COMMUNIQUÉ

Canadian Society for the History and Philosophy of Science

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Nº 105 autumn/l'autome 2022

Media

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Cover Image: "Post-truth-era 03." Photograph from the POST-TRUTH ERA photo series by Heikki Leis (2017). Wikimedia Commons.

Editorial Team

CSHPS Officers, 2022

Canadian Society for the History and Philosophy of Science
CSHPS
Société canadienne d'histoire et de philosophie des sciences

Editor's Letter

Meditations on Media

Media. It is mass and social; it has circuses and darlings, hype, events, and junkies. The term rose to ubiquity in the post-war era its contours have proven malleable and capacious. Undergraduate students in my seminar on the history of ignorance are quick to invoke it as responsible for myriad warpings and obscurings of knowledge; yet, when rendered social, media (according to them) has the democratic potential to reveal the world as it really is. Certainly, if these unripened assumptions reflect more general trends in our culture's understanding of media, historians and philosophers of science will have much to say.

This issue of *Communiqué* suggests that they do. In his wide-ranging interview with Lise Henric, Ghyslain Bolduc delves into fake news, docufiction, and the war in Ukraine. Aaron Kenna introduces readers to the structure and protocols of Bellingcat, an alternative media platform, which he argues, offers lessons on how to better organizing journalistic inquiry today. Isaac Record and Boaz Miller draw on a growing body of scholarship, they make the case that standard prescriptions for how to deal with the spread of mis- and dis-information online will not work. Together, these three contributions give the reader an appreciation for work that philosophers of science are doing in this area.

There is much else in this issue beyond the special topic content, including a flurry of note-worthy news and announcements from CSHPS members, and Jonathan Turner's instalment of Career Corner which offers advice on how to approach the sometimes daunting ocean of jobs outside of the academy.

This year's Hadden Prize winning essay, by Amhad Ellabar, makes a compelling and thought-provoking case for considering the skewed evidential standards of climate change research as a matter of epistemic justice.

This issue features a strong Innovative Pedagogy section, with Ellie Louson and Rich Bellon diving into the first of a two-part essay on how to teach mandatory HPS courses. This instalment considers ways of cultivating a culture of care in the classroom to help engage and connect with students. Jörg Matthias Determann offers readers an enticing glimpse into the trove of materials and resources available in the Qatar Digital Library, and shares his and his colleagues' experiences teaching with the library. This essay is a must-read for anyone seeking new ways to weave Arabic and non-European sources into their teaching.

You will find, also, the minutes from the 2022 CHSPS annual meeting that took place online this past spring, and member updates.

And now, I must bid farewell to my co-editor, Ghyslain Bolduc. I will miss the creative energy he brought to Communiqué: the spark behind the last two issues. Thank you for your work, Ghyslain. Wishing you the best on your next project!

Dani Inkpen, Editor
dkinkpen@mta.ca

Editor's Letter

Depuis notre dernier numéro, notre monde a essentiellement été marqué par la guerre en Ukraine, déclenchée par l'invasion de ce pays par la Russie le 24 février dernier. L'impact global de cet événement dramatique est tel qu'il accélère l'état de crise dans lequel l'ordre mondial était déjà entraîné. Précarité alimentaire, dynamique bipolaire de guerre froide entre les superpuissances, dépendance accrue aux énergies fossiles, coût humain et en ressources matérielles astronomiques; ces effets sont particulièrement délétères en regard du besoin criant d'une coopération internationale sur de nombreux enjeux de sécurité, de santé, d'économie et surtout, d'écologie. Disons-le: cette guerre heurte nos espoirs en l'habitabilité du monde de demain.

Elle nous rappelle également que l'information, quelle que soit sa valeur de vérité, est d'abord l'instrument d'intérêts particuliers qui peut se transformer rapidement en arme de guerre. À l'ère des fausses nouvelles, elle sert déjà de munitions dans divers conflits sociaux et idéologiques qui paraissent se multiplier et s'exacerber par les réseaux sociaux numériques. Comme l'évoque l'économiste Daniel Cohen, auteur d'*Homo numericus: la «civilisation» qui vient*, les médias numériques poussent, par leur mode de fonctionnement même et l'économie de l'attention qu'ils produisent, à « la mise en tension » et à la polarisation, engendrant par le fait même une société civile plus immodérée et divisée. L'assaut du Capitole du 6 janvier 2021 nous rappelait déjà que la guerre des mots et des images prépare et entretient celle du fer et du feu.

Les contributrices et contributeurs de ce numéro éclairent donc les rapports entre l'information, ses modes de mise en forme et les finalités tant épistémiques que politico-économiques de ses producteurs, diffuseurs et relayeurs au sein des espaces médiatiques actuels. Je vous partage d'abord mon entretien avec Lise Henric, qui nous offre une riche analyse des liens entre fiction et réalité dans les représentations médiatiques d'aujourd'hui. D'autres proposent, en s'appuyant sur des théories en épistémologie et philosophie des sciences, des mesures originales pour améliorer la validité de l'information. En particulier, l'analyse et la promotion du modèle de journalisme d'enquête *Bellingcat* permet à Aaron Kenna de rappeler certaines conditions sociales et institutionnelles de l'objectivité. Isaac Record et Boaz Miller relèvent entre autres l'insuffisance du décryptage des faits (*fact checking*) par les plateformes numériques pour contrer les fausses nouvelles et soulignent la nécessité de transformer les normes qui gouvernent l'affichage en ligne et les opérations fournies par les plateformes.

Il s'agit de mon dernier numéro à titre de corédacteur de *Communiqué*. Je tiens à remercier Pierre-Olivier Méthot et tous les autres responsables de la SCHPS pour leur confiance et la latitude éditoriale qu'ils m'ont accordée. Merci à Jaipreet Virdi, qui m'a beaucoup appris; ce bulletin ne serait pas ce qu'il est aujourd'hui sans elle. Merci à ma corédactrice Dani Inkpen pour sa bonne humeur, son ouverture et la rigueur de son travail. Merci enfin à vous, lectrices et lecteurs fidèles du bulletin. Pour l'avenir de *Communiqué*, je souhaite que le retour du congrès annuel en présence favorise une implication plus soutenue des membres francophones au bulletin: ce n'est qu'ainsi qu'on puisse espérer dépasser les «deux solitudes».

Ghyslain Bolduc, Editor
ghyslain.bolduc@umontreal.ca

President's Message

Dear CSHPS members,

As we all settle into a new academic year, the third of the pandemic, I have been reflecting on the resilience and resourcefulness of many in our community. Practices borne of necessity during the pandemic have brought scholars together in new ways, have made connection and communication possible, and scholarship and teaching more accessible. Virtual conferences have also lessened our environmental impact. However, many of us ache for the lively discussions and exchanges that take place at in-person conferences, both inside and outside sessions and panels. The hallway chats, the quick coffee between sessions, the lunch and dinner gatherings, the drink at the end of the day.

I hope as we prepare for our first in-person CSHPS meeting in three years that some of that excitement can return. Our CSHPS officers, particularly Program Chair Jamie Elwick and Local Organizer Ernie Hamm, have been working closely with Congress to ensure that the 2023 meeting at York University will be a wonderful event. We are following the options that Congress has given us, and plan to have a hybrid meeting to accommodate participants that participate remotely and will ensure accessibility for as many participants as possible.

The theme of Congress 2023 is "Reckonings and Reimaginings". This theme draws on the lessons of Black Lives Matter, Idle No More, the Truth and Reconciliation Commission, and the Inquiry into Missing and Murdered Indigenous Women and Girls. Organizers hope that the meeting will help us to learn how to work towards racial and climate justice, and I hope we can think about how to incorporate this theme into the work we do at our own CSHPS meeting. As we plan, we should think about how the history, philosophy, and social studies of science and technology can help us address these and some of other issues we face: global climate change, the social health inequities brought to the surface by the pandemic, and the implications of the Anthropocene, just to name a few.

In the last few months, we have launched two new initiatives that I hope will highlight and spread the word on the important work we are doing. Our Social Media Committee has been working hard to promote our work on several platforms. If you haven't done so already, be sure to check out our YouTube channel as well as our Twitter, Facebook, and Instagram pages. And, if you are interested in writing a blog post, being interviewed for a podcast, or even writing something for Communiqué, please send me an email. Our website is also in the process of being revamped to present a stronger portal to our activities.

The other initiative is our Graduate Student Committee. We have long understood that the future of the history and philosophy of science in Canada is in your hands, and that you also face precarity as you embark on your graduate education and careers beyond graduate school. We want to support you and make sure that CSHPS is a place where you can find support, connection, and mentorship. The Graduate Student Committee will serve to help organize graduate student events at our annual meeting, and direct the CSHPS executive facilitate mentoring sessions, early career workshops, and any other events that can help support graduate students in the history and philosophy of science. If you have any ideas for this group, or would like to get involved, please get in touch.

I want to thank Alan Richardson for his leadership as CSHPS President over the past three years. His presidency was a model of sharpness and good humour, particularly welcome during the challenges of the pandemic. Thank you also to all the volunteers that came on board this last cycle,

President's Message

particularly those who have joined our new committees—CSHPS is grateful for your participation.

My final thanks are to our Communiqué co-editors Dani Inkpen and outgoing co-editor Ghyslain Bolduc. We know how much work goes into producing each issue, and on behalf of all of us, thank you.

Wishing you all a productive and safe fall, and see you at York in the spring,

Tara Abraham, CSHPS President
taabraha@uoguelph.ca

Call for Symposium Proposals: Sessions for the Joint Commission of the IUHPST, Congress of Logic, Methodology, and Philosophy of Science

24-29 July 2023
Buenos Aires

The Joint Commission of the International Union for the History and Philosophy of Science and Technology (IUHPST) invites submissions for symposia to be presented at the XVIIth Congress on Logic, Methodology, and Philosophy of Science and Technology (CLMPST), taking place July 24-29, 2023 in Buenos Aires, Argentina.

The Joint Commission brings together the IUHPST's Divisions of Logic, Methodology and Philosophy of Science and Technology (DLMPST) and History of Science and Technology (DHST), promoting work that genuinely integrates historical and philosophical perspectives on science and technology. At each Congress, it organizes symposia that showcase such work.

We thus invite submissions for symposium proposals aligned with the JC's mission. We are especially interested in proposals that align with the Congress's theme, Science and Values in an Uncertain World, although we welcome proposals on any topic.

Symposia should include at least four speakers. Proposals should consist of a 500-word synopsis of the symposium theme, together with 500-word abstracts for each of the talks and contact information for authors. They should be formatted according to the general guidelines for CLMPST symposium submissions, available here, and submitted by email to bolinska@mailbox.sc.edu.

Submissions should be received no later than **November 1st, 2022**.

Any questions should be directed to Agnes Bolinska (bolinska@mailbox.sc.edu).

Call for entries: IUHPST Essay Prize in History and Philosophy of Science

Submission deadline: 15 January 2013

The International Union of History and Philosophy of Science and Technology (IUHPST) invites submissions for the 2023 IUHPST Essay Prize in History and Philosophy of Science. This biennial prize competition seeks to encourage fresh methodological thinking on the history and philosophy of science and related areas.

This year's prize question is inspired by the theme of the 17th International Congress on Logic, Methodology and Philosophy of Science and Technology, "Science and Values in an Uncertain World." Current global challenges such as the pandemic and climate change are pervaded by epistemic and material risks. Science plays an increasing role in policy and personal decisions, yet its application is sometimes contested. We therefore invite entries, in the form of an essay of 5,000–10,000 words written in English, addressing the question: **"How can history and philosophy of science, technology, and medicine help us to understand and evaluate the role of values in science?"** This question may be interpreted broadly. Submitters are encouraged to specify what kinds of values are in question.

All entries should consist of original work that has not previously been published. Entries written originally in another language should be submitted in English translation, along with the name and contact details of the translator. Entries will be judged on the following criteria, in addition to general academic quality: direct engagement with

direct engagement with the prize question, effective integration of historical and philosophical perspectives, and potential to provide methodological guidance for other researchers in the field.

The author of the winning entry will be invited to present the work at the CLMPST in Buenos Aires, Argentina, 24–29 July 2023. Presenting at the Congress will be a condition of the award.

The award will carry a cash prize of 1,000 US dollars and a waiver of the Congress registration fee.

Other strong entries will also be considered for presentation at the Congress. In order to ensure this consideration, entrants should submit the entry also as a standalone paper abstract for the Congress by the deadline for that (December 15, 2022), following the standard instructions indicated on the Congress website: https://clmpst2023.dc.uba.ar/callforpapers

Entries are invited from anyone, without restriction of age, nationality, or academic status. Co-authored work will be considered; if the winning entry is a co-authored work the cash prize will be shared out among the authors.

This prize is administered by the Joint Commission of the IUHPST, whose remit is to make links between the work of the two Divisions of the IUHPST: the DHST (Division of History of Science and Technology) and the DLMPST (Division of Logic, Methodology and Philosophy of Science and Technology). For further information about IUHPST, see: http://iuhpst.org/

Entries for the prize competition should be submitted in pdf format by e-mail to the Chair of the Joint Commission, Dr. Agnes Bolinska, Department of Philosophy, University of South Carolina (bolinska@mailbox.sc.edu). Any queries should also be directed to her. The deadline for submission is 15 January 2023.

Job: Tenure-track position, HOST

University of King's College
Halifax

The History of Science and Technology Program (HOST) and the Foundation Year Program (FYP) at the University of King's College invite applications for a tenure-track position at the rank of Assistant Professor, commencing July 1, 2023. The focus for the appointment is "globalised modern science, technology and medicine" with an emphasis on decolonization and the interface of "non-Western" and "Western" knowledge.

Application Deadline: December 1, 2022

For more information on the position and for details on how to apply, please visit: https://ukings.ca/campus-community/employment/assistant-professor-tenure-track-history-of-science-and-technology-and-foundation-year-programs/

Committee: CSHPS Graduate Student Committee

In response to data gathered from our Membership Survey, and given that graduate students make up one of the largest sub-groups in our membership, the CSHPS Executive has decided to create a standing **Graduate Student Committee**.

The Graduate Student Committee will represent the interests of graduate students in the society. We also hope the committee will work to generate ideas about graduate student events at our annual meeting and during the year, such as reading groups, social events, mentorship sessions, and early career workshops. The committee will **not be solely responsible for organizing such events.** Rather, we'd like graduate students to have a voice on the executive and to offer us direction from the graduate student perspective.

If you are a graduate student and are interested in volunteering on this committee, please send an email to taabraha@uoguelph.ca.

Career Corner

Last time we addressed the question "what should students know about applying/interviewing for academic jobs?" This time let's address the parallel question "what should students know about applying and interviewing for __ jobs?"

Some might want to fill the blank in with "non-academic" or "alternative academic" or "industry." The first two flip the reality, because the application processes for most careers are similar – faculty positions are the anomaly, while also being rare in both the overall labour market and the narrower labour market for those with doctoral or terminal degrees. On the other hand, "industry" has a variety of connotations that may or may not line up with the wide spectrum of public sector, private sector, charitable and non-profit sector, and entrepreneurial or self-employment opportunities that exist.

As with the last column, this is a big topic, and I'm happy to revisit it again in the future, but for this issue let's narrow our focus to just applying and to three tips.

Know the industry

There are many things you need to know before you can get a job in any specific sector or industry of the economy. The most logistically important for the purposes of putting together an application is learning where and how job opportunities are communicated. Sometimes this is unique to the specific organization or hiring manager, but usually it's consistent across an entire field or sector. Public sector jobs are customarily posted on a careers page for that specific government or public sector organization, and occasionally advertised elsewhere. Non-profit and non-government positions are usually shared in a central hub like Charity Village, and private sector roles might be posted on the organization's site (if they are large, and have their own recruitment team) or on a central hub like Indeed. Some jobs are never posted: the hidden job market. Though, it's unclear precisely how many positions are filled this way – there is no reliable source study for the oft-quoted 80%.

The simplest way to learn about an industry is finding someone who works in it, requesting an informational interview or coffee chat, and asking: "how are jobs typically posted and filled in your organization and this sector more broadly?" This signals both your curiosity and your interest in a role. It's nearly universally good advice that you shouldn't ask, "can I have a job?" to signal your interest in a position.

Informational interviews, or the more involved and valuable job-shadowing programs, are extremely informative for all manner of questions you might have about a sector of the economy, such as:

- What are the hours of work?
- What is the workplace culture?
- What skills are knowledge are current and relevant?
- What are the opportunities for growth within a position/organization/sector?
- What does a typical day/week/month/year look like?

Know the Organization

Once you've identified a sector of the economy you are interested in working in, then the next step is finding the right organization. How you define the right organization is up to you. For some of us, it is the first one to offer a position in a sector. For others it's a more involved quest for alignment of values (represented in both a strategic plan, and how that plan is implemented in the workplace). In

the current economy, with a relatively high employment rate, jobseekers seem to have a bit more choice between organizations.

The core question for those looking for work at this moment seems to be where they can find a position that offers their preferred balance of working from home and working in person. Organizations are struggling with the expectations of returning to the pre-pandemic workplace, and with the uneven acceptance that remote work has significant advantages for employers and employees.

A question that is likely to take on more prominence for applicants over the coming months is whether the organization, team, and position will be recession-proof. It is, for instance, a dream for some working in the restaurant industry to find a place offering a guaranteed minimum income that matches cost of living, but that dream collapses if the restaurant is not able to sustain their revenues and pay their staff.

Know the audience

Once you are convinced that you've found the right opportunity for you, then you must leverage the research that helped you determine it was a good fit to explain why you are a good fit for *their* needs. How have your previous experiences demonstrated that you have the skills, knowledge, and values to align with the needs of the position, team, and organization?

If, in your research, you had the opportunity for an informational interview with the hiring manager or members of the team you'd be joining if you were successful, then all those additional touches you'll be able to add to your application will concretize the impression they formed of you when connecting with you.

With any luck, you might even have a mentor or someone within the industry willing to share insights about the specific formatting of your application materials. Is a cover letter necessary? Will they read it first or second? What content will they want to see featured prominently in your resume, and what additional information will be nice to include if you have space? What are the formatting expectations for a resume so that you stand out for good reasons?

Jonathan Turner has a PhD in the history of science from the University of Toronto. He works in university administration, is a project manager and co-founder of the Graduate and Postdoctoral Development Network and has a consulting business. He can be reached at bcw.director@gmail.com with questions or ideas for future columns.

Image: Media, PA Theatre. Photograph by Small bones (2010).

La représentation médiatique entre fiction et réalité

entretien avec Lise Henric

Ghyslain: Lise Henric, vous êtes Maître de conférences en sciences de l'information et de la communication à l'Institut catholique de Toulouse, et vous avez notamment fait une thèse doctorale sur la diffusion du docufiction en France.

En étudiant votre parcours et vos publications, on identifie le rapport entre la fiction et le réel dans l'expression médiatique comme fil problématique de vos recherches, que ce soit dans l'étude du genre hybride entre le documentaire et la fiction qu'on nomme *docufiction*, dans l'analyse de la spécificité des *fake news* ou encore dans celle du rôle des journalistes *fact-checkers*. D'où vient votre intérêt pour ce problème directeur?

Lise: C'est vraiment un cas pratique qui s'est présenté à moi. J'avais fait un stage de fin d'étude dans une société de production, et en fait ma mission était de "vendre" un documentaire sur un peintre catalan qui s'appelle Pierre Garcia-Fons aux chaînes de télévision françaises. Et donc j'appelle les diffuseurs, je présente le documentaire, et je vois qu'on me répond à chaque fois: "oui, mais ce n'est pas assez vendeur, c'est trop classique, ça ne pourra pas attirer les téléspectateurs". Voyez, c'est cette notion de "classique" qui revenait sans cesse, on me disait que le documentaire manquait de dynamisme, etc. Je me suis donc posée la question: "si ce documentaire est trop classique, qu'est-ce qui fonctionne aujourd'hui à la télévision?" Or, à la même période était diffusé *L'Odyssée de l'espèce*, qui avait attiré 9 millions de téléspectateurs en allant chercher 32% de parts de marché. C'était vraiment une petite révolution à l'époque. Pour vous faire un bref résumé, *L'Odyssée de l'espèce* retraçait l'histoire de l'humanité, de l'*homo sapiens,* et tout était fictionnalisé bien entendu, car nous n'avons pas de documents d'archive pour cette époque. Ce qui avait vraiment fonctionné c'était cette ressemblance; les acteurs étaient très bien grimés, des heures de maquillage étaient nécessaires. Cette place de la réalité, de la *ressemblance* avec la réalité, avait fonctionné et c'était ce qui était recherché par les diffuseurs. De plus, il existe à la fois ce côté fictionnel et ce côté scientifique, puisque c'était entrecoupé d'interviews avec des scientifiques, dont Yves Coppens. On se rend à l'évidence qu'avec 9 millions de téléspectateurs, c'est un format qui fonctionne. C'est donc à partir de cette observation que je me suis dite qu'il y avait vraiment quelque chose à faire sur la manière dont le réel aujourd'hui s'immisce dans la fiction. À partir de là, d'autres questions me sont apparues: lorsqu'on met en scène *Lucy* (l'australopithèque) qui commence à marcher, les causes de ce trait présentées dans cette fiction sont-elles vraiment le produit de vérifications scientifiques? Est-ce que les clefs sont données aux téléspectateurs pour comprendre ce qui relève d'une part de la fiction, et ce qui d'autre part est vraiment issu de faits scientifiques? C'est un peu tout ce cheminement-là qui était à l'origine de la rédaction de ma thèse.

Ghyslain: Cette prise de conscience va vous mener à aborder certaines réflexions philosophiques. Cette relation à la fois complexe et tendue entre la fiction et le réel, tant dans la représentation cinématographique, télévisuelle - disons sensible - que dans le discours, possède assurément une dimension philosophique. Dans votre analyse par exemple du docufiction *Armadillo* de Janus Metz (2010), qui représente l'expérience de soldats danois pendant la guerre en Afghanistan, vous faites référence à Martin Heidegger et Edmund Husserl pour penser la «transcendance du réel» qui serait opérée par Metz. Quel est le rôle de la philosophie dans votre travail?

Lise: J'ai beaucoup de chance car les sciences de l'information et de la communication sont transdisciplinaires. On touche à la philosophie, à la psychologie. Lorsque j'ai visionné le film *Armadillo*, la notion de transcendance du réel s'imposait, car on sent que le réalisateur veut vraiment prouver que les scènes qui sont filmées sont réelles. Je me suis donc intéressée aux travaux philosophiques, car j'ai voulu interroger cette notion de transcendance du réel, la manière dont le réalisateur veut la "traduire". J'ai essayé de repenser ce concept dans mes recherches et dans mon article sur le travail de Janus Metz dans le sens d'un *dépassement de soi*.

Ghyslain: Que signifie cette transcendance du réel, ce dépassement de soi dans le contexte du docufiction?

Lise: C'est-à-dire que la fiction va "fictionnaliser" un fait en apportant cette touche de réel dans le docufiction. Dans certains docufictions, nous retrouvons la place de l'archive, qui permet d'appuyer cette transcendance du réel, d'authentifier les faits. Metz n'utilise pas d'images d'archives, puisqu'il propose un film sur la guerre en Afghanistan. Il dit bien dès le début: "Ceci n'est pas une fiction, ceci est la réalité de ce qui se passe en Afghanistan". Il y a donc une volonté de transcendance, dans le sens que la fiction peut même dépasser l'archive pour donner sa vision du réel.

Ghyslain: Dans votre article *Armadillo*: *entre images de guerre contemporaines et mise en scène du réel*, vous constatez que la dramatisation romanesque des images propre au docufiction provoque ce que vous appelez un «puissant effet de réel» qui tend à remplacer l'«effet de vérité» que l'on retrouve dans des productions journalistiques plus traditionnelles comme le reportage. Si l'on considère, de manière très classique, que la vérité est l'adéquation du *discours* avec la réalité – qu'elle implique nécessairement une représentation rationnelle et médiatisée du réel – peut-on dire que ces «effets de réel» répondent à une soif de réalité brute qui tend à mettre au rancart sa voie d'accès discursive? Si oui, d'où provient selon vous cette soif?

Lise: Nous retrouvons ici un phénomène de société. Je pense que nous sommes dans une société de défiance, de méfiance envers la presse. Aujourd'hui, on peut très bien lire un article dans la presse et se dire: "oui, mais est-ce réel ?" De plus en plus de citoyens se posent ces questions, du moins en France. Donc aujourd'hui on veut les indices, on veut cette réalité, on veut prouver que cette réalité existe. Donc on recherche la contextualisation afin de rendre certains faits "réels". Permettez-moi de vous donner un exemple intéressant. On a par exemple *Parcours meurtrier d'une mère ordinaire*: *L'Affaire Courjault*, qui est un docufiction sur cette affaire; il s'agit du procès d'une mère qui avait congelé trois de ses nouveau-nés. Dans ce docufiction, les scènes de fiction sont reproduites dans le même tribunal où a eu lieu le procès, et mettent en scène des acteurs qui ressemblent vraiment aux protagonistes. Vous avez aussi, comme dans plusieurs docufictions, quelques interviews face caméra avec par exemple le mari de Madame Courjault, qui assiste au procès et qui, d'après le procès, n'aurait pas été au courant des agissements de son épouse. Dans le cadre de ma thèse, j'ai donc demandé au réalisateur du docufiction, Jean-Xavier de Lestrade, pourquoi il avait utilisé la fiction, et il m'a répondu que *la fiction, ça rend réel*. Il a donc assisté au procès, il a pris des notes, il était avec une dessinatrice qui a vraiment repris les gestes, les mimiques de l'accusée, et tout a été rendu réel. Les effets de réel deviennent, grâce à la fiction, cette réalité brute. On a vraiment l'impression d'assister au procès.

Ghyslain: Si je comprends bien, cette soif du réel provient selon vous, du moins en partie, de la méfiance que la population entretient à l'égard de la presse, dans la mesure où cette voie discursive ne semble plus en état de convaincre, et alors on a besoin d'un accès au réel plus direct, plus empirique?

Lise: Tout à fait, vous avez très bien résumé.

Ghyslain: Très intéressant. Vous avez d'ailleurs étudié les mécanismes et les modes d'expression de ces effets de réel dans *Armadillo*, œuvre docufictionnelle qui prétend présenter à son public la réalité de la guerre en Afghanistan. Avez-vous identifié des contenus médiatiques qui offrent des effets de réel semblables sur la guerre en Ukraine qui est en cours? Si oui, notez-vous une évolution dans les pratiques de production de ce type de contenu?

Lise: Malheureusement, je n'ai pas eu encore l'occasion de faire ce parallèle, mais c'est une question très pertinente, ce serait à approfondir. Reste à voir si on peut trouver des mécanismes communs ou non. En revanche, ça m'a fait penser à une citation de Regis Debray, qui je pense peut faire

le lien entre le docufiction *Armadillo* et la guerre en Ukraine: "l'information dérange, la communication rassure". Une réflexion à avoir par rapport au traitement médiatique de la guerre en Ukraine.

Ghyslain: J'imagine qu'une certaine distance historique est nécessaire avant qu'apparaissent des productions du même type.

Lise: Absolument. Dans le cas de la guerre en Afghanistan par exemple, on peut comprendre beaucoup plus de choses dans le docufiction avec ce recul.

Ghyslain: Je vois. Toujours dans le même article, vous qualifiez de «trouble contemporain» la tendance, liée à la pensée post-moderne et déconstructiviste, «à refuser de tracer une frontière nette entre fiction et non-fiction». Quelles sont les formes et pratiques médiatiques les plus caractéristiques de ce trouble?

Lise: Une des caractéristiques pour moi de ce trouble contemporain est la *spectacularisation du monde*, sur laquelle on va calquer notre perception. Un lien peut être fait avec notre utilisation des réseaux sociaux numériques - je pense notamment à Instagram - où on renvoie une image qui n'est peut-être pas la réalité. Si la représentation docufictionnelle attire les spectateurs, la représentation sur Instagram attire les *followers* (abonnés).

Ghyslain: C'est clair. Abordons une autre forme dans laquelle la frontière entre la fiction et la réalité n'est pas très nette: les *fake news*. Dans votre article *Les fake news, entre outils de propagande et entraves à la liberté de presse*, vous affirmez «que la détention, en majorité, des médias par des groupes restreints et concentrés d'industriels et de financiers, nuisant au pluralisme de l'information, accentuent ainsi le développement de *fake news*». Ce capital médiatique au service d'intérêts corporatifs ne tend-t-il pas d'abord à son accroissement aux dépens de «la recherche de la vérité» (je cite ici Emmanuel Macron qui aurait déploré, dans la foulée de l'Affaire Benalla, que la presse «ne cherche plus la vérité», ce qui suppose qu'elle la cherchait avant)? Si c'est le cas, les citoyens consommateurs de *fake news* n'auraient-ils pas un peu raison de se méfier des médias traditionnels?

Lise: Oui, effectivement, en France, on a cette concentration des médias en dépit d'un certain pluralisme de l'information. Le journal *Le Monde* a fait une cartographie des propriétaires de la presse, et on y voit que toute la presse française appartient à peu près à dix familles d'industriels, de personnes issues du monde numérique dont Xavier Niel, Patrick Drahi, etc. Par exemple, le Groupe EBRA, qui appartient au Crédit Mutuel, n'aura pas du tout le même traitement de l'information sur le Crédit Mutuel par rapport à d'autres journaux. On voit aussi que pour la plupart des "affaires" qui paraissent dans la presse, c'est souvent *Le Canard enchaîné*, qui est plutôt un journal indépendant, qui va sortir des informations. Oui, cette concentration des médias va accentuer cette méfiance et cette défiance envers la presse. En plus, les jeunes s'informent de plus en plus sur les réseaux sociaux numériques, donc fatalement, qui dit réseaux sociaux numériques, dit propagation de l'information, irréalité de l'information, et donc obligatoirement, propagation des *fake news*. Pour revenir sur la citation d'Emmanuel Macron, est-ce que cette presse recherche toujours la vérité? Faisons appel à un autre exemple. Avez-vous entendu parler de l'Affaire Xavier Dupont de Ligonnès?

Ghyslain: Non, pas celle-là, contrairement à l'Affaire Benalla.

Lise: C'est une affaire qui illustre bien certaines motivations de la presse. Xavier Dupont de Ligonnès est recherché à travers la France depuis maintenant de très nombreuses années parce qu'il a assassiné toute sa famille à Nantes. Donc un jour on retrouve à la une du *Parisien*, "Xavier Dupont de Ligonnès arrêté dans un aéroport à Glasgow", et toute la presse s'emballe et diffuse la même information. Or, 24 heures plus tard, le journal *Le Parisien* envoie un démenti: ce n'est pas lui qui avait été arrêté à l'aéroport. Cet exemple montre bien, effectivement, que la presse va rechercher

le *scoop,* le *buzz.* C'est relié au fait que le chiffre d'affaires de la presse, en dix ans, a chuté de 32%. Cette presse maintenant est vraiment à la recherche du renouvellement, de la manière d'attirer le lecteur.

Ghyslain: Justement, votre diagnostic est que cette recherche nuit au pluralisme de l'information, et c'est problématique. Emmanuel Macron parle de la "recherche de la vérité", et c'est sans doute une vision un peu idéaliste de la presse. Mais face à votre diagnostic, pourrions-nous justement donner raison à ceux qui se méfient de la presse, ou du moins reconnaître les fondements de leur méfiance, bien que la forme que prend cette méfiance soit critiquable ? Ces citoyens n'ont-ils pas un peu raison tout de même ?

Lise: Oui. On le voit avec la une du *Parisien* ; si ce journal sort une information erronée, qu'en est-il des autres informations ? Là on voit que le travail journalistique n'a pas vraiment été mené, c'est ici une source qui a appelé et qui a dit qu'il avait été arrêté, aucun journaliste ne s'est rendu sur place pour vérifier les informations. Effectivement, tout manquement engendre une méfiance, aussi bien par la concentration des médias que par un travail journalistique qui tend à aller vers le *buzz* et le *scoop*. On est aussi dans une société où on va de plus en plus vite, on ne prend plus le temps et le recul nécessaire (au travail journalistique rigoureux et fiable).

Ghyslain: Les *fake news* auraient, mise à part la motivation de maximiser les visionnements, des motivations idéologiques. Quelle est la relation entre les *fake news* et ce qu'on appelle de manière plus classique la propagande ?

Lise: On peut dire que *fake news* et propagande peuvent s'entrecroiser, puisque derrière ces deux phénomènes, on vise l'efficacité, on utilise des techniques, des outils. Vous avez Jacques Ellul, qui affirme : "une propagande inefficace n'est pas une propagande". Dans le cas de l'affaire du Pizza Gate, basée sur une rumeur anti-Hillary Clinton, on est vraiment à la limite de la propagande puisque des militants de Trump propagent délibérément ce *fake news*. Vous avez à ce sujet un article de Florian Dauphin intitulé *Les fake news au prisme des théories sur les rumeurs et la propagande* qui pourrait vous intéresser.

Ghyslain: Merci pour cette référence, qui permettra à nos lecteurs d'approfondir cette question. Lorsqu'on regarde la guerre en Ukraine, on ne peut s'empêcher de faire ce lien très actuel entre les *fake news* et la propagande. Cette guerre en Ukraine qui a éclaté en pleine ère numérique pose la question de l'objectivité journalistique. La démission de la responsable d'Amnistie internationale en Ukraine, Oksana Pokaltchouk, suite au rapport de l'ONG qui reprochait aux forces armées ukrainiennes de mettre en péril la vie de civils, rappelle que l'information, quelle que soit sa valeur de vérité, constitue d'abord une arme qu'il faut utiliser avec prudence. L'objectivité journalistique en temps de guerre est-elle possible ? Si oui, quelles en seraient les conditions identifiables par des citoyens de nations impliquées directement ou indirectement dans un conflit ?

Lise: Comment d'abord contrôler les réseaux sociaux numériques en pleine guerre ? Comment vérifier l'information ? Un travail de *fact-checking* est quand même fait dans la plupart des rédactions, mais c'est vrai que c'est très difficile de tendre à l'objectivité en temps de guerre face à l'abondance et la pluralité de l'information qui est produite et qui s'accumule. Des outils numériques pourraient être mis en place pour mieux contrôler cette information, mais qui dit contrôle, dit censure ! C'est donc très compliqué d'apporter une réponse et de trouver cette objectivité en temps de guerre.

Ghyslain: Si c'est compliqué pour les journalistes, pour les experts en communication comme vous, j'imagine que c'est encore plus compliqué pour le citoyen qui regarde le téléjournal ou qui navigue sur Internet. Si vous aviez un conseil à donner à nos lecteurs qui voudraient s'assurer que l'information qu'ils consomment est la plus objective possible dans ce type de situation, quel serait-il?

Lise: Vérifiez les sources, vérifiez que la personne qui a publié cette information a déjà publié d'autres articles, faites ce travail de vérification. En France, nous avons des cours d'éducation aux médias qui existent dès le plus jeune âge pour permettre aux jeunes de bien comprendre comment s'articule l'information, comment un article est structuré. Il est important de mener ce travail de vérification en amont.

Ghyslain: Merci! Revenons pour terminer à Janus Metz, le réalisateur du docufiction *Armadillo*. Vous signalez qu'il propose, par son docufiction, une vision partielle de la guerre en Afghanistan. Comment les formes journalistiques plus conventionnelles comme l'article de presse ou le reportage seraient-elles à même d'incarner une vision plus complète de la guerre? Y a-t-il ici une différence de nature ou de degré de partialité?

Lise: Normalement, lorsqu'on est en face d'une forme journalistique, un journaliste doit respecter une charte de déontologie. Dans celle de Munich, par exemple, on peut se dire que le travail journalistique est rigoureux. Mais lorsqu'on est face au docufiction, on est face à la vision d'un réalisateur, et comme je l'ai mentionné dans mon article, nous notons un directeur de casting dans *Armadillo*. On se dit qu' un travail a été effectué; il a peut-être refait des scènes, il a peut-être demandé à telle ou telle personne de se positionner à tel endroit. C'est compliqué parce que quand je lis et que j'étudie les commentaires des spectateurs, je constate que beaucoup considèrent *Armadillo* comme un documentaire et pas du tout comme un docufiction. Il faut vraiment donner les outils et peut-être "former", faire cette éducation. Mais pour répondre à votre question, on est à la fois sur une différence de nature *et* de degré de partialité entre un docufiction comme *Armadillo* et un article de presse.

Ghyslain: En passant, je voudrais vous signaler que j'ai beaucoup apprécié la partie dans votre article où vous apportez certains commentaires du public, car très souvent ils étaient très riches en pistes, en idées ; on voit qu'ils peuvent participer à l'analyse, surtout par la manière dont vous les arrimez à la vôtre. Comme lorsqu'on cite des auteurs, certains commentaires pouvaient éclairer et donner une autre perspective sur les idées mêmes que vous apportiez dans votre article. J'ai trouvé la structure intéressante, je tenais à vous le dire (rires). Notre entretien se dirige vers la fin: avez-vous un commentaire en conclusion pour nos lecteurs?

Lise: J'ai trouvé que vos questions résumaient bien ce que j'essaie de démontrer dans mes articles. Je vous remercie vivement pour la qualité de nos échanges.

Ghyslain: Le plaisir est le mien, merci à vous.

Lise HENRIC est titulaire d'un doctorat en Sciences de l'Information et de la Communication sous la direction de Francis BALLE (Université Panthéon Assas II). Membre du laboratoire Culture Ethique Religion et Société (CERES) et membre associée du Centre de Recherche en Gestion (Université de Poitiers), ses recherches portent sur l'analyse des représentations médiatiques (les docufictions), le développement des fake-news et le fact-checking. Elle est actuellement Maître de Conférences en Sciences de l'Information et de la Communication et Directrice des Etudes à l'Institut Catholique de Toulouse depuis septembre 2021.

Varying Evidential Standards as a Matter of Justice: The context of climate change

Amhad Ellabar
University of Cambridge

Is Germany at greater risk from climate change than Bangladesh? Posing such a question may seem absurd. After all, we have excellent reasons to believe that developing nations are experiencing the brunt of climate impacts, and countries like Bangladesh routinely top the climate vulnerability indexes of various think tanks and charities.[1] Yet, a reader of a recent assessment report by the world's epistemic authority on climate change, the Intergovernmental Panel on Climate Change (IPCC), might be forgiven for drawing this seemingly absurd conclusion. In its 2014 assessment of 'Impacts, Adaptation, and Vulnerability', the IPCC mentions *developed* countries (and particularly wealthy ones) more often in connection to loss and damage from climate change than developing countries. As a recent text-mining analysis of the report summarises: "The words Europe, Australia, North America and United States cooccur with loss/damage about three times more often than the words Asia, Africa, Latin America and the Pacific … Germany is mentioned in connection to loss/damage more often than the entire Caribbean and almost twice as often as an extremely vulnerable country like Bangladesh."[2] What explains this skewed assessment by the IPCC, and what broader lessons does it have for philosophers of science? My essay aims to answer these questions.

I proceed by examining two contextual factors that shape the IPCC's assessment. The first is the existence of severe inequalities in the distribution of peer-reviewed literature in our world: the efforts of climate scientists are predominantly focused on the Global North, with scant peer-reviewed publications by comparison on the Global South. The second factor is the 'evidential standard', or 'burden of proof', set by the IPCC in its assessment, i.e., the type of evidence the IPCC admits in its assessment and the amount of such evidence it requires before drawing conclusions. Let us unpack the first factor first.

[1] Christian Huggel et al., "Reconciling Justice and Attribution Research to Advance Climate Policy," *Nature Climate Change* 6, no. 10 (October 28, 2016): 901–8.

[2] Kees van der Geest and Koko Warner, "Loss and Damage in the IPCC Fifth Assessment Report (Working Group II): A Text-Mining Analysis," *Climate Policy*, 2020, 10.

To put it mildly, climate science as a discipline is not 'well-ordered'[3] – the research efforts of the community are not properly geared towards the interests of those who are most vulnerable to climate change, as demonstrated by an overwhelming number of studies. Here are just two examples from the literature on heatwaves: In a global review of the literature from 1964–2017, Sharon Campbell and colleagues found that the 854 heatwave study sites reported in the literature were distributed as follows: 584 were in North America, 144 in Europe, 91 in Asia, 34 in Australia, 1 in South America, and 0 in Africa. They conclude that those underrepresented in the literature are "the global populations most at risk of death and illness from extreme heat."[4] In a complementary review of heatwave research, another team found similar results noting that in "some Australian cities like Brisbane or US cities like Phoenix there have been more studies conducted than the entire continent of Africa."[5] Similar evidential inequalities have been documented across virtually the entire literature on climate impacts, from health-related impacts to impacts on cultural heritage. Let us now turn to the second factor shaping the distribution of findings in the IPCC: the institution's evidential standards.

The IPCC is famous for adopting stringent evidential standards in its assessment.[6] The IPCC typically excludes 'grey' literature, such as charity and NGO reports, demands multiple peer-reviewed studies of climatic events before assessing them, and suspends judgement routinely under uncertainty. Such epistemic caution has its benefits: it reduces the chance of error. But it has significant ethical and political costs. Given the evidential inequalities surveyed above, the IPCC's high evidential standards favour 'data-rich' regions, rendering visible impacts in the Global North (e.g., Germany) while rendering invisible climate impacts in the Global South (e.g., Bangladesh). This, I argue, represents *distributive epistemic injustice* – injustice in the distribution of knowledge. In an evidentially unequal world, we have duties of justice to vary evidential standards. The essay thus intervenes in a long-standing philosophical debate over the appropriate setting of evidential standards in science for policy, a debate which has thus far neglected contexts of evidential inequality.

[4] Sharon Campbell et al., "Heatwave and Health Impact Research: A Global Review," *Health & Place* 53 (September 2018): 210.

[5] Hunter Green et al., "Impact of Heat on Mortality and Morbidity in Low and Middle Income Countries: A Review of the Epidemiological Evidence and Considerations for Future Research," *Environmental Research* 171 (April 2019): 85.

[6] See Elisabeth Lloyd et al., "Climate Scientists Set the Bar of Proof Too High," *Climatic Change* 165, no. 3–4 (April 19, 2021): 55.

The Organisation of Journalistic Inquiry: Lessons from Bellingcat

Aaron Kenna
University of Toronto, IHPST

Introduction

The proliferation of New Media technologies has produced a staggeringly large and complex information ecosystem, one saturated in mis, dis- and malinformation. The sheer abundance of information of indiscernible provenance and accuracy contributes to truth decay: the erosion of trust amongst large segments of democratic society in the ability of traditional epistemic authorities, notably journalistic institutions, to sift truths from falsehoods faithfully and communicate knowledge objectively. In the face of truth decay, large numbers of media critics have embraced digital pessimism. Herein I argue for a degree of digital optimism and contend that we may go some way toward combating truth decay by decentralising epistemic trust and adopting a distributive, collaborative model of investigative journalism.

The Bellingcat Model

An illustration of the sort of decentralised model of journalism that I propose is Bellingcat. Launched in 2014, Bellingcat is a global network of researchers, investigators, and citizen journalists who utilise open source information and transparent methods to conduct online inquiries into a wide variety of questions. In a painstakingly detailed crowdsourced investigation, for example, Bellingcat famously probed the 2014 downing of Malaysian Airlines Flight 17 (MH17), demonstrating beyond any reasonable doubt the Kremlin's responsibility for the crime. The success of Bellingcat investigations hinges largely upon three core methodological features: (i) *crowdsourced collaboration*, (ii) *radical transparency*, and (iii) *traceability*.

1 Schmitt, Debbelt, and Schneider. "Too much information? Predictors of information overload in the context of online news exposure" (2018). *Information, Communication & Society* Vol. 2, Issue 8. https://doi.org/10.1080/1369118X.2017.1305427

2 Brown, Sara. "MIT Sloan research about social media, misinformation, and elections" (2020). https://mitsloan.mit.edu/ideas-made-to-matter/mit-sloan-research-about-social-media-misinformation-and-elections

3 Kavanagh and Rich. "Truth decay: An initial exploration of the diminishing role of facts and analysis in American public life." *RAND Corporation* RR-2314-RC (2018). https://www.rand.org/pubs/research_reports/RR2314.html

4 Newman et al. "Reuters Institute Digital News Report" (2022). *Reuters Institute for the Study of Journalism*. https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2022

5 Pew Research Center. The Future of Truth and Misinformation Online (2017). https://www.pewresearch.org/internet/2017/10/19/the-future-of-truth-and-misinformation-online/

Crowdsourced Collaboration

Bellingcat deploys an international network of independent investigators and citizen journalists crowd sourced (largely via social media) from a diversity of demographic, ideological, and educational backgrounds. Members of the Bellingcat community are encouraged to contribute to investigations by exploiting their individual perspectives and expertise through gathering information, verifying the provenance and accuracy of information, and criticising the hunches, judgements, and inferences of peers. Importantly, these critical interactions largely unfold openly on Bellingcat's social media channels.[6]

The crowdsourced nature of Bellingcat's inquiries ensures that they enjoy a degree of *cognitive diversity* simply not encountered in traditional media investigations. Cognitively diverse epistemic communities approach problems with a suite of different interpretative schemes, investigative skills, ideological commitments, and knowledge-bases, whilst minimising group-level biases and ideological blindspots. Thus, greater cognitive diversity tends to produce epistemic communities which generate a broader range of explanatory hypotheses and cultivate a wider array of critical perspectives, thereby improving the ability of communities to detect errors and converge upon true explanations.

Radical Transparency

Bellingcat enacts strict transparency standards regarding (among other factors): sources of data, investigative methods and methodological decisions, and funding sources and allocation. Central to Bellingcat's model of radical transparency is its rejection of confidential informants and 'insider information' and its emphasis on utilising open source intelligence. Open source intelligence (OSINT) is information openly available for public consumption. Examples include (but are not limited to) social and citizen media, public government records, satellite imagery (e.g., Google Maps), legacy media, and grey literature (e.g., conference proceedings, newsletters, etc.).

Utilising exclusively OSINT plays two key roles in safeguarding the methodological accountability of journalistic investigations, one epistemic and one game theoretic. To the former, transparency strengthens the validity of findings by increasing the criticisability of conclusions. Transparency allows critics more easily to detect methodological, analytical, and inferential errors, which in turn allows for their piecemeal elimination. Game theoretically, radical transparency blunts the rhetorical purchase of trolls, bad faith critics, and bullshitters. By transparently laying out their sources and methods, Bellingcat invites the public

[6] https://www.bellingcat.com/about/

[7] https://www.bellingcat.com/category/news/

[8] https://www.bellingcat.com/app/uploads/2015/10/MH17-The-Open-Source-Evidence-EN.pdf

[9] The Netherlands brings MH17 case against Russia before European Court of Human Rights | News item | Government.nl

[10] https://www.europeanpressprize.com/winners-european-press-prize-2019/

[11] https://twitter.com/bellingcat

[12] https://www.twitch.tv/bellingcat_live

[13] Page, Scott. The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies (2008). Princeton University Press.

[14] Longino, Helen. *The Fate of Knowledge* (2001). Princeton University Press.

[15] Ibid.

[16] Kitcher, Philip. "The division of cognitive labor" (1990). *The Journal of Philosophy* Vol. 87, No. 1. https://doi.org/10.2307/2026796

[17] Zollman, Kevin. "The epistemic benefit of transient diversity" (2010). *Erkenntnis* Vol. 72, Article No. 17. https://doi.org/10.1007/s10670-009-9194-6

[18] https://www.bellingcat.com/app/uploads/2020/09/Principles-for-Data-Collection.pdf

[19] Higgins, Eliot. We Are Bellingcat: The Online Sleuths Solving Global Crimes (2022). Bloomsbury.

[20] https://www.bellingcat.com/app/uploads/2022/05/Bellingcat-Annual-Accounts-2021-pw.pdf

[21] Richelson, Jeffrey. The U.S. Intelligence Community (7th edition) (2016). Routledge.

to scrutinise their work openly, thereby signalling expectations that critics and other parties to the investigation will adhere to the same norms of transparency in their criticisms and counterclaims. Establishing norms of transparency helps build public trust in the investigative process. Genuinely transparent, crowdsourced inquiries, inquiries open to public criticism and feedback, belong to all participants, investigators and critics alike.

Traceability

Whereas transparency concerns the 'what' of an inquiry — what sources of information, what investigative methods, etc., — traceability concerns the 'how' of an inquiry: how information was gleaned, how methodological decisions were made, how discordant opinions were reconciled, and so forth. Put concisely, traceable investigations provide critics with the grimy details of an inquiry, the process in which it unfolded and lead to the conclusions advertised. (The distinction between transparency and traceability is akin to that between a list of ingredients and cooking temperatures, on the one hand, and a step-by-step recipe, on the other. Whilst traceability is impossible without transparency, transparency is methodologically empty without traceability.) Traceability, therefore, amplifies the methodological accountability secured by transparency, but more effectively facilitates independent corroboration of findings.

Whilst improvements can always be made, Bellingcat nevertheless takes seriously the methodological need to trace their analytical steps. Bellingcat, for example, utilises web capture software packages (e.g., Hunchly) which run passively in investigators' web browsers and fully log and annotate every website visited, bit of information downloaded, and search term(s) queried. And Bellingcat then details every investigative step both on social media and within their investigation reports.

Conclusion

The ultimate aim of inquiry is to sift (however fallibly) truths from falsehoods. We achieve this aim by subjecting our hunches and suspicions to the most searching criticisms we can devise, thereby giving us our best chance to detect errors and missteps.

Within our chaotic New Media information environments, questions about how best to pursue this critical endeavour turn crucially upon questions of methodology and the organisation of inquiry. Bellingcat's model of crowdsourced, open source online investigations provides a roadmap for how we might organise future journalistic inquiry to carry out this critical endeavour most effectively. Taking the social nature of inquiry seriously, Bellingcat suggests how truth (however elusive), objectivity, and trust are community products — they are the hard won gains of open epistemic communities of honest inquirers who embrace diversity, collaboration, and a zeal for methodological accountability.

[22] https://www.hunch.ly//hunchly-journalists

[23] Popper, Karl. Realism and the Aim of Science: From the Postscript to the Logic of Scientific Discovery (1985). Routledge.

[24] Miller, David. "The objectives of science" (2007). *Philosophia Scientiae*. Tome 11, No. 1 http://www.numdam.org/item/PHSC_2007__11_1_21_0/

Wrong on the Internet: Why some common prescriptions for addressing the spread of misinformation online don't work

Isaac Record & Boaz Miller

Leading prescriptions for addressing the spread of fake news, misinformation, and other forms of epistemically toxic content online target either the platform or platform users as a single site for intervention. Neither approach attends to the intense feedback between people, posts, and platforms. Elsewhere, we provide an account for what we believe is a more productive approach (Record and Miller, 2022). Here we will specify what goes wrong in most approaches, an exercise that is worthy in itself.

Platform-centered approaches note a duty of platforms, such as Facebook and Twitter, to act as responsible gatekeepers, to monitor, and to filter misinformation (e.g., Gillespie 2018). In their consideration of platform duties, O'Conor & Weatherall write:

Algorithmic responses can help, but more is needed: ultimately, we need human editorial discretion, armies of fact checkers, and ideally, full financial and political independence between the groups whose actions are covered by news organizations, whose platforms are used to distribute news broadly, and who are responsible for evaluating whether claims are true (2019, 184).

Some hope that the state will coerce platforms to fulfill this duty. O'Conor & Weatherall add that "part of the picture will have to involve regulatory bodies in government as well as online sources whose entire purpose is to identify and block sources of misinformation" (2019, 184).

We have four objections to this approach. First, expecting corporations to adopt responsible practices or hoping for salvation by the state is the stuff of dystopian fiction. Giving monopolistic mega-corporations the license to filter content for truth is a cure worse than the disease. AndMoreover, states do not have a good track record regulating free flow of politically inconvenient information, and they may be even less trustworthy than private corporations (Origgi 2013; Tufekci 2017).

Second, while platforms are already expected to filter incitements to violence and pornography, and we may arguably also expect them to filter institutionally organized attempts to spread misinformation and fake sites that impersonate legitimate sites, it is less clear that we should also expect them to epistemically monitor posts that individuals make from their private accounts. Such posts widely vary in their level of factual accuracy, and many are in an epistemic grey area. Monitoring epistemically toxic content requires extensive inquiry and subtle, contextual judgment, which platforms appear incapable of doing, bearing in mind their abysmal track record at transparently monitoring posts for offensive content or in giving users proper channels to appeal their decisions (Vaccaro et al. 2020; Schwarz 2019).

Third, making platforms epistemic gatekeepers is an attempt to "return" to an imagined past-century media environment that never quite existed, in which editors and curators alone decided what was news. We share a concern about divided attention and a lack of common ground, both of which impede democratic decision making, but we do not think algorithmic silencing of dissenting voices can produce legitimate consensus.

Finally, such 'magic bullet' thinking misunderstands the autonomy of platform users to interpret and engage with posts and platforms. Thinking that if only we had a magic 'truth' button, no one would tell lies on the Internet anymore "prioritizes causal effects on user activity while disregarding the structural influence of problematic patterns in media messaging and representation" (Marwick 2018, 485). In fact, however, as we stressed, users have numerous strategies for reading and sharing content to weave it into their preferred narrative.

footnotes

Another common approach to misinformation is to pillory individual users for sharing stories that critics find problematic. As of this writing, media scholars have traced much bizarre content-spreading activity to QAnon and the so-called 'Pizzagate' fiasco, in which a wacky theory that Hilary Clinton was running a child slavery ring out of a pizza parlour gained circulation and was well-enough believed that an armed man assaulted the location hoping to free the children. It is sometimes suggested that this problem could be solved if individuals clicked through, fact-checked, verified sources, or otherwise employed the methods of media literacy (cf. Priest 2014).

Calls for media literacy assume that when a problematic post is re-shared, the re-sharers have made a mistake – these gullible saps have been taken in by tricksters and if they just knew a bit of critical thinking they would not make those mistakes. This does happen, but individual ignorance, generated by simple not knowing, is not the best explanation for the widespread circulation of misinformation in this context. Social media audiences are far from media illiterate. People simply aren't always so concerned about truth. Some Ppeople aren't looking on social media aren't just looking for what is true. They are also looking to share their identity and innumerable other things (Marwick 2018; Introne et al. 2018). Thus, narrow prescriptions like fact-checking will be ineffective because they assume people would do otherwise if they simply "knew better."

Fact-checking-based solutions underestimate the autonomy of audiences and the diversity of values that enter into social media engagements. "Verrit, […] Snopes, Politifact, and a host of other fact-checking sites, reflect fundamental misunderstandings about how information circulates online, what function political information plays in social contexts, and how and why people change political opinions" (Marwick 2018, 475). In particular, fact-checking sites assume that the audience for a post cares about its veracity when they often care only about verisimilitude. Posts are often polysemic, and a skilled audience members can bend nearly any messages to fit their purposes. The audience may care much more about identifying themselves with the poster through mimicking affect or simply clicking 'like' than about truth.

There is another problem with fact checking. Epistemically toxic content encompasses more than false information. It also consists of misleading information, including true information framed misleadingly or blown out of proportion. A viral story – true or false – can swamp other news. Politicians know that it is easy to distract from complicated bad news by drumming up conversation about minor but easily grasped events. A focus on fact-checking lets the liars set the agenda for our attention.

Yet another challenge is that following the routines of media literacy is burdensome. Besides liking and scrolling, sharing is the easiest operation to carry out on social media platforms. It's much easier than reading or clicking through. Requiring people to take on a burdensome task that may be orthogonal to their purpose in engaging with a post (see above) is not likely to work (Miller and Record 2017). An exception is when a person takes on a role, e.g., as a journalist or area expert, where their role responsibilities require them to carry out this task regardless of difficulty. Likewise, individuals sometimes take on the mission of fighting misinformation on a specific topic of personal interest. Notwithstanding, it is hard to see society adopting fact-check oriented media literacy practices as a general duty, especially when platform-provisioned operations such as 'like' are much easier than the alternative.

Another proposed solution is ranking posts or people. Linking present treatment to past behaviour adds a consequence for bad behaviour online. Successful examples of ranking include some Reddit communities. These typically exist inside discrete contexts where there are clear community norms. It is unclear how such a system could work in a single, undifferentiated context like Facebook or Twitter. Even with clear criteria, applying rules to ambiguous content is hard. Poe's "Law," which states that it is impossible to

to distinguish between a true believer and satirist, points to the difficulties of judging intent or affect on the Internet is difficult, and, thus, so too is establishing blame for a bad outcome. This challenge is amplified when there is no stable media ideology to help adjudicate disagreements. People's reliability also varies between subject areas, so an overall ranking based on an individual social media user may not be appropriate. Finally, people could exploit ranking and flagging mechanisms to bring down posts they don't like, such as political posts with which they disagree.

Leading prescriptions boil down to the suggestion that we make social media more like traditional media, whether by making platforms take active roles as gatekeepers, or by exhorting individuals to behave more like media professionals. Both approaches are impracticable, but there are two further reasons to resist them. First, such reforms give up the defining features of social media, foremost, its accessibility. Social media provides means for marginal voices to find audiences. Gatekeepers tend to suppress marginal voices. Second, traditional media has not escaped the ills of epistemically toxic content, so making social media look more like it isn't guaranteed to fix the problems. According to recent research (Benkler et al. 2020; Allen et al. 2020), traditional news organizations are responsible for the majority of discussion and circulation of misinformation. This is partly due to their overzealous pursuit of the very media literacy prescriptions described above, and partly due to their desperate engagement with the same attention economy as social media. Discussing crackpot theories on the nightly news, even for debunking them, makes the fringe mainstream.

Malicious misinformants exploit two weaknesses in journalism. One is the weakening business model and shortening news cycle. There isn't time, budget, or demand for in-depth reporting. Anticipating or 'prebunking' a coming flood of falsehoods is hard. Second is the fundamental tenet of journalism: to cover the story. Journalists can choose how to cover the story, e.g.: fact-check it or feature 'both sides' (which itself can be problematic when only one is legitimate, as in certain matters of expertise) (Boykoff 2007). But once a story is in circulation, news organizations feel obliged to cover it. Misinformants count on this; they aim to create viral popularity that launches them into mainstream news coverage and thereby shifts the 'Overton window' on what is appropriate and important to discuss. Interested viewers then follow the trail back down the rabbithole, often carefully documented by journalists trying to debunk the claims. In an era of information scarcity, coverage is a virtue. In an era of attention scarcity, coverage becomes a vice.

We have briefly explored some challenges of addressing epistemically toxic content in social media, and have argued that leading prescriptions, focusing on platforms or people as isolated sites for intervention, will not work. We would like to suggest that a better approach would be to make changes to both the norms governing individual posters and the platform-provisioned operations. Ideally, these changes could work in concert to address the spread of toxic information online. Elsewhere, we expand on this suggestion (Record and Miller, 2022).

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***Boaz Miller** is a visiting fellow at the Center for Advanced Internet Studies, Bochum, Germany and a senior lecturer at the Zefat Academic College Department of Management information Systems. He has a PhD from the IHPST, the University of Toronto. He works in social epistemology and philosophy of science and technology. His recent publications include "When is Scientific Dissent Epistemically Inappropriate?" Philosophy of Science (2021), and "Is Technology Value-Neutral?" Science, Technology, & Human Values (2021).*

***Isaac Record** is a visiting fellow at the Center for Advanced Internet Studies, Bochum, Germany and a teaching professor at Lyman Briggs College, Michigan State University. He has a PhD from the IHPST at the University of Toronto. He is the founding director of the Collaborative Experiential Learning Laboratory (CELL) and he teaches courses in philosophy of science, science and technology studies, and critical making. He researches how technology affects what we know. Find him at www.isaacrecord.net*

How to engage students in required HPS courses, Part I: Create a culture of care

Rich Bellon & Ellie Louson

Student disconnection and disengagement pose one of the most serious challenges we face as teachers. The student who stays mostly silent in class discussions and contributes little to group work. The student who attends intermittently, hands in assignments sporadically, and by the end of the semester disappears entirely. The student who skips online lectures and ghosts you on email. The student who requests an emergency extension on the final project but never hands anything in. How can we design courses to reduce the likelihood of these scenarios and intervene when students do drift away from our courses?

We both teach courses that explore science from the perspectives of the humanities and the social science in Michigan State University's science-focused Lyman Briggs College. Rich also teaches a large-enrollment general-education class on biology, technology, and the human condition, which fulfills a university requirement in the arts and humanities. Many of our students treated our classes as a hoop they had to jump through on their way to a credential, and not as something relevant to their futures. Even before the spring of 2020, others faced personal or academic stressors which impeded their educational progress. The covid pandemic has dramatically exacerbated the pressures on students.

We've found strategies to reduce student disengagement that we hope will be useful to our many CSHPS colleagues who teach similar "service" or "gen ed" courses to non-HPS majors. Our strategies are grounded in two broad principles. First, we strive to create a culture of care, which we explain in this article. Second, we unequivocally advocate for the "usefulness" of our courses, which we will discuss in part 2 in the next issue of Communiqué.

A culture of care

College can be intimidating and bewildering. Students arrive on campus without knowing many of the norms we take for granted—and why should they? They're new here! The adjustment is even more bewildering for disadvantaged or first-generation college students. Students need guidance navigating the "hidden curriculum"—the all-too-often unspoken expectations that attach to life in the university. Breaking down as many barriers as possible needs to be a dedicated course objective.

Students often find professors unapproachable. Opening channels of communication requires work. Some of this can be done by making it clear in our interactions with students that we value them and want to help. But there's also an important role for

course policy. Here's a tiny but high-impact example: holding "drop-in hours." This small reframing of "office hours" makes the purpose of your scheduled availability clearer and friendlier. Lauren S. Hallion recently reported that more than twice as many people showed up to her "drop-in hours" than had attended her "office hours."

We dedicate class time to emphasizing the importance of health and wellness, personal connections, and coping with stress and uncertainty. At Michigan State, our Counseling and Psychiatric Services have created a Virtual Care Kit, which serves as a valuable resource. Charlotte Lieberman has a fantastically useful survey of research on "procrastination" in the *New York Times*. "Procrastination isn't a unique character flaw or a mysterious curse on your ability to manage time," she explains, "but a way of coping with challenging emotions and negative moods induced by certain tasks—boredom, anxiety, insecurity, frustration, resentment, self-doubt and beyond."

Course policy should be framed as a means to provide a flexible learning environment rather than a set of punitive requirements. For example, we build relief valves into our course structure with well-defined policies for extending deadlines. Rich offers no-questions-asked extensions (he's surprised how infrequently students use, much less abuse, this accommodation). The goal isn't to do away with expectations in favor of some fuzzy "turn it in when you like" ethos, which Ellie has found often culminates in a stressful end-of-term for some students, no matter how often you remind them of that likely consequence. Extensions can be generous without being ill-defined or open-ended. The point is to create a structure which allows students latitude to deal with exigencies while still holding them to high standards and maintaining a structure for completing the work.

We find that the above policies have the beneficial consequence of discouraging academic dishonesty. To be sure, plagiarism can be the mixture of laziness and deviousness. But some of the time—probably most of the time—it is not. Students cheat because they're overwhelmed and anxious. The writing assignments in our classes are challenging by design. We push students to accomplish new things and do old things to a higher intellectual standard. These demands—especially when students have other stresses in their lives—can spiral from challenging to intimidating to paralyzing. Students sometimes try to get out of these situations by recklessly cutting corners. When it comes to academic dishonesty, it's best to help students avoid it in the first place. A flexible extension policy and open classroom discussion framing the role of anxiety are two concrete ways to do so. These policies won't deflect all dishonest behaviour, course, but they are more productive than casting ourselves—as Rich, to his regret, did for much of his career—as Old West hangin' judges.

Belonging matters

Belonging is central to a culture of care. Course activities should foster a sense of camaraderie and students should work together routinely. Creative activities (particularly ones that shy away from the justly hated five-paragraph essay) allow students to *produce* meaning rather than simply *absorb* it. For example, in Ellie's Science and the Environment course, students researched conservation initiatives, made group presentations, and used ranked-choice voting to make a real donation to their favourite project.

As part of belonging, connect with each student to help them set goals for themselves. You can have brief, mandatory meetings with each student in the first month of class (if your numbers permit) or build small assignments that involve sharing goals with you or with their peers. Connections can be in-person or virtual; make sure there are many ways for students to connect to you and to each other for different kinds of support. For example, the discussion forums on the class learning management system can provide a shared space

What to do if things go wrong

Sometimes, despite our best efforts, things go wrong for students. Factors beyond anyone's control can interfere with their participation in a course: the non-exhaustive examples of a demanding course load, jobs, family responsibilities, health issues, the ongoing pandemic, and economic, food or housing instability can each or in combination interfere with students' attendance, participation, and achievement in the course.

Students rarely know about university resources (such as mental-health, wellness, and advising services) or don't feel confident accessing them. Taking time in class to familiarize students with these resources can create a sense of care and community. It can also have an immediate impact. Recently, a student apartment building near our campus flooded, and Ellie was trying to support a temporarily homeless student who understandably fell behind on assignments. In trying to connect him to relevant and appropriate resources on a large, well-funded campus committed to student success and wellness, she was amazed at the confusing and outdated websites, the barriers to aid, and the overall attitude that students in a challenging situation must prove their worthiness and jump through a variety of bureaucratic hoops to obtain the money, food, shelter, or academic supports they need in an emergency. Institutions can be difficult to navigate; doing your research before suggesting avenues for help makes it more likely your suggestions will actually be helpful.

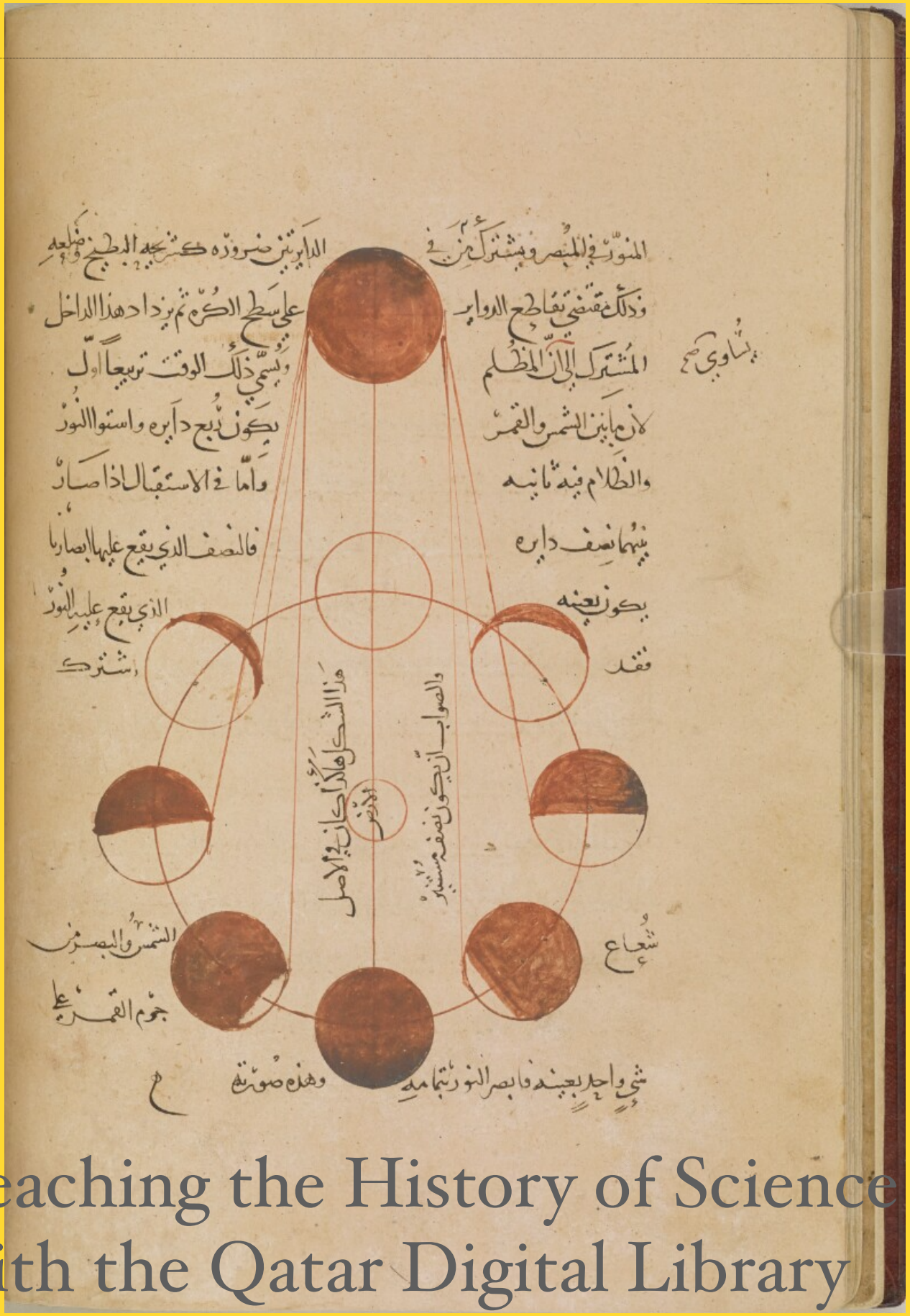
Depending on the context and your familiarity with that student, it may be appropriate to reach out with a mid-term, monthly, or more frequent check in. It can be helpful for a student to see their current grade on submitted work or the number of missing assignments as part of a gentle intervention. Offer to help them as you can with course challenges. Instructors have limited resources, of course. For that reason, you can learn what academic and wellness supports are available for students. Pointing a struggling student to an appropriate advisor or counselor can be a meaningful step. Your institution might have helpful resources. Michigan State uses a system where an instructor can file a so-called EASE (Enhancing Academic Success Early) report to request support for an academically struggling student.

These interventions might seem tangential to—maybe even distracting from—the core mission of teaching disciplinary content. On the contrary, creating a culture of care—including taking classroom time to do it—equips our students to better engage in the reading, writing, and thinking we want them to do.

See Part 2 of our article in the next issue of *Communiqué* for strategies to advocate for the "usefulness" of our courses.

Dr. Rich Bellon is a historian of science who holds a joint appointment with Lyman Briggs College and the Department of History at Michigan State University. His current research examines conceptions of virtue in Victorian Britain.

Dr. Ellie Louson is an academic specialist-teaching at Michigan State University in the history, philosophy, and sociology of science at Lyman Briggs College. She is also a learning designer at MSU's Center for Teaching and Learning Innovation.



Teaching the History of Science with the Qatar Digital Library

Jörg Matthias Determann

During the COVID-19 pandemic, physical access to countless archives became restricted. Digital images of historical documents thus became essential for teaching as well as research. Fortunately, when public buildings across the world closed in early 2020, I had already gained experience in one of the most important collections on the Middle East: the Qatar Digital Library (QDL). Started as a joint venture by Qatar Foundation, the Qatar National Library, and the British Library, the QDL has digitized millions of pages about the history of the Persian Gulf region and the history of Arabic and Islamic science. The documents include manuscripts, letters, reports, maps, and photographs, mostly from the middle of the eighteenth to the middle of the twentieth centuries. Based at the Virginia Commonwealth University School of the Arts in Qatar, an institution funded by Qatar Foundation, I started using the QDL for my research as soon as it was launched in 2014. At that point, 500,000 digitized pages were available alongside accompanying articles by experts. I found many items of interest to the historian of science.[1]

My colleagues and I quickly realized the value of the QDL for teaching as well. During the academic year 2016/2017, several of us worked with undergraduate students on a project called Qatar Dynamic History, a web-based platform that used material from the Qatar Digital Library to craft new narratives about Qatar's history. In one of my courses, I asked participants to create timelines and essays about cultural, political, scientific, and technological developments using the online archival materials. This project came to an unexpectedly early end, due to the sudden death of one of my faculty colleagues, Dina Bangdel, in 2017. Nevertheless, students were able to present a prototype at the Qatar Foundation headquarters.

Although the Dynamic History project was not fully realized, the potential of the Qatar Digital Library to give rise to new narratives remains huge. In Middle Eastern countries, national archives were difficult to enter even before the pandemic.[2] An open-access repository with millions of pages like the QDL thus compensates for otherwise opaque practices of heritage management. Even if many governments continue to keep their files secret, my students and their students will still have plenty of material with which to (re-)write the history of the Gulf region.
Despite having a specific country in its name, the Qatar Digital History is equally useful for teaching transnational phenomena. During the academic year 2021/2022, I included more than a dozen articles from the QDL in the syllabus of my undergraduate course, "History Without Borders: Global Science." These covered topics from Arabic and Latin translations of Ptolemy's *Almagest*, to the transfer of plants to the Botanical Garden in Bengal, to the introduction of the telegraph to the Gulf region.[3] My students loved learning about the circulation of ideas and technologies between different parts of the world, while literally zooming into historical documents they had never seen before.

Though it has enormous appeal and impact, the Qatar Digital Library—just like any other archive—has its limitations. Not all holdings of the British Library relevant to the histories of the Gulf and Arabic science have been digitized. Many of those documents which have been made available online were created or collected by servants of the British Empire. They thus reflect the biases of colonial agents that historians of the Global South so often encounter and struggle with. And, as with all digitalizations, even high-resolution scans cannot give viewers a true feel for the documents. Information contained in the materiality of these

[1] Denielle Emans, "Qatar Dynamic History," 2017, https://denielleemans.com/student-work/qatar-dynamic-history/.

[2] Rosie Bsheer, Archive Wars: The Politics of History in Saudi Arabia (Stanford: Stanford University Press, 2020). Yoav Di-Capua, Gatekeepers of the Arab Past: Historians and History Writing in Twentieth Century Egypt (Berkeley: University of California Press, 2009).

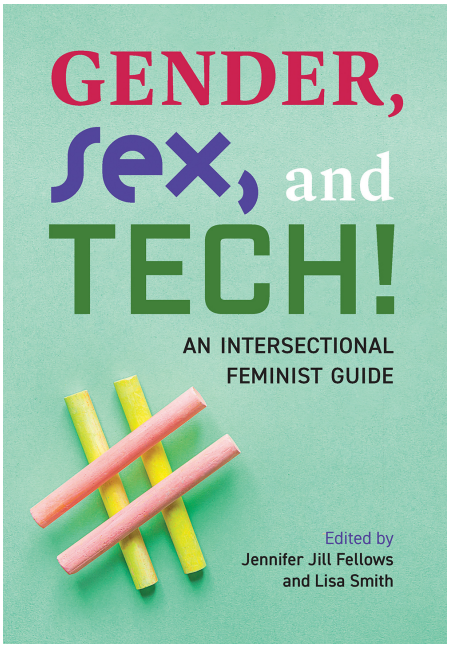
[3] Paul Kunitzsch, "The Arabic Translations of Ptolemy's Almagest," Qatar Digital Library, July 31, 2018, https://www.qdl.qa/en/arabic-translations-ptolemys-almagest. John Hayhurst, "A Quest for Knowledge: The Basra Date Palm, the Botanical Garden in Bengal," Qatar Digital Library, October 14, 2014. https://www.qdl.qa/en/quest-knowledge-basra-date-palm-botanical-garden-bengal. Mark Hobbs, "Telegraphs and Typewriters: The Impact of Technology on Bookkeeping at Bushire," Qatar Digital Library, August 11, 2015. https://www.qdl.qa/en/telegraphs-and-typewriters-impact-technology-bookkeeping-bushire

objects (for instance, the quality of the paper) is lost. Nevertheless, discussing these limitations is a worthwhile pedagogical exercise in itself.

Jörg Matthias Determann is Associate Professor of History at Virginia Commonwealth University in Qatar. He is the author of four books including Islam, Science Fiction and Extraterrestrial Life and Space Science and the Arab World. He is currently writing a book about the history of the movement for equity, diversity and inclusion in modern astronomy.

Book Releases

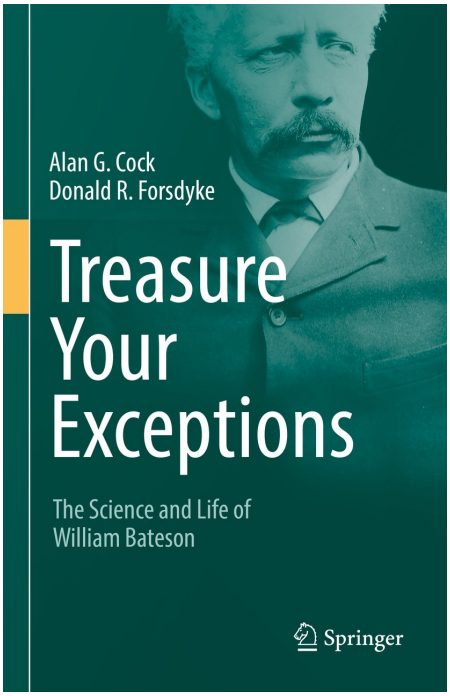
J.J. Fellows and L. Smith (eds.), *Gender, Sex and Tech!: An Intersectional Guide* (Canadian Scholar's, Women's Press, 2022)
In this timely collection, gender, sex, and technology are explored through an intersectional and interdisciplinary lens. *Gender, Sex and Tech!* provides insight into the ways that technology affects, and is affected by, cultural perceptions of gender and sex. Through an examination of a range of past and present issues, the text highlights our relationships to technology and illustrates how gendered relations are shaped and transformed through social and technological innovations. Contributors bring to the fore feminist, decolonizing, and anti-racist methods to examine our everyday uses of technology, from the mundane to the surreal to the playful to the devastating. Original research and scholarship is skillfully grounded in real-world scenarios like revenge pornography, gender bias in artificial intelligence, menstrual tracking, online dating, and the COVID-19 pandemic, inviting students to take a closer look at technological transformations and their impact on gendered lived experience and to consider how the benefits of technology are inequitably shared within society.
https://www.canadianscholars.ca/books/gender-sex-and-tech



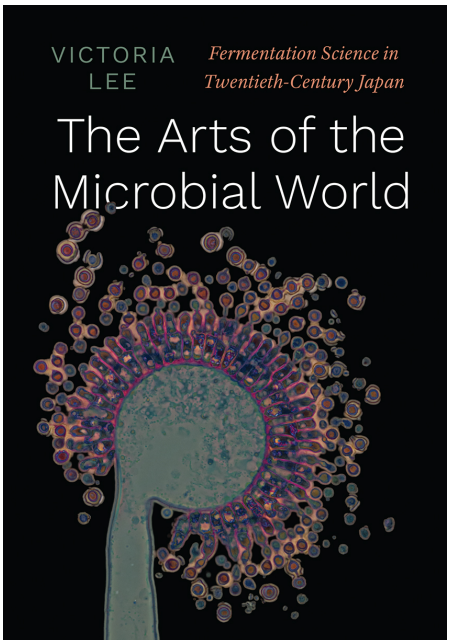
Gender, Sex and Tech: Continuing the Conversation podcast.
This podcast accompanies the book *Gender, Sex and Tech!: An Intersectional Feminist Guide*. Developed as an open access educational resource, the podcasts's first season (airing now) interviews the fourteen contributors to the book about their research on various technologies using an intersectional feminist lens. Though it is an educational companion to the book, reading the book is not necessary to listen to, and learn from, the podcast. The podcast aims to go beyond the book, adding two bonus episodes of new material to the first season. Season Two is in development and will add even more research on feminist intersectional analyses of material and digital technologies to the podcast library. We aren't Luddites here, but it's complicated!

Season One: *https://gendersextech.opened.ca/*
If your research would be a good fit for an interview, email *fellowsj@douglascollege.ca*

Alan Cock and Donald R. Forsdyke, *"Treasure Your Exceptions": The Science and Life of William Bateson* (Springer-Nature, 2022)
Marking considerable progress since the 2008 first edition, the second edition includes four additional chapters detailing the Bateson's scientific work, which may be read independently from the main text.
doi.org/10/1007/978-3-030-92099-9



Victoria Lee, *The Arts of the Microbial World: Fermentation Science in Twentieth-Century Japan* (University of Chicago Press, 2021)
The Arts of the Microbial World explores the significance of fermentation phenomena, both as life processes and as technologies, in Japanese scientific culture. Victoria Lee's careful study documents how Japanese scientists and skilled workers sought to use the microbe's natural processes to create new products, from soy-sauce mold starters to MSG, vitamins to statins. In traditional brewing houses as well as in the food, fine chemical, and pharmaceutical industries across Japan, they showcased their ability to deal with the enormous sensitivity and variety of the microbial world.



Charting developments in fermentation science from the turn of the twentieth century, when Japan was an industrializing country on the periphery of the world economy, to 1980 when it had emerged as a global technological and economic power, Lee highlights the role of indigenous techniques in modern science as it took shape in Japan. In doing so, she reveals how knowledge of microbes lay at the heart of some of Japan's most prominent technological breakthroughs in the global economy.

At a moment when twenty-first-century developments in the fields of antibiotic resistance, the microbiome, and green chemistry suggest that the traditional eradication-based approach to the microbial world is unsustainable, twentieth-century Japanese microbiology provides a new, broader vantage for understanding and managing microbial interactions with society.

Member Updates

Mark Solovey (University of Toronto)

From June 17th to June 19th, 2022, the Institute for the History and Philosophy of Science and Technology and Victoria College at the University of Toronto hosted the 7th annual conference of the Society for the History of Recent Social Science (HISRESS). IHPST historians of science Mark Solovey and Marga Vicedo were the local organizers. Previous conferences were held in Germany, Switzerland, the Netherlands, the UK, the USA, and France. Due to covid, there was no conference in 2020 or in 2021. Normally, the conference is held over two days. But, due to pent up interest, there was an unusually large number of submissions, and more outstanding ones than could be accommodated over two days. Hence, the decision to hold this year's conference over three days. The full schedule is available here: https://hisress.org/schedule/ The conference participants came from a wide variety of disciplinary backgrounds, which made for rich discussions. Many participants said afterwards that this was the best conference they had ever participated in. No doubt the conference's sucess was also due in part to the particular HISRESS conference format: no parallel sessions; the expectation that all participants will attend every individual session, each of which focuses on a single paper; the expectation that all participants will have read the full drafts of all papers, which are posted a few weeks before the conference; and after a short intro by the author, most of the time in each session is devoted to discussion of the designated paper. Next year's HISRESS conference will be held in Sweden, at Uppsala University. Also worth noting, HISRESS is on the verge of launching a new scholarly journal for the history of recent social science.

Mark Solovey's recent book *Social Science for What? Battles over Public Funding for the "Other Sciences" at the National Science Foundation* (MIT Press, 2020, and available open access on the publisher's website - https://mitpress.mit.edu/books/social-science-what) is featured in a recent book forum, with 4 commentaries and the author's response, in *Studies in the History and Philosophy of Science* - https://www.sciencedirect.com/journal/studies-in-history-and-philosophy-of-science/vol/94/suppl/C In addition, Mark discusses *Social Science for What?* in a new 2-part podcast interview on the New Books Network - https://newbooksnetwork.com/search?+q=solovey

CSHPS 2022 AGM Minutes

May 19, 2022 Online

In attendance: Selam Abraham (event technician), Gabriel Miller (CFHSS), Camilla Ferrier (CFHSS), Penny Bryden (CFHSS), Andrea Davis (CFHSS), Vanessa Foran (CFHSS), Ahmad Elabbar, Alan Richardson, Allal Olley, David Orenstein, Ellie Louson, Ernie Hamm, Elisa Pertigkiozoglou, Gordon McOuat, Ingo Brigandt, Jacob Neal, James Elwick, Jessica Oddan, Jill Fellows, Johannes Chan, Katrin Zavgorodny-Freedman, Kevin Kaiser, Marco Buzzoni, Marga Vicedo, Mark Solovey, Melanie Frappier, Molly Kao, Paul Bartha, Siyu Yao, Tara Abraham, Victoria Lee, Yousif Hassan

CSHPS President Alan Richardson calls meeting to order.

Land acknowledgement.

1. **Adoption of agenda**

2. **Adoption of 2021 AGM minutes**
   - Correction to 2021 minutes (Ernie Hamm): item 2 should refer to 2020 minutes
   - Moved by Marga Vicedo, seconded by Jill Fellows. *Motion passes.*

3. **Report from CFHSS**

Introductions:

Gabriel Miller, President & CEO
Camille Ferrier, Director, Communications and Member Engagement
Andrea Davis, Congress 2023 Academic Convenor
Penny Bryden, Member of Federation Board of Directors
Vanessa Foran, Membership relations

- Land acknowledgments
- Andrea Davis: Congress will be in person at York in 2013. Theme: Reckonings and Re-imaginings. Lecture series will seek to centre Indigenous and black knowledges and dialogues across disciplines.
- Penny Bryden: recent work, future plans.
- Gabriel Miller: EDID update. 2021 report from Advisory Committee made 43 recommendations. 2022 progress update posted on web page. Changes geared toward sustainable progress on EDID: diverse board, oversight committee, staff person dedicated to EDID, funding for programs to advance EDID. Important new program at Congress to provide childcare assistance to presenters.

Questions for CHSS:
Alan Richardson: How many participants in 2022, how many expected for 2023?
Answer: 5000 for 2022 (close to expectations), predicting 7000-10 000 for 2023 (matching pre-pandemic numbers)
David Orenstein: How will CFHSS make final decision on in-person vs remote? What will be done for health and safety at Congress 2023?
Answer: Final decision is subject to public health recommendations. Contingency plans include monitoring info from public health authorities and setting decision points. Congress will continue with platform that allows remote participation. On-site precautions will be settled closer to the event. Many events will be accessible both in-person and online; some events will be virtual.

4. **Amendments to Constitution**
   - Article IX: Amendments to the Constitution. Proposal to replace mail-in ballot option with email voting.
   - Article VIII: Standing or Temporary Committees. Proposal to add first VP to Nominating Committee.
   - Brief discussion of whether to hold votes at AGM or by mail-in ballot as per existing

- Article IX. Motion to approve amendment to Article IX: David Orenstein; seconded by Paul Bartha, Melanie Frappier. *Motion passes unanimously with more than 20 votes* [25 of 25 voting members present]
- Brief discussion of whether to vote on Article VIII remotely. Motion to approve amendment to Article VIII: David Orenstein; seconded by Melanie Frappier. *Motion passes with more than 20 votes* [23 of 25 voting members present]

5. **President's Report** (Alan Richardson)
   - See report
   - Highlights: thanks, ambitions for more active roles for CSHPS including online events outside Congress, mentoring, etc. HPS community has useful perspectives on public discourse about science and technology and could provide helpful input into public policy.
   - Motion to approve: Allan Olley; seconded by Tara Abraham. *Motion passes.*

6, 7. **Secretary & Treasurer Reports** (Paul Bartha)
   - Secretary Report highlights: decline in membership (but close to 2018 and 2019 levels).
   - Motion to approve: David Orenstein; seconded by Molly Kao. *Motion passes.*
   - Comment (Mark Solovey): Many in Canadian HPS community are not in CSHPS
   - Treasurer Report highlights: slight increase in financial balance.
   - Question (Tara Abraham): What minimum balance should CSHPS maintain. Paul Bartha suggests $30 000.
   - Motion to approve: Jamie Elwick; seconded by Allan Olley. *Motion passes.*

8. Programme Committee Report (Jamie Elwick)
   - Highlights: good quality of papers, Hadden entries
   - Suggestions for the future: additional PC member; more program chairs
   - Motion to approve: Ingo Brigandt; seconded by David Orenstein. *Motion passes.*

9. **Hadden Prize** (Jamie Elwick)
   - Hadden Prize awarded to **Ahmad Elabbar** for "Varying evidential standards as a matter of justice: the context of climate change"
   - For future: new initiates for grad student merit may be combined with Hadden Prize; may also put former Hadden winners on decision committee.

10. **Local Arrangements** (Ingo Brigandt)
   - For future: graduate merit award may be combined with Hadden; childcare supplement will be available next year. LAC for 2023 should refer to 2019 LAC Report by Alison Wylie (last in-person Congress).
   - Comment (Tara Abraham): urged continuation of hybrid option for papers.
   - Motion to approve: Ernie Hamm; seconded by Marga Vicedo. *Motion passes.*

11. **Communiqué Report** (Dani Inkpen)
   - See report: editors not present.
   - Motion to approve: David Orenstein; seconded by Victoria Lee. *Motion passes.*

12. **Webmaster Report** (Allan Olley)
   - Highlights: Little has changed. York hosts we page and list-serv. Some technical issues were resolved. Webmaster encourages submission of news.
   - Motion to approve: David Orenstein; seconded by Ernie Hamm. *Motion passes.*

13. **Social Media Report** (Filippo Sposini)
   - See report: Social media coordinator not present.
   - Alan Richardson noted that the position of social media coordinator is now vacant, and that this would be discussed under agenda items 16 and 17.
   - Motion to approve: David Orenstein; seconded by Victoria Lee. *Motion passes.*

14. **Nominating Committee Report** (Victoria Lee)
- See report for names of nominees
- No Social Media Coordinator named in report (committee was unaware of vacancy).
- Motion to approve: Mark Solovey; seconded by David Orenstein. *Motion passes.*

15. **Further nominations from the floor and election**
- Call for nominations. None
- Motion to elect officials in the Nominating Committee Report: David Orenstein; seconded by Allan Olley. *Motion passes.*

16, 17. **Proposal: Steering Committee on Social Media/other business**
- CSHPS could improve outreach and find ways to bring younger members.
- Comments from Paul Barth:
  - A steering committee could meet and discuss ideas for improving CSHPS social media. Possibly this committee could take over direction of social media, with rotating role for social media coordinator.
  - Communiqué is interested in associate editors to help with production. If interested, please write to Dani Inkpen or Ghyslain Bolduc.
  - To encourage cooperation/ partnerships between younger members of CSHPS and senior faculty, CSHPS could create a portal for people to propose ideas for sessions well in advance of Congress (suggestion from Dani Inkpen).
- Comments from Mark Solovey:
  - For grad students: CSHPS could have session on networking.
  - For undergraduates: Could CSHPS have a platform for younger scholars?
- Comments from Tara Abraham:
  - May add grad student to executive committee.
  - Hoping to plan more graduate student events.
- Comment from David Orenstein:
  - Opportunities for more coordination with other associations: CSTHA, CSHPM. Should aim for more joint sessions. At minimum, overlapping schedules.
- Comment from Jill Fellows:
  - A CSHPS podcast would both encourage potential members and create a public role for CSHPS.
  - Jill will help with social media steering committee.
- Comments from Margo Vicedo:
  - Thanks to Alan and welcome Tara!

Alan Richardson called meeting to a close (no motion).

Meeting adjourned

Submissions

Submissions and inquiries should be emailed to cshps.communique@gmail.com

Issues are published twice a year: in autumn and spring. Submissions are welcome and may be sent in both official languages. We welcome submissions in the following categories:

Announcements: details about conferences, workshops, job openings, department or program news, and calls for papers.

Research & Pedagogy: launches of new and innovative research or techniques used to teach HPS, or original topics addressed in classes and seminars. We are especially interested in digital humanities projects and pedagogies that prioritize student engagement. Descriptions should be no more than 800 words.

Reports: we are interested in receiving short reports (500 words max.) from conferences or workshops our members have attended, together with photos they would like to share with us.

In Conversation: we encourage graduate students and early career scholars to contact the editors if there is an individual you would like to interview for Communiqué. We are looking, especially, for interviews of scholars who adopt intersectional approaches to HPS or explore non-traditional scholarly avenues.

Artwork & Photos: we welcome submissions of all original art and photos, especially for the cover.

Member Updates & New Books: Please ensure the book write-ups are no more than 200 words and include a high-resolution image of the cover.

We aim to keep the HPS community abreast of what is going on in the field, in Canada and abroad. But we need your contributions if we are to share your news with the CSHPS community. The newsletter is only as robust and effective as we make it. Thank you for your contributions.

REMINDER TO RENEW/RAPPEL DE COTISATION

This is a good time to remind members that the 2022 memberships are about to expire, so it is time to renew for 2023. To attend or participate in annual meetings, you need to be a member in good standing: http://www.yorku.ca/cshps1/join.htm

Le moment est venu de rappeler à nos membres que leur affiliation pour 2022 vient d'arriver à son terme et qu'il est donc temps de renouveler leur adhésion pour 2023. Pour assister et/ou participer au congrès, vous devez être à jour dans votre cotisation: http://www.yorku.ca/cshps1/join.htm