example, Paul Weithman, 'Review of "Distributive justice and the complex structure of ownership", Brown Electronic Article Review Service (BEARS), ed. by James Dreier and David Estlund (March 1, 1995), https://web.archive.org/web/19970606094747/http://www.brown.edu/Departments/Philosophy/bears/homepage.html.

Table 1 The early history of online philosophy.

1	2	TIDI
rear	Description	UNL
1979	Philosopher's Index (via DIALOG)	philindex.org
1983	Usenet	alt.philosophy and net.philosophy (ia800404.us.archive.org/view_archive.php?archive=/13/items/usenet-net/
		net.philosophy.mbox.zip&file=&ext=)
1986	HUManities BULletin Board	humbul.ac.uk (users.ox.ac.uk/~mikef/rts/future/slide4.html)
1989	Philos-L	listserv.liv.ac.uk/cgi-bin/ wa?A2=ind8908&L=PHILOS-L&P=1323
1993	A Guide to Philosophy in Cyberspace	web.archive.org/web/19990209072931/http://www-personal.monash.edu.au/%7Edey/phil/
1993	Electronic Journal of Analytic Philosophy	ejap.louisiana.edu
1994	David Chalmers (personal website)	web.archive.org/web/19970720201749/http://ling.ucsc.edu/~chalmers/index.html
1994	University of Chicago Philosophy Project	web.archive.org/web/19971210103000/http://csmaclab-www.uchicago.edu/philosophyproject/philos.html
1995	Stanford Encyclopedia of Philosophy	plato.stanford.edu
1995	Internet Encyclopedia of Philosophy	iep.utm.edu/home/about/
1995	Brown Electronic Article Review Service	web.archive.org/web/1997060609474/http://www.brown.edu/Departments/Philosophy/bears/homepage.html
1996	Brown Electronic Article Review Symposia	(ibid.)
1997	The Philosophers' Magazine	philosophersmag.com
1997	EpistemeLinks	web.archive.org/web/19981202141433/http://www.epistemelinks.com/
		. т

online magazines,¹³ online profiles,¹⁴ and massive open online courses.¹⁵ A list of these and other examples of the earliest online philosophy can be found in Table 1 The early history of online philosophy.—links that are broken have been supplied using the Wayback Machine.¹⁶

Online Philosophy Conferences

At some point, philosophers were organizing online reading groups,¹⁷ online symposia,¹⁸ and online conferences such as the Online Philosophy Conference,¹⁹ the Online Consciousness Conference,²⁰ the Minds Online conference,²¹ the Neural Mechanisms Webconference,²² and the Uncovering Philosophical Biases In Scientific Controversies digital conference.²³ To give an idea of the reach of online philosophy conferences, the page views for each conference are reported in Table 2.

¹³ See, for example, Jeremy Stangroom, 'Enter an experimental philosophical universe', The Philosophers' Magazine (July 1, 1997), p. 58, https://doi.org/10.5840/tpm1997119.

¹⁴ See, for example, David Chalmers, David Chalmers' Home Page (1994), https://web.archive.org/web/19970720201749/ling.ucsc.edu/~chalmers/index.html

¹⁵ Leonard J. Waks, *The Evolution and Evaluation of Massive Open Online Courses: MOOCs in Motion* (New York: Palgrave Macmillan, 2016), https://doi.org/10.1057/978-1-349-85204-8.

¹⁶ Internet Archive, Wayback Machine, http://web.archive.org/.

¹⁷ J. Cohen, *The University of Chicago Philosophy Project* (1993/2018), https://web.archive.org/web/19971210103000/http://csmaclab-www.uchicago.edu/philosophyproject/philos.html.

¹⁸ James Dreier and David Estlund, *Brown Electronic Article Symposia* (1996/2002), https://brown.edu/Departments/Philosophy/bears/homepage.html.

¹⁹ Thomas Nadelhoffer, Second Online Philosophy Conference (OPC 2) (2007), https://philosophycommons.typepad.com/opc2/.

²⁰ Richard Brown, Online Consciousness Conference (2009–2013), https://consciousnessonline.wordpress.com/program/.

²¹ Cameron Buckner, Nick Byrd and John Schwenkler, 'Minds online 2017—program', Minds Online (2015), https://mindsonline.philosophyofbrains.com/2015program/; Cameron Buckner, Nick Byrd and John Schwenkler, 'Minds online 2016—program', Minds Online (2016), https://mindsonline.philosophyofbrains.com/minds-online-2016-program/; Cameron Buckner, et al. (2017).

²² Fabrizio Calzavarini and Marco Viola, 'Web and hybrid conferences', Neural Mechanisms (2018), https://neuralmechanisms.org/webconferences.html.

²³ Rani Lill Anjum and Elana Rocca, Uncovering Philosophical Biases In Scientific Controversies (2020). https://interdisciplinarityandexpertdisagreement. wordpress.com/blog/program/.

Conference	Views
Online Philosophy Conference (2006)	>30,000
Online Philosophy Conference (2007)	>14,000
Online Consciousness Conference (2009)	≅11,000
Online Consciousness Conference (2010)	≅14,000
Online Consciousness Conference (2011)	≅ 20,000
Online Consciousness Conference (2012)	>16,000
Online Consciousness Conference (2013)	≅ 25,000
Minds Online Conference (2015)	12,795
Minds Online Conference (2016)	10,745
Minds Online Conference (2017)	9,998
Neural Mechanisms Webconference (2018)	≅ 500
Uncovering Philosophical Biases In Scientific Controversies (2020)	1,265

Table 2 Online philosophy conferences and views

Alas, all but one of these online conferences have ceased. While participants found these conferences highly rewarding, the organizers found the workload of annual conference organizing to be unsustainable. So one might wonder how to replicate the online conference so as to share the burden of serving the profession. Further, one might wonder why scholars should take on this particular burden in the first place. What do we actually know about online conferences and how they compare to traditional conferences? This chapter addresses some of these inquires by explaining the methods of one of the longest-running online philosophy conferences, sharing its quantitative and qualitative results, and highlighting the relative advantages of the online conference model.

Design and Evaluation Considerations

Conferences can serve a wide range of needs, from pre-publication peerreview to dialogue about the academy's climate. Given this wide range of

²⁴ Cameron Buckner, Nick Byrd and John Schwenkler, 'The future of online conferences in philosophy', *Daily Nous* (October 15, 2015), https://dailynous.com/2015/10/15/the-future-of-onlineconferences-in-philosophy/.

needs, conference design and evaluation involves many considerations. This chapter will focus on a few elements that are relevant to designing and evaluating conferences: data, workload, inclusivity, emergency resilience and sustainability.

Data. Conferences are a source of valuable data about the profession, such as demographic information, trending topics, linguistic patterns, etc. Online conferences are entirely digital. So online conferences provide ready-made quantitative and qualitative data for analysis. Therefore, the contents and experiences of online conferences are more easily analyzed.

Of course, gathering and sharing data from traditional brick and mortar conferences can be just as valuable to the profession. Indeed, various claims about the profession and its climate can be answered by more rigorously analyzing data from both online and traditional conferences. Alas, these data are rarely public or digital and therefore inaccessible for such analysis. This chapter presents quantitative and qualitative data about one of the longest-running online philosophy conferences in hopes that such data gathering and sharing will become the norm.

Workload. At first glance, online conferences seem to involve less workload. They are less encumbered by the need to plan travel, accommodation, meals, childcare, physical accessibility, and the like. And everything occurs online. So conference responsibilities can be fulfilled anywhere that offers Internet access. These features of online conferences can make online conference organizing easier. However, not all online conference models are so location independent—e.g., online conferences that record a live panel discussion from one location. Further, not all traditional conferences are so technology-dependent—e.g., conferences in which presenters read from printed copies of their papers. So while the workload of each online conference might be lower, on average, than its traditional counterpart, there will surely be exceptions to this average difference between individual online conferences and more traditional conferences.

There are also longitudinal differences in workload between online and traditional conferences. Traditional conference organizing responsibilities are often handed off from year to year so that the workload is more distributed amongst its members. However, online conference organizing requires somewhat specialized experience or skill (e.g., with content management systems like WordPress, web development more generally, etc.) that traditional conference organizing might not. So insofar as this experience and skill is less common among academics, the workload of online conference organizing cannot be as widely distributed as the workload of traditional conference organizing—at least, not until more members of the profession become familiar with online content creation and management. This is, in part, why the present chapter attempts to make its methods transparent. The hope is that publishing this information will reveal how easily online conferences can be replicated.

Emergency Resilience. Many conferences can be disrupted by natural disasters, disease outbreak and other unexpected emergencies. Worse, traditional conferences expose attendees to local emergencies, toxins or communicable diseases. Of course, online communities can continue to function in the wake of local, national or global states of emergency.²⁵ As a result, online conferences may be valuable alternatives to traditional conferences when emergencies are occurring or else predictable.

Inclusivity. Philosophy has been called 'demographically challenged'. For instance, academic philosophy still contains a large gender gap²⁷ and a larger racial gap. Some propose that closing these gaps not only improves representation, but improves philosophy's epistemic conditions and perhaps counterconditions undesirable

²⁵ Xiangyang Guan and Cynthia Chen, 'Using social media data to understand and assess disasters', *Natural Hazards*, 74.2 (2014), 837–850, https://doi.org/10.1007/s11069-014-1217-1; Jooho Kim and Hogun Park, 'A framework for understanding online group behaviors during a catastrophic event', *International Journal of Information Management*, 51.102051 (2020), https://doi.org/10.1016/j.ijinfomgt.2019.102051.

²⁶ Linda Martin Alcoff, 'Philosophy's civil wars', *Proceedings and Addresses of the American Philosophical Association*, 87 (2013), 16–43.

²⁷ American Philosophical Association, *Demographic Statistics on the APA Membership, FY2016 to FY2018* (2018), https://apaonline.org/page/demographics; Molly Paxton, Carrie Figdor and Valerie Tiberius, 'Quantifying the gender gap: An empirical study of the underrepresentation of women in philosophy', *Hypatia*, 27.4 (2012), 949–957, https://doi.org/10.1111/j.1527-2001.2012.01306.x; Saara Särmä, '"Congrats, you have an all-male panel!"', *International Feminist Journal of Politics*, 18.3 (2016), 470–476, https://doi.org/10.1080/14616742.2016.1189671; Jennifer Saul, 'Scepticism and implicit bias', *Disputatio*, 5.37 (2013), 243–263.

²⁸ Tina Botts et al., 'What is the state of Blacks in philosophy?', Critical Philosophy of Race, 2.2 (2014), 224–242, https://doi.org/10.5325/critphilrace.2.2.0224.

A. E. Kings, 'Philosophy's diversity problem', Metaphilosophy, 50.3 (2019), 212–230, https://doi.org/10.1111/meta.12358.

stereotypes.³⁰ Fortunately, online conferences can be less constrained by location, scheduling, childcare, and other variables, eliminating barriers that might prevent already underrepresented scholars from participating in more traditional conferences. Data in the present chapter provides some support for this optimism about the inclusivity of online conferences.

Sustainability. Scholars are realizing the need for more sustainable conference practices.³¹ Online conferences can significantly reduce carbon output by eliminating the need for carbon-intensive air travel and other forms of transportation. And with the advent of renewable-powered data centers,³² online conferences might even be able to become carbon neutral. So if scholars want to reduce their profession's carbon footprint, then they should seek to adopt the online conference format. This chapter offers one set of such methods.³³

The Minds Online Conference Method

The Minds Online conferences were organized in 2015, 2016 and 2017 by Cameron Buckner, Nick Byrd, John Schwenkler and Bruce Rushing and in association with The Brains Blog.³⁴

Call for Papers (**CFP**). Each year's call for papers was posted at the beginning of the calendar year to PhilEvents.org. The CFP would include a description of the conference, a list of the keynote presenters, a list of suggested paper topics and submission instructions. In addition to being advertised to PhilEvents users, the call for papers was advertised

³⁰ Nick Byrd, 'What we can (and can't) infer about implicit bias from debiasing experiments', *Synthese* (2019), 1–29, https://doi.org/10.1007/s11229-019-02128-6.

³¹ See, for example, David S. Reay, 'Virtual solution to carbon cost of conferences', *Nature*, 424.251 (2003), https://doi.org/10.1038/424251a.

³² See, for example, Gary Anthes, 'Web host sees bright future with 100% solar-powered data center', Computerworld (November 5, 2007), https://computerworld.com/article/2539563/web-host-sees-bright-future-with-100--solar-powered-data-center.html.

³³ See also Trevor Chow-Fraser, Chelsea Miya and Oliver Rossier, *Moving Ideas without Moving People: How to Econference at the University of Alberta* (2018), https://aroundtheworld.ualberta.ca/wp-content/uploads/2018/05/E-Conferencing-Toolkit.pdf.

³⁴ The conference proceedings can be found at https://mindsonline.philosophyof brains.com.

on The Brains Blog,³⁵ on email listservs such as Philos-L, and on social media platforms such as Facebook and Twitter (via The Brains Blog page and the organizers' personal profiles). The deadline for papers was in March (see Table 3).

January or February	Call for papers posted, advertised
March	Deadline for conference submissions, reviewers solicited
April	Deadline for responding to authors, invited commenters solicited
May	Deadline for commenters to confirm, for authors to send revisions
August	Deadline for comments to send comments to authors, organizers
September	First conference session begins (see Table 4).

Table 3 Timeline for annual Minds Online Conference organizing.

The Minds Online conference required submissions to adhere to the following guidelines:

- limited to approximately 3,500–7,500 words;
- prepared for anonymous review;
- described with several keywords;
- accompanied with an abstract of no more than 500 words;
- submitted as .doc, .pdf, or .rtf file.

Authors submitted their name, contact information, current position, email address, keywords, an anonymized copy of their paper and a cover page to The Brains Blog³⁶ via an online form.³⁷

³⁵ Gualtiero Piccinini, Brains: A Dialogue on Philosophy of Mind and Related Matters (December 25, 2005), https://web.archive.org/web/20070723084710/philosophyofbrains.com/2005/12.aspx.

³⁶ John Schwenkler, 'Minds online submissions', *The Brains Blog* (November 16, 2014), https://philosophyofbrains.com/minds-online-submissions.

³⁷ *JotForm*, https://jotform.com/.

Review. In 2015, review was double-blind. In 2016 and 2017 review was triple-blind—only one author was asked to review their own paper and the author notified the organizers of their error so that they could find another reviewer. Reviewers were solicited by the organizers via the conference's Gmail address. Reviewers indicated their name, the title of the submission they reviewed, whether or not they would be willing to comment on the submission if accepted, their rating of the submission on a scale ranging from 1 (Unacceptable) to 5 (Excellent), their (optional) comments for the author and their (optional) comments for the organizers. Reviews were submitted via Google Forms.³⁸

Invited Commenters. Invited commenters were recommended by authors and reviewers. Organizers invited commenters via the conference's Gmail address. The deadline to submit invited comments to authors and organizers was August (see Table 3).

Scheduling. Each conference included three to four sessions. Each session lasted one week (see Table 4 Timeline for each Minds Online Conference session.). It included a keynote presentation, three to four contributed presentations and two to four invited commenters for each contributed session. Paper presentations and invited comments were published the weekend before the Monday of their session. Public comments were enabled on Monday. The goal of this posting schedule was to allow for pre-reading and, subsequently, more careful and reflective public comments. Keynote presentations were also posted on the Monday of the session, when public commenting began.

Table 4 Timeline for each Minds Online Conference session.

Saturday	Publish, announce N^{th} session's contributed presentations with invited comments.
Monday	Publish keynote presentation. Enable and announce public commenting.
Friday	Announce final day to comment on N^{th} session. End public commenting at end of day.
Saturday	Publish, announce $[N+1]^{th}$ session contributed presentations with invited comments.

³⁸ Google, Google Forms, docs.google.com/forms/.

Presentation. Presentations included a short video, created by the author(s). Organizers encouraged videos to be short (e.g., 'about 5 minutes'), simple and to provide only an overview of the paper. Nonetheless, the length, style and depth of videos varied widely. Videos were shared with organizers via cloud storage services and then uploaded to the Minds Online conference YouTube channel by organizers.³⁹ Once uploaded, videos were embedded at the top of their corresponding paper presentation. So each presentation included—in the following order—the presenter's video, the presentation title, the author's name and affiliation (with a link to their personal website), the presenter's paper (in html, but with a link to a printer-friendly PDF version at the beginning), and links to invited comments, as pictured in Figure 1.

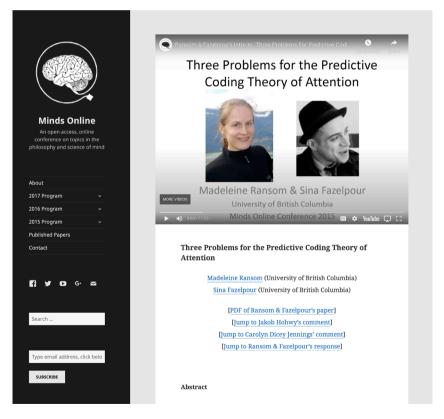


Fig. 1. Example of Minds Online Conference post.

^{39 &#}x27;Brains Blog', YouTube (August 26, 2015), https://youtube.com/channel/UC6mcw UhGe39zScWd2cxm_dQ.

Comments. Like many conferences, one of the purposes of the Minds Online conference was to give scholars access to pre-publication feedback on their papers. So appended to every conference presentation were invited comments from a few relevant experts. This (a) ensured that every presentation had an audience of scholars in its field and (b) identified specific avenues of discussion for the five-day open comment periods for each presentation. Invited comments were appended to and published at the same time as their corresponding paper. Invited comments were also pinned to the top of the comments section—i.e., invited comments always appeared before public comments.

It was decided *a priori* to abstain from creating a comment policy or moderating comments until a need for moderation and corresponding policy arose. In three years of conferencing, there was no need for comment moderation. Posting comments required commenters to type their name and email address into the comment form—email addresses were visible only to the organizers managing the website via the password-protected WordPress content management system.

Website Management. The conference was hosted on a subdomain of philosophyofbrains.com. The hosting company created the subdomain and installed the open-source WordPress content management system on it.⁴⁰ The appearance of the website was adapted from the Twenty Fifteen theme.⁴¹ Presentations were created by copying text from .doc or .rtf files and pasting it into new posts. (NB: at the time, figures and images could not be copied and pasted. Instead, they were uploaded and inserted into posts one-at-a-time.) Each presentation's blog post was time-stamped so that they appeared on the blog page in the same order as the program. Each year's conference program was published in 'page' format. Each program contained links to each presentation. Each session of each year's conference had its own category so that users could view each session as one webpage. The conference logo was found in a public domain image library.

Pre-Print Concerns. A small minority of scholars expressed concern about having their paper posted online for the Minds Online conference. The worry was that posting the paper for the conference could make it ineligible for publication in academic journals. These worries were

⁴⁰ WordPress, https://wordpress.org/.

⁴¹ WordPress, 'Twenty Fifteen', WordPress (August 11, 2020), https://wordpress.org/themes/twentyfifteen

assuaged when organizers of the conference relayed their experience of publishing papers whose earlier drafts had circulated at traditional and online conferences. The worries were further assuaged by the fact that many papers shared during the online conference were published in respected journals afterward.⁴²

Results

Some aspects of the online conferences can be analyzed quantitatively, such as online conference visitors, page views, presentations, comments and social media shares. The following data come from Wordpress.com and publicly available data about the Minds Online conferences of 2015, 2016 and 2017.

Descriptive Statistics. Data about conference participation, inclusivity, and video were gathered from WordPress, from presenters, and from YouTube. These data are reported below.

Participation. Participation data was obtained using the 'Stats' feature in WordPress. The number of visitors, page views, submissions, comments, and social media shares for each year are reported in Table 5 Traffic statistics for each year of the Minds Online Conference. By design, the 2017 Minds Online conference included only three sessions and lasted only three weeks compared to four sessions over four weeks in 2015 and 2016. Data for these years show a slight decline in more superficial forms of participation such as page views per year, but slight increases in more substantial forms of participation such as visitors per week and comments per presentation.

Inclusivity. The gender distribution of Minds Online presenters and geographic composition of participants for each year of the Minds Online conference is reported in Table 6. This representation of women was at least as high as the 25.1% of postsecondary philosophy instructors in the United States that were women at the time.⁴³ In 2015, double-blind peer review selected a higher rate of women than men. Triple-blind review selected a higher rate of women than men in 2016, but not in 2017. Additionally, in every year of the Minds Online conference the

⁴² Minds Online, 'Published papers', Minds Online (2018), https://mindsonline.philosophyofbrains.com/published-papers/.

⁴³ American Philosophical Association (2018).

	2015	2016	2017
Mean Visitors/Week	3,199	2,786	3,333
Total Visitors	5,173	4,234	3,615
Total Page Views	12,795	10,745	9,998
Mean Comments/ Presentation	30	48	38
Mean Shares/Presentation	41.22	Unknown	Unknown

Table 5 Traffic statistics for each year of the Minds Online Conference.

largest share of page views came from outside the USA. These data might suggest that the conference was at least as inclusive as the average philosophy conference in the United States. Without publicly accessible conference data, this hypothesis is difficult to test.

Video Content. Most presenters created videos to accompany their papers, as recommended by the organizers. Video durations ranged from 61 seconds to 26 minutes, 48 seconds. As this is being written, individual Minds Online videos have been watched between 57 and 2301 times.

Inferential Statistics. Participation varied over the course of each conference. One might wonder how session order (e.g., beginning, middle or end of the conference), presentation type (i.e., keynote vs contributed), or presenter gender accounted for variance in conference participation (i.e., page views or comments). Multiple regression analysis revealed that participation, measured by views, varied significantly by session order and gender, but not presentation type. Specifically, participation decreased from the beginning to the end of each conference, on average, but page views were significantly higher for presentations by women, on average (see Figure 2 and Figure 3)—despite fewer women presenters. Standardized correlation coefficients, effect sizes and p-values are reported in Table 6 Participation by presentation type, session order and presenter gender.

Table 6 Participation by presentation type, session order and presenter
gender.

	Standardized Coefficient	F (1,45)	P
Session Order (Week 1—Week 4)	47	13.12	.001
Presentation Type (Keynote vs Cont.)	04	0.01	.752
Gender (Men = 1, Women =2)	.28	4.66	.038
Year (2015, 2016, 2017)	18	2.1	.153

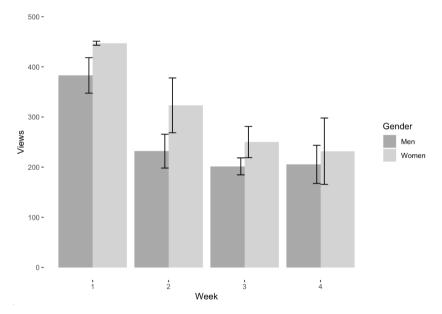


Fig. 2 Average page views for presentations per week by gender with standard error bars.

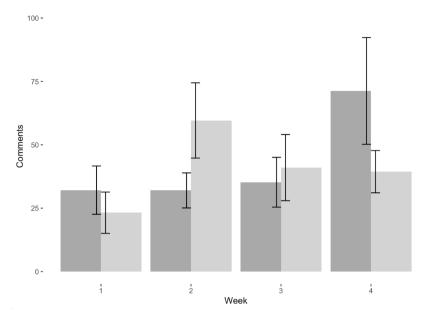


Fig. 3. Average comments on presentations per week by gender with standard error bars

Multiple regression also revealed that the average number of comments per presentation increased marginally by week (β = .27, F(1,45) = 3.6, p = 0.064), but did not vary significantly by presentation type, gender, or year (ps > 0.23). Nonetheless, there were noticeable differences in comments received by men and women from year to year (see Fig. 4 Average comments on men's and women's presentations per year.).

Qualitative Analysis. Minds Online participants and presenters were given the option to complete a post-conference survey. When asked about their overall experience, 5% selected 'negative', 17% selected 'neutral' and 78% selected 'positive'. Also, when prompted with 'Feel free to tell us anything that might help us improve the Minds Online conference', responders reported outstandingly positive experiences. For example, 'I had an overall great experience' and 'I think the conference is overall fantastic and I consider it the gold standard for how to do an online conference'. More specifically, Minds Online participants and presenters mentioned valuing the online conferences' accessibility, pace, video content and commentary. However, some participants expressed concerns about the duration and volume of the conference.

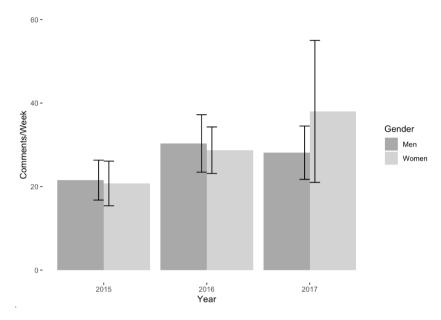


Fig. 4 Average comments on men's and women's presentations per year.

Accessibility. Some presenters and participants who were new to online conferences seemed to be won over by the accessibility. One presenter went as far as to say, 'I loved the Minds Online format: there was no need to travel [...]' and another presenter adds, 'Participation was easy'.

Pace. Like previous online philosophy conferences,⁴⁴ the Minds Online conference lasted several weeks. Allowing a few days for people to comment created opportunities for more careful and extended discussion. And dividing the conference into separate weeks seemed to be appreciated. 'I really appreciated the pacing of the discussion. [I]n traditional conferences, just attending the talks you want to attend can be extremely exhausting. For this reason, I think not posting all papers in one go was the right decision', reported a presenter. Despite valuing more time and sessions, participants also valued periodic deadlines—e.g., the final day to comment on a session. One participant reported, 'Knowing that I had a deadline if I wanted to comment really helped me focus as an audience member. It also helped make it feel more like

⁴⁴ See, for example, Nadelhoffer (2006); Brown (2009).

a "real" conference. The amount of time allotted, and overall pace was good'.

Video. Most Minds Online presenters created the recommended video introduction to their paper. Some participants reported appreciating the videos, but also reported a preference for short introductory videos rather than longer, more comprehensive videos. A participant reported, 'I like having the videos there. It's nice especially when I get to see and hear the author; it humanizes the whole process. I find myself not watching the entire video, though, and rely on the actual papers to get the philosophical content'. Another participant seconded this point. '[I] f one is going to just make one video then [a] short abstract one is best. Most people get the argument from the paper but [the video] makes it feel more like you are engaging with a person [because] you can at least track their tone and inflection a little'.

Comments. Invited comments were submitted to presenters at least a week before the presentation, giving presenters ample time to formulate careful responses. Many presenters seemed to appreciate this. 'I really enjoyed the opportunity to have such great invited comments', reported a presenter.

Public commenting was open for five days for each paper—after papers had been available for pre-reading over the weekend. The descriptive statistics revealed that many participants commented, suggesting that commenting was easy and rewarding. Both presenters and participants seem to confirm this. One presenter reports,

[We] received really helpful commentary from commentators who likely would have declined to comment on our paper at a traditional conference due to travel and timing issues. [O]ur paper received more exposure than it would have had at a traditional conference. [M]y co-author and I had lots of people comment to us about the paper (outside of the conference comments) or mention that someone else had posted a link to it somewhere or was discussing it on twitter or another blog. [...] I found the back and forth with our commentators to be immensely helpful and productive. This is one of the biggest benefits of the online format in my opinion.

Other presenters reported, 'I thought the Minds Online Conference had an impressive lineup of talks and commenters and many of the discussions went really well', and 'I found the quality of the comments wonderful'. Participants also praised the commentary. For example, 'I

[got] a lot out of just "lurking" and observing the various exchanges (even if I couldn't find time to articulate a comment)'.

Volume. One consistent line of constructive feedback from presenters and participants concerned volume. Papers and commentaries seemed too numerous or too long for many survey responders' schedules. As one participant reported, '[I]t was very hard to find the time to participate in as many sessions as I wanted to, compared to a normal conference [because I had to] weigh [conference participation] against all my other responsibilities'. Another participant reported a similar sentiment, 'My only complaint is that I felt overwhelmed by the volume of excellent material. I wanted to read and comment on several papers, but simply couldn't keep up with more than one or two'. Some presenters had similar concerns, 'I do think there were too many talks, such that most of them did not seem to garner enough attention'. Other survey responders were more concerned about the length of presentations and commentaries. For instance, someone wrote, 'The papers were too long to facilitate online discussion. [...] The comments were also very long for the Internet format'.

Costs. The total monetary cost of hosting Minds Online conference is about \$15 per month. That is the cost of hosting philosophyofbrains. com, including the cost of the conference's subdomain mindsonline. philosophyofbrains.com. Co-organizers volunteered their time. The call for papers was advertised on PhilEvents.org at no cost. Peer-reviewers volunteered their time. The conference program was advertised at no cost by Facebook, Twitter and Reddit users. Keynote and contributed presenters volunteered their time. Invited commenters volunteered their time. The conference's videos are hosted on YouTube at no monetary cost. And, of course, there were no costs associated with travel, lodging, childcare or food.

The labour costs for the Minds Online conference were low compared to a more traditional conference. However, as many other online philosophy conference organizers report, ⁴⁵ the labour required to organize an online

⁴⁵ Richard Brown, 'Consciousness online—10 years later', *OneMoreBrown* (May 14, 2018), https://onemorebrown.com/2018/05/14/consciousness-online-10-years-later/; Thomas Nadelhoffer, 'Comment on "The future of online conferences in philosophy", *Daily Nous* (October 17, 2015), https://dailynous.com/2015/10/15/the-future-of-onlineconferences-in-philosophy/#comment-74841.

conference was not insignificant. Other online conference organizers report, 'It was also an awful lot of work putting [the online conference] together. [...] First, as a junior philosopher, I had a number of other things that had to take precedence—namely, research and teaching. [So] it seemed like I was stretched thin enough as things were'. Another online conference organizer reports, 'I [organized the online] conferences while teaching a 5/4 load [four to five courses per semester]. As the years went by and the committee work and professional commitments grew, I became overwhelmed [even though] I really did enjoy [and benefit from organizing it'. Indeed, part of the reason that the Minds Online conference was put on hold after the 2017 conference was that its organizers were too busy with other, more career-advancing work. This is largely due to the highly competitive nature of hiring and promotion in academia and the relatively low institutional rewards for professional service such as conference organizing. These conditions leave early career philosophers with little incentive to serve their colleagues by organizing conferences—online or otherwise.

Discussion

The data suggest that the Minds Online conference produced the kind of participation, inclusivity and impact to which many conference organizers aspire. Presenters and participants alike clearly reported being appreciative of the online conference format in general and the Minds Online conferences in particular. Of course, the data also reveal some opportunities to improve online conferences—e.g., by adjusting duration and volume. Online conference organizers could provide important professional improvements by incorporating these insights into future online conferences and publishing their results for comparison.

General Discussion

The Minds Online conference results suggest that online conferences can improve scholars' conferencing practices and experiences. It has produced useful data about the academy, shared the workload of conference organizing, maintained or improved representation for underrepresented groups, and reduced the academy's carbon footprint. Moreover, the cost of obtaining all of these benefits was strikingly lower than the cost of a traditional conference. This raises questions about the advantages of the online conference model vs. more traditional conference models.

Advantages of Online Conferencing

The Minds Online Conference revealed that the online conference format has many advantages. These advantages include presentation quality, commentary quality, pace, cost, convenience and safety.

Presentation quality. One clear advantage is the quality of the presentations. Naturally, this quality is largely determined by the quality of the submission pool and selection process. While both online and traditional conferences can employ rigorous selection processes, the online conference does not disincentivize submissions based on geographic distance, travel funding, teaching load, physical ability or childcare needs. So the online conference allows not only more submissions, but more high-quality submissions that tend not to be submitted to or presented at traditional conferences. Of course, submission quantity can also be aided by associating an online conference with a large, existing online community such as The Brains Blog contributors and readers.⁴⁶

Commentary quality. One reason that the online conference format allows for better commentary might be that there are fewer spatial and temporal constraints—e.g., for booking space, scheduling concurrent sessions, etc. Another reason that online conferences can offer improved commentary is that there are fewer constraints on who can be invited to comment. For example, invitations need not be limited only to those who can manage to travel to a particular location at a particular time. Moreover, commentaries can be far more detailed and developed than a verbal comment or question at a traditional conference. So online conferences can offer all of their presenters a quality of commentary that traditional conferences can offer to only a few of their presenters.

⁴⁶ Piccinini (2005).

Pace. The traditional conference's constraints leave little time for people to respond to presentations and thereby select for confidence and quick wit. Of course, it is not obvious that confidence and quick wit correlate with the kind of clarity and rigor that scholars hope for in conference feedback. The results of the Minds Online conferences suggest that allowing more time for reading and commenting allows not only for improvements in comment quantity, but also improvements in comment quality.

Cost. The monetary and time costs of online conferences are lower for organizers, presenters, and participants. The main savings come from not having to plan or purchase venue space, transportation, accommodation, or food. However, there might also be additional time and cost savings for online conference-goers who participate from home—e.g., savings from not having to commute, find childcare, purchase professional clothing, clean professional clothing, etc.

Convenience and Safety. Finally, online conference organizers, presenters and participants enjoy more autonomy and less inconvenience, stress and risk than their traditional conference counterparts. For example, online conference-goers are not at the mercy of transportation systems, non-optimally accessible venues, limited childcare or non-inclusive meal options. They can be anywhere with an Internet connection, dressed however they want, eating whatever they need, attending to all sorts of other needs at work and at home. These benefits are obvious. Less obvious are the expected events in which these benefits become handy. During multiple years of the Minds Online conference, many organizers and participants evacuated to hotels or relative's homes while hurricanes Harvey, Irma and Michael were wreaking havoc in their backyard. However, everyone was able to fulfill their conference duties. One might wonder how online conferences might be more resilient than traditional conferences in the face of other kinds of emergencies such as virus outbreaks.⁴⁷ Overall, the flexibility of online conferences in the face of unexpected emergency is simply not possible for traditional conferences.

⁴⁷ Anthony McAuley, 'Two upcoming New Orleans conferences canceled amid coronavirus fears', *The New Orleans Advocate* (March 4, 2020), https://nola.com/news/business/article_c865e6e8-5d7c-11ea-ad9d-f71dc925f69e.html.

Advantages of Traditional Conferencing

Of course, the traditional conference model has benefits that the online conference model lacks. It is worth acknowledging these advantages and considering how—if at all—online conferences can achieve similarly advantageous outcomes.

Professional Serendipity. Some of the most fortuitous moments in careers occur when scholars unexpectedly cross paths while at a traditional, in-person conference. These interactions simply cannot occur—or cannot occur in the same way—online. Perhaps more importantly, traditional conferences afford opportunities for people to exchange valuable information that is not usually discussed publicly—e.g., delicate topics or the climate of particular departments. Online conferences might be able to improve professional serendipity by including a 'virtual meet and greet' in the program⁴⁸ or by creating opportunities for participants to chat privately—e.g., letting presenters opt to share their email address with participants.

Social Efficiency. Socializing via written word, video and other online mediums is significantly more effortful and time-consuming than face-to-face conversation. Further, the probability of confusion, misunderstanding, and offense might be higher in online conversation where many social cues are easily lost. Worse, these disadvantages of the online conference model could compound as the volume of a conference increases. One way for online conferences to compete with traditional conferences' social efficiency would be to employ technology that mimics face-to-face interaction—e.g., video conferencing.⁴⁹ Online conferences might also reduce their outsized social workloads and risks by limiting the volume of their presentations and commentaries.⁵⁰

Conclusion

Online conferences have provided open access conference presentations and commentary to thousands of participants all over the world for

⁴⁸ Madeline Ransom, 'Comment on "The future of online conferences in philosophy', *Daily Nous* (October 20, 2015), https://dailynous.com/2015/10/15/the-future-of-onlineconferences-in-philosophy/#comment-75263.

⁴⁹ See Calzavarini and Viola (2018).

⁵⁰ Ibid.

over a decade—and at a small fraction of the cost of their traditional conference counterparts. Like previous online philosophy conferences, Minds Online participants viewed their experience favorably. Further, the Minds Online conference managed to—among other achievements—represent some underrepresented groups at least as well as they were represented in the profession at the time. Of course, there are still many opportunities to improve the methods and results of online conferences with new innovations as well as past innovations. For example, online conference organizers might attract more submissions by offering presenters the option of publishing in a special issue of a respected journal after revising their paper according to the commentary received during the conference. Further innovation and research should investigate these opportunities to improve online conferences.

There are also opportunities to improve conferences more generally. While the benefits of online conferences and traditional conferences are fundamentally different, there may be ways to design both traditional and online conferences to get the best of both models. For those interested in organizing online conferences, the present chapter provides some historical context, replicable methods and empirical data about the results. Those interested in continuing with the traditional conference model may still improve traditional conferences by adopting online conferences' innovations in reviewing, commenting, scheduling and more. Of course, which methods are most likely to achieve desirable outcomes is an empirical question. So the path to improving conferences online or otherwise—involves more conference organizing, more data collection, more analysis and more publications thereof. However, motivating scholars to provide this service to their profession might require incentives and support from professional institutions that have yet to be widely adopted in academia.⁵³

⁵¹ Buckner, Byrd and Schwenkler (2015).

⁵² Fabrizio Calzavarini and Marco Viola, eds., Neural Mechanisms: New Challenges in Philosophy of Neuroscience (New York: Springer, 2020).

⁵³ Brown (2018).

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