



Making and Meeting Online: A White Paper on E-Conferences, Workshops, and other Experiments in Low-Carbon Research Exchange

Anne Pasek, Emily Roehl, and Caleb Wellum October 2020

TABLE OF CONTENTS

1.	Introduction & Rationale	2
2.	Precedents and Formats	4
3.	Socio-technical Protocols	8
4.	Security	15
5.	Accessibility and Inclusion	16
6.	Experiments and Interventions	18
7.	Acknowledgements and Further Resources	19

1. Introduction & Rationale

Academics fly a lot: to research sites and archives, to conferences and workshops. Traveling long distances to present papers and interact with colleagues are significant events in academic calendars, as well as important opportunities for networking, professional development, and socializing. As a work-culture, academia values, rewards, and has required far-flung travel, which has shaped its dominant values and perspectives.

These work expectations have several downsides. Flying has terrible repercussions for the environment: air travel represents most of the typical researcher's work-related carbon emissions and contributes to environmental injustices in the communities that live near airports and on the frontiers of climate change. Conference travel is also expensive. Reimbursements are often insufficient, late, or unavailable, pushing stress and debt onto graduate and precariously employed scholars. Care work needs to be arranged when trips pull researchers away from family members or when circumstances require that family travels as well. Mobility itself can be a fraught proposition for disabled academics, while increasingly securitized airports and borders present further challenges for minority populations.

Travel, in short, is not something academic workers or other knowledge professionals should take for granted. The requirement to travel frequently shapes who shows up at conferences and thus, who participates in the conversations that define a community of study. It also shapes environments, warming the world and expanding the sacrifice zones of global hypermobility.

Presently, efforts to control the spread of Covid-19 have grounded many of us. If there is an equalizing effect to the pandemic, it's in the end of easy, international travel that has undergirded research norms in the academy for decades. Conferences have been canceled, lectures delayed, and events calendars thrown into disarray. Individual academics and large scholarly societies have been forced to think about how to meet without airplanes and hotels, and what sorts of social and intellectual exchanges might be salvaged or created in the process.

As with any crisis, the loss of convention creates the opportunity for reform and redress. As many university instructors have learned in the shift to teaching online, simply importing previous formats and expectations to a newly digital context fails to satisfy multiple needs and expectations built up over centuries of face-to-face interaction. We think that the same holds true for exchanges between scholars. What's more, we think this presents an opportunity to think about what conferences can or should be, to address the inequities and

exclusions baked into current research norms, and to foster a more sustainable and accessible academe.

This task will require a great deal of inquiry and experiment.

As scholars of media and energy, and as e-conference organizers and participants ourselves, we have some early observations, advice, and provocations to offer. We have written this white paper to highlight what's worked in the past, what hazards lie ahead for the future, and what potential gains could be won in the present.

We hope our words will be useful to small conference organizers and professional associations alike. Our aim is not to end in-person meetings but rather to foster effective low-carbon alternatives that can help reduce the amount of travel necessary to participate in global knowledge communities. Meeting together in person is invaluable, but we can augment it with effective alternatives through critical reflection and smart design choices. We understand the move to digital gathering entails fraught entanglements with surveillance capitalism and the attention economy. Our hope in writing this white paper is to spark further reflections and innovations in collaborative experiments in digital research exchange - or even other forms of scholarly community. We hope such experimentation continues long after the pandemic is over, and that its effects will shape the university for the better.

Citing and using this guide:

Cite as:

Pasek, Anne, Caleb Wellum, and Emily Roehl. 2020. Making and Meeting Online: A White Paper on E-Conferences, Workshops, and other Experiments in Low-Carbon Research Exchange.

This guide is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives International 4.0 (CC BY-NC-ND) license.

Contact us at annepasek@trentu.ca, cwellum@gmail.com, e.a.roehl@gmail.com

2. Precedents and Formats

Remote research exchanges predate the Covid-19 pandemic, providing an archive of experiments and formats to draw from. There is no need to reinvent the wheel. Below are a series of case studies that prove it can be done with a variety of budgets and end goals.

I. Around the World - The University of Alberta, Kule Institute for Advanced Study

Format	Multi-sited livestream with asynchronous video archive, social media, and text discussion components
Participants	Roughly 30-60 speakers per year, hosted in a hub at the University of Alberta and personal/institutional nodes around the world
Registration Fee	Free
Budget	~\$12,500/year
Duration	Variously, 18 continuous hours of content or 5 days of 2-5 hour content blocks
Date(s)	2013-2018

Around the World is an early entrant to e-conferencing, experimenting with globally distributed live content for half a decade. During this time, conference organizers developed important best practices in e-conference participation and technical access. Practical lessons learned from the experience are summarized in several <u>white papers</u> as well as a forthcoming <u>open-access book</u>.

II. Nearly Carbon Neutral Conference - University of California Santa Barbara/ASLE

Format	Asynchronous video presentations uploaded to YouTube and hosted on a custom Wordpress site for text-based discussion
Participants	50-120 speakers
Registration Fee	Free or \$5-25 sliding scale

Budget	\$300 in technical costs + additional honoraria
Duration	3-week period of active discussion and programming, indefinite online archive
Date(s)	May and Oct/Nov 2016 (UCSB) + 2018 and 2020 (ASLE)

Ken Hiltner's Nearly Carbon Neutral conference format has been highly influential in the humanities and has been adopted by the Association for the Study of Literature and Environment (ASLE) for their off-year conferences. It features asynchronous, written discussions over long periods of time, which can become quite rich and extensive. A detailed <u>white paper</u> discusses iterations and rationales for the NCN format and provides easily-adapted templates for conference communications.

III. Displacements / Distribute - The Society for Cultural Anthropology and the Society for Visual Anthropology

Format	A stream of pre-recorded talks broadcast to > 50 local nodes + a digital film festival, and several structured social events
Participants	>1000
Registration Fee	\$10
Budget	\$26,806
Duration	3 day conference, 1 week film festival
Date(s)	2018, 2020

This joint, biennial conference for cultural and visual anthropologists has grown considerably over its two runs. It has achieved notably high participation rates from institutions in the Global South, thanks to its bilingual Spanish/English programming and grant funding to support nodes and keynotes in these regions. Livestreamed content takes the form of multiple 8-hour loops, set to sync to different local time zones, broadcast throughout the 3-day period.

IV. Twitter Conference - American Society for Environmental History Graduate Student Caucus

Format	Academic presentations translated into Twitter threads of 5-15 posts with accompanying images/slides and Twitter replies/discussion
Participants	2020 event: 25 presenters and hundreds of engagements via Twitter using hashtag #ASEH2020Tweets
Registration Fee	Free
Budget	~\$0
Duration	Two days
Date(s)	2018-2020

For the past three years, the Graduate Caucus of the American Society for Environmental History (ASEH) has hosted a Twitter conference that runs prior to the annual in-person event. In 2020, in response to the cancellation of the in-person conference, the Twitter conference brought together 25 presentations over 2 days (March 19-20). A Twitter thread with all of the presentations can be found <u>here</u>.

V. Energy In/Out of Place - Petrocultures Research Group/Transitions in Energy, Culture, and Society

Format	Asynchronous research-creation workshop with synchronous keynote presentations and group critiques
Participants	5 research teams (16 researchers total), 3 keynote lecturers, and >100 audience participants
Registration Fee	Free
Budget	\$0 plus a few favours
Duration	1 week
Date(s)	June 2020

This event, organized by the authors of this white paper, is near and dear to our hearts. Five research teams produced open-ended media projects about an energy site near where they

lived and/or worked. The results (which included poems, StoryMaps, ethnographic video, and visual artworks) were hosted on a Wordpress site for asynchronous feedback by invited respondents and registered participants. Two keynote lectures and an all-teams meeting were hosted by Zoom over the duration of the conference week.

An e-conferencing grant was initially secured to pay for live broadcasting from nodes in Waterloo and Edmonton, but the Covid-19 pandemic prevented these plans from coming to fruition. Instead, the conference took place entirely from participants' homes, without external technical support. Revised versions of the workshop materials are set to be published in an artist publication, a collaboration between Mystery Spot Books, the Petrocultures Research Group, and West Virginia University Press.

3. Socio-technical Protocols

Traditional conferences come with a set of protocols to coordinate expectations, proceedings, and interactions. These are largely unwritten and they can at times be difficult for newcomers to learn, forming part of academia's <u>hidden curriculum</u>.

Changing the format of the conference opens up the issue of conference protocols anew, letting organizers think more consciously and collaboratively about how best to come together and form a lower-carbon scholarly community. These questions should be examined early in the planning process of an online event and expectations should be communicated to participants. Organizers must now think about not just logistics, but the social contract of the conference or workshop.

Below are a list of participant norms and considerations to weigh in the design of digital research exchanges.

I. Managing Time

Online events are fragmented across time and space, creating practical problems of time management (When should live events be broadcast? How long should an asynchronous event last?). Wrapped up in deciding these questions are larger assumptions about who belongs in one's audience and who might be invited to newly consider themselves within that group.

There are three forms of time management for e-conferences: synchronous, asynchronous, or a mix of both. As in teaching, the advantages of asynchronous delivery include to reaching a wide group of participants in many corners of the globe. If participants can come and go equally, at their own pace, then Jakarta and New York are on more equal footing when it comes to conference access. Yet this come-as-you-may approach can come at the cost of mutual presence: that effervescent and emergent quality to panel discussions, the serendipitous encounter in a conference hallway, or the heightened attention encouraged by a live event.

Organizers face decisions about trade-offs and preferences. They should consider the audience and outcomes they imagine, and then design the timing of their conference with these goals in mind. We offer the following considerations for synchronous and asynchronous delivery:

Asynchronous Events:

• Set clear expectations about how frequently presenters should return to their given webpages or fora to monitor and comment on the discussion sparked by their work

(once a week? once every other day?). This will vary based on the duration of the event but is essential to ensuring that presenters do not 'check out' early.

- Look for plugins and platform settings that allow participants to receive notifications when new comments have been posted.
- Create smaller events at different points within larger asynchronous event runs to better encourage repeated engagement and a sense of momentum. This could be as simple as highlighting a given paper every day though a Twitter thread or email, or through the staggered release of keynote materials.
- Consider the merits of shorter, more concentrated periods of engagement over lengthy asynchronous runs. A week-long conference may drive more participation than a month-long conference (though this principle can obviously be pushed to uncomfortable extremes).

Synchronous Events

- Look for ways to lower the stakes of technical failure and local bandwidth concerns. Pre-recorded talks, even if held in reserve, can make simultaneous broadcast much less fraught.
- During synchronous video calls, audiences are often requested or volunteer to arrive early. Without any obvious visual feedback, however, they can sometimes be confused as to whether they arrived at the right time and place. You can mitigate this uncertainty by displaying a static image with the event details, times, and guidelines to greet early entries.
- Build buffer materials to avoid the experience of 'dead air' when transitioning from one component of a broadcast to the next. This could include short videos with acknowledgements from funders or organizers, artworks pertinent to a conference theme, or agreeable hold music.
- It can be helpful to do a dry run with keynote speakers before a live, synchronous event to preempt any technical problems or confusion.
- Consider limiting synchronous events to 60 minutes. If the event will go longer, include breaks at appropriate intervals.

II. Maintaining Attention

E-conference attendees in 2020 report a somewhat disappointing lack of engagement with asynchronous materials. Many people are presenting online, but fewer seem to be listening. This is likely, in part, an effect of the pandemic and various crises that have left many of us with diminished time and focus. Yet even without external upheavals, one can expect attention to be a habitual problem online, where apps, websites, and devices are increasingly designed to nudge and distract.

Digital conveners therefore need to consider the temptations of newly available distractions and a habit of multitasking in their screen-based audiences. As with other social changes in the move to remote participation, these concerns should be recognized and designed around in the planning of events:

- Consider structuring the event to encourage periods of focused participation (i.e. have participants commit to looking at a given page once a day).
- Be aware of Zoom fatigue when planning your conference or workshop (i.e. limit speakers to x minutes, schedule ample space between long, synchronous events).
- Consider sending regular reminders, updates, or links throughout the event to encourage engagement. Better still, draft and automate the sending of these emails in advance so you don't have to worry about them during the run of a conference week.
- Create opportunities for informal social interaction, such as a Zoom coffee hour. This can help to drive engagement and create space for further discussion.
- Encourage participants to use inviting and accessible language in how they present their work to their potential audience. Highly formal jargon may be helpful to authors seeking to position their ideas within a wider conversation, or to appeal to a selections committee, but may not actually invite clicks and discussion from peers in the context of an event. Instead, model and encourage the use of slightly more colloquial language.
- Consider soliciting or assigning respondents for specific panels or works in progress. This ensures that participants receive focused engagement with their work and can help to kickstart a conversation around it.
- Consider integrating a strategically limited number of interactive elements, such as a poll, Q&A, or asking participants to respond in a chat box to icebreaker prompts and open questions.

III. Social Connections

The worst digital conferences, as a friend put it, "feel like a database with a few Zoom calls attached." Sociologists of knowledge help explain why this might be the case: the substance of traditional conferences is often not so much the brilliant paper you present, but the exciting dinner conversation you have with colleagues afterwards or the sense of comradery you achieve later still at the hotel bar. These moments can in principle be replicated online through sidebar emails and private chats, but experience shows that these connections will not occur organically. The informal and unplanned sociality of traditional conferences is therefore a goal that online conference organizers must design for from the outset. If it won't happen spontaneously, organizers should think about how to foster it with care and purpose.

Here are some suggestions for designing online events with social connection in mind:

- Provide spaces for networking. Our Energy In/Out of Place workshop included a "cartes des visites" page on the conference website: essentially a message board that allowed attendees to introduce themselves and their research interests to connect with others.
- Set expectations for collegial discussions. This may be as formal as a research interest "matchmaking" service, coordinated between willing attendees, or simply a set of messages encouraging participants to reach out to others who seem to have similar interests via email, Twitter, or some other platform.
- Digital coffee/happy hours or formal mentoring programs are also options to broaden opportunities for networking and socializing. Structured conversation prompts can help forward discussions among strangers over Zoom. You can invite participant submissions to host themed social hours on points of shared interest, creating sub-communities within the gathering and reducing the amount of planning work taken on directly by the organizing team.
- Large social video conferencing events can be made more manageable through breakout rooms based on research interests (or some other category), allowing people to hop from room to room to meet like-minded researchers and share resources. Hosts should be assigned to each room to ensure there is always someone to talk to with attendees as they circulate between rooms.

A warning: Don't overwhelm participants with too many platforms and options for engagement. A conference that asks attendees to contribute on Zoom, Twitter, Facebook, Slack, and Wordpress is unlikely to have high participation across all of these platforms. Be strategic about where and how you want to create opportunities for informal socializing to happen.

IV. AV Quality and Technical Hiccups

As many have found negotiating home offices, childcare, and Zoom backgrounds, remote participation often challenges the professional standards one may aspire to in delivering courses or papers in-person. Event organizers should extend care and resources to participants to help better meet the standards they would like to meet and be accommodating when this is not possible. Specifically, you may wish to:

- Offer practice calls with presenters, troubleshooting AV set up and bandwidth issues.
- Encourage participants to use hardline connections instead of wifi, especially when streaming data-intensive materials such as video.

- Write protocols to reduce the data-intensity of live broadcast, such as reducing file quality and size of video broadcasts (see also VIII. Lower Carbon Digital Events, in this section).
- Prioritize decent sound over high-fidelity visuals. Audio is more important in
 effectively communicating with others and achieving a sense of telepresence. If
 there's money to pay for equipment, make it <u>microphones</u>. Participants at home can
 also dramatically improve the sound quality of their recordings/broadcasts with a
 <u>cheap blanket</u>.
- Write protocols that acknowledge the possibility of lost and imperfect transmissions. Even a simple note encouraging participants to "reconnect and all will be well" can reduce the stress and confusion of these events.

V. Land Acknowledgements

<u>Land acknowledgements</u> are an increasingly common practice in settler territories. They are an important, but insufficient, component of state and institutional commitments towards reconciliation with Indigenous nations and other displaced communities with claims to the lands on which a given event occurs.

Land acknowledgements should be more than just routine words. As Dr. Dylan Miner from the American Indian and Indigenous Studies program at Michigan State University <u>notes</u>, the practice of recognizing the ancestral, traditional, and contemporary lands of Indigenous nations across settler territories is always provisional and must be "preceded by relationships with living Indigenous people, communities, and nations" and accompanied by actions that contribute to Indigenous sovereignty and self-determination.

While negotiating this framework can sometimes be tricky in person, online events add additional complications. One view is that digital actions obscure or erase a sense of territorial space; digital actions may seem to occur in an immaterial place, underscored by the metaphor of "the cloud." However, digital technologies are grounded in specific sites and materials (servers, cables, machines built with rare earth minerals), entangled with prior and ongoing histories of empire and dispossession. Addressing these territorial histories is a prudent extension of the principle of land acknowledgements.

Following the lead of Indigenous artists who recently convened a <u>discussion</u> on the topic of land acknowledgments in digital convenings, event organizers may wish to recognize the territories and histories that stand behind the infrastructures of a given event. Zoom headquarters, for example, are located in what is now called San Jose, California, on the traditional lands of the Ohlone and Tamyen peoples, and data produced through Zoom calls are stored and routed in <u>Equinix data centres</u>, located in multiple sites around the world with

distinct Indigenous land claims. Corporate clouds owned and managed by <u>Amazon</u>, <u>Microsoft</u>, and <u>Google</u> can be likewise researched and rhetorically territorialized. When possible, words of acknowledgement should be extended to include material supports, discussion, and advocacy on the part of the event participants and planning team.

VI. Feedback and Discussions Online

The Q&A component of a talk or lecture can be rewarding or terrible, depending on the degree of audience engagement or digressive grandstanding. Carefully designed digital conferences provide opportunities to dramatically improve this component of conference life.

At first, the downsides to e-conferencing discussions may be more obvious than the benefits. Because of the lack of clear body language cues, synchronous video questions and answers need to be heavily facilitated. Similarly, asynchronous discussions may fizzle out without explicit protocols around the frequency and character of participation. However, with structure and generosity, online exchanges can rival or exceed their analog precedents. Specifically, we recommend that:

- Moderators should have an expanded role in digital exchanges. In the context of panel discussions or keynote lectures, moderators can aggregate and convey questions and feedback posed by the audience, rather than having the audience address speakers directly. This has the advantage of equally fielding questions from multiple platforms or hybrid audiences throughout the event without interrupting the speaker and allowing audience members to see their peers' queries and build upon them immediately after they are posted. This further prevents the loss of time to mics being turned on and off as well as questions that are "more of a comment, really." Like-minded inquiries can be combined into better questions, and questions that time does not permit to be posed directly to the presenter can still be shared with the audience and preserved in the archive of the event.
- Nonverbal feedback should be provided during synchronous events. Live presenters
 in video calls frequently remark that they struggle to calibrate their performance style
 because of a lack of responsive cues from audience members. This is especially so
 when most of the audience is not broadcasting video back to the speaker. At least
 one member of the conference organizing team should therefore keep their video on
 throughout the whole presentation.
- For asynchronous materials, we recommend securing designated respondents for a given presentation, panel, or paper. This seeds discussions for the run of the event and ensures that every presenter will receive at least one high-quality set of engagements.

• It's increasingly common for attendees of physical conferences to wear pronounidentifying stickers to make it easier to correctly address them and to show solidarity with trans and gender non-conforming colleagues. This practice can continue online, for example in Wordpress bios or Zoom display names.

VIII. Lower Carbon Digital Events

Given the <u>carbon intensity of air travel</u>, any gathering that shifts a share of its audience from departure gates to desktops will significantly reduce the climate impacts of the event. It's hard to imagine a scenario where participants emit more carbon through their computers than they would through personal travel. That said, the aggregate <u>carbon intensity and</u> <u>outputs of digital networks are growing</u>. For fear of proving the Jevons paradox (greater efficiency translating into greater resource consumption) true on new scales, organizers should be mindful of the environmental and material impacts of networked and archived data. Below are a number of practical steps that can be taken to reduce the carbon intensity of digital scholarly exchanges:

- If storing materials in the cloud, try to provision services from companies that score higher on Greenpeace <u>Clicking Clean report card</u> (i.e. opt for Google over Amazon).
- If storing materials locally, and if you have flexibility over the locality in which the materials will be stored, aim to host data in a location with an electrical grid with a lower emissions profile (i.e. with more solar, wind, and hydropower).
- Optimize the quality of files for screen viewing, rather than print. 4K video and images more than 200 dpi are probably not necessary.
- As mentioned previously, ask participants in group video calls—especially large ones—to cut their video transmissions whenever visual feedback is not required.
- Experiment with other, non-digital forms of meeting as well; invest in relationships and collaboration with local and regional colleagues; imagine forms of collaboration and sharing that rely neither on air travel, nor Google, Microsoft, Facebook, or Twitter.

4. Security

Digital harassment has long been a factor in many scholars' lives, especially women, scholars of colour, and researchers who study popularly polarized topics such as feminism, climate change, video games, queer studies, and anti-racism. For these scholars, reports of 'Zoom bombing' look less like a new threat than a continuation of long-standing patterns in harassment. For others, the move to remote platforms is an opportunity to learn what these scholars have to teach us about digital security and to reflect more seriously about the safety of the participants invited to meet online.

At times, this work will be in tension with aspirations to use digital platforms to make research exchanges more open to the public. There is a trade-off between security and reach. Organizers will have to evaluate the likelihood of attracting unwanted attention to their event, relative to the audiences they wish to engage. Defining specific publics, rather than orienting towards 'the public' in general, will help in these assessments.

Specifically, planners can:

- Avoid bad actors looking for publicly available video conferencing links by distributing this information only over email or on password-protected platforms to registrants.
- Develop a privacy policy for the event—both for presenters and audience members—and clearly communicate how long materials will be made public (and to whom).
- Further specify privacy protocols for the group regarding the reproduction and circulating of materials with or without the consent of participants. In some instances (i.e. an annual conference) live-tweeting talks may be welcome. In others (a workshop of materials under development, a roundtable on a contentious topic) it may not be. Share expectations explicitly and often.
- Create a moderation policy in advance. Assign dedicated roles. Inform everyone early and stick to it consistently.
- Develop a verification process for registrants that strikes a balance between diligence and gatekeeping. For instance, lightly Googling participants without institutional email accounts, or asking them to provide a few sentences describing their interest in the event, can be an effective way of screening out potential trolls.

5. Accessibility and Inclusion

There are significant challenges to reading or watching materials online—both physiological, in the case of physical, sensory, and cognitive impairments, and technological, when confronting digital divides and a bewildering sea of formats and platforms. Effective online research exchange should therefore plan to accommodate multiple modes of accessing digital materials, sensorially, temporally, and financially.

I. Accessible Conferencing

Face-to-face conferences were never easily accessible to many attendees and participants with disabilities, but many people have at least become nominally familiar with ways to address these challenges (ASL interpretation, printouts of lectures distributed in advance, sensory rooms, and using a microphone). Digital equivalents exist but may require greater social coordination. Drawing from <u>Aimi Hamraie</u>'s excellent work on this topic, we urge conference planners to anticipate and accommodate different physical, sensory, and cognitive impairments in their audience and presenters. The following are a few places to begin:

- Require participants to add <u>image descriptions</u> to any asynchronous visual materials they upload, and to verbally describe materials they present in video form.
- If uploading pdfs, ensure that <u>OCR and screen reader</u> accessibility is enabled.
- For synchronous and asynchronous video presentations, provide captions and/or produce text transcripts.
- Limit the required hours of consecutive and/or synchronous participation in a given conference day (2 hours seems to be a good upper limit).
- Do not require audience members to turn on video functions during synchronous events.

<u>Small budget tips:</u> YouTube can <u>automatically generate subtitles</u> for videos uploaded to the platform (though you will have to proof them manually). Apps like <u>Otter.ai</u> or <u>Thisten</u> will do the same for audio. <u>Zoom can generate automatic transcriptions</u> for admins of a cloud recording with Business, Education, or Enterprise licenses.

<u>Big budget tips:</u> Consider hiring professional transcribers to live-caption synchronous events. The Association of Transcribers & Speech-to-text Providers maintains a <u>directory</u> of vendors and trained contractors you can work with.

II. Low-Tech and Low-Bandwidth Conferencing

Not everyone has access to high speed or consistent Internet connections. Organizers can minimize the bandwidth requirements for participation through the following considerations:

- Encourage/request all participants in synchronous video calls (besides moderators, chairs, and presenters) to turn off their video broadcast functions. This will lower the bandwidth of the call and make it less likely for calls to be dropped.
- Post archived and asynchronous materials on platforms that allow for offline downloads and viewing, and that are mobile-ready in their design. Consider aggregating conference materials into .zip or .rar archives that can be easily downloaded with a single click.
- Encourage participants/tech teams to record in lower-quality sizes and formats, optimized for downloading. HD video and images are almost always unnecessary.
- Allow participants to join Zoom calls via phone as well as their computers. Encourage presenters to verbally describe any visual materials in their presentations to ensure that audio-only attendees can participate.

Many of these steps double as means to reduce the carbon intensity of a digital gathering, benefiting both environmental and access considerations.

6. Experiments and Interventions

As we've explored above, the character of online research exchange is not yet fixed. It is open to exploration and experimentation—we do not yet know what an e-conference can fully do. There are many exciting directions and provocations that point to how they might evolve in a future where how we meet online does not merely replicate the conventions of in-person gatherings, but draws on the affordances of various platforms and media formats to add analytic, aesthetic, and social value to the exchange. Below are a few interesting possibilities:

- Flipping the classroom: If scholars seek deeper engagements with their work, it may
 make more sense to distribute written materials in advance and use their panel time
 to workshop, rather than merely present, their arguments. Several panels in the
 2020 4S/EASST conference opted to make this shift after the conference went
 digital, to good effects.
- Audiovisual interventions: Following the excellent work in the field of visual anthropology, we can imagine future contexts in which presenters increasingly approach the formal and performative elements of conference talks as unique means by which to make their arguments. Free to determine the setting and substance of their presentations, scholars may be drawn away from PowerPoint and eye-level shots and more towards edited video essays, situated reports from within scholars' field sites, critical making tutorials, and other object lessons.
- Research-creation: The opportunities for critical engagement with the forms and formats of research exchange suggest the possibility of creative presentations and performances becoming the primary outcome of the research process for some, instead of a steppingstone towards a written publication. <u>Research-creation</u> is one administrative and methodological framework in which this kind of scholarship can be recognized and evaluated.
- Administrative activism: Event planners, freed from conventional formats and travel costs, can look to event budgets as a resource for unconventional interventions. Instead of paying for plane tickets, conveners can fund research directly, paying for equipment and expenses needed to produce materials for a conference or workshop. Simply transforming travel expenses into honoraria would be a big step to support precariously employed scholars.

7. Acknowledgements and Further Resources

Research is a collaborative process, and this is especially true for research about research. In writing this white paper we benefited from the experience of many conference organizers and attendees. We would specifically like to thank the following people for their input, time, and expertise:

Zane Griffin Talley Cooper Aimi Hamraie Jordan Kinder Chelsea Miya Jessica Otis Oliver Rossier Imre Szeman Hannah Zeavin

And the participants in *Energy In/Out of Place: A Virtual Energy Humanities Research-Creation Workshop*

Additional E-Conferencing White Papers and Guides:

Chow-Fraser, Trevor, Chelsea Miya and Oliver Rossier. "Moving Ideas Without Moving People." University of Alberta. March 20, 2018. <u>https://www.ualberta.ca/kule-institute/media-library/econferencing/e-conferencing-toolkit2018-04-10.pdf</u>

DeWitt, Jessica. "#ASEH2018Tweets Presenter's Guide." 2018. https://jessicamdewitt.com/2018/02/12/aseh2018tweets-presenters-guide/

Fernando, Mayanthi L., E. Gabriel Dattatreyan, Arjun Shankar, Paul Christians, Andrea Muehlebach. "The Distribute 2020 Playbook." May 2020. <u>https://distribute.utoronto.ca/playbook/</u>.

Katz-Rosene, Ryan, et al. *Flying Less in Academia: A Resource Guide.* 2020. Available at: <u>http://FlyingLessResourceGuide.info</u>.

Rockwell, Geoffrey, and Chelsea Miya and Oliver Rossier. *Right Research: Modelling Sustainable Research Practices in the Anthropocene*. 2020. <u>https://doi.org/10.11647/OBP.0213</u>.

Accessibility Resources:

Academic Audio Transcription (an audio transcription collective composed of disabled and chronically ill workers): <u>hello@academicaudiotranscription.com</u>; @AAT_transcribes.

The Digital Library Federation's Guide to Zoom Accessibility: https://wiki.diglib.org/Zoom_Accessibility

Guides on Digital Harassment:

Marwick, Alice E., Lindsay Blackwell, and Katherine Lo. "Best Practices for Conducting Risky Research and Protecting Yourself from Online Harassment (Data & Society Guide)." New York: Data & Society Research Institute. 2016. <u>https://datasociety.net/wpcontent/uploads/2016/10/Best_Practices_for_Conducting_Risky_Research-Oct-2016.pdf</u>

Pacansky-Brock, Michelle. "6 Tips to Deter Zoom-bombers in times of disruption." The Online Network of Educators. 2020. https://semo.edu/it/guides/pdf/Tips2DeterZoomBombers.pdf.

Research on Telepresence and Mediated (A)synchronicity:

Innis, Harrold. The Bias of Communication. Toronto: University of Toronto Press, 1982.

Karin Knorr Cetina. "Scopic Media and Global Coordination: The mediatization of face-toface encounters." In Lundby, Knut, ed. *Mediatization of Communication.* Berlin: de Gruyter, 2014.

Milne, Esther. "Email and Epistolary Technologies: Presence, Intimacy and Disembodiment." *Fibreculture* 2 (2003). <u>www.journal.fibreculture.org/issue2/</u>.

Shelley-Egan, Clare. "Testing the Obligations of Presence in Academia in the COVID-19 Era." *Sustainability* 12:16 (2020): 6350. <u>https://doi.org/10.3390/su12166350</u>