Re-examination research via the COVID glasses: an intellectual movement emerging for the better

Wei-Ning Xiang¹

Accepted: 25 October 2020 / Published online: 7 January 2021
© Springer Nature Singapore Pte Ltd. 2021

Wei-Ning Xiang is a professor of geography and earth sciences at University of North Carolina at Charlotte, USA; he is the founding editor in chief of SEPR.

The journal *Socio-Ecological Practice Research* (SEPR) plans to publish a special issue in 2021 with the theme *Re-examining theories, methods, programs, and policies in socio-ecological practice via the COVID glasses*. In this Call for Prospectus, I outline the aims and scope of the special issue and provide guidelines for the prospectus preparation and submission. But first, what is the theme about? Where did the idea come from? Is it legitimate? I devote the first two sections to these questions.

1 A spark of insight from an *Aha!* experience and its inspirations

The theme for the special issue emerged serendipitously from an *Aha!* moment I encountered recently.

✉ Wei-Ning Xiang
wxiang@unc Charlotte.edu

¹ University of North Carolina at Charlotte, Charlotte, USA

1.1 Alas, my favorite theory is torn to shreds by COVID!¹

Pitiful lament of this kind is a common sentiment in more than a dozen e-mails I received in the past several months from colleagues around the world.²

One senior natural scientist, for example, regretted that an ecological model she had been using since the graduate school years had ceased to work properly because the COVID-19 pandemic negated a theoretical assumption underlying the model. An anthropologist, an economist, and an urban planner, for another example, shared, respectively, their profound sorrow at the significant setbacks in the contemporary science and practice of sustainability caused by the “mutually exacerbating catastrophes” triggered by the COVID-19 pandemic.³

¹ COVID is a variant of COVID-19, “a mild to severe respiratory illness that is caused by a coronavirus (*Severe acute respiratory syndrome coronavirus 2* of the genus *Betacoronavirus*)” (Merriam-Webster.com Dictionary 2020a). When used as a modifier of another word in this editorial, it makes that word pertinent to one or any combination of the following words: COVID-19, the COVID-19 pandemic, the multipronged crisis caused by the COVID-19 pandemic. For global COVID situation updates, readers can go to World Health Organization (WHO)’s portal <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>.

² I thank these colleagues for sharing their thoughts and for permitting me to use their emails in this editorial on the condition that they remain anonymous. These are the colleagues whom I have had the privilege to know for years, and many of whom have a distinguished career. The countries they presently work in are listed in Table 1.

³ (1) About these setbacks, see two recent reports: Bill & Melinda Gates Foundation (2020) and The United Nations (2020). (2) The phrase “mutually exacerbating catastrophes” was originally used in an article to describe the situation in India during the 1918 influenza pandemic, a situation in which “a health crisis became an economic crisis, a food crisis, a housing crisis, a political crisis. Everything collided with everything else.” (Bill & Melinda Gates Foundation 2020, p. 4) The phrase “is an apt description for the COVID-19 pandemic, too.” (*Ibid.*) These COVID-triggered, mutually exacerbating catastrophes include, but are not limited to, those in public health, economy, education, nutrition, and social equity (*Ibid.*, pp. 4–17). (3) Specifically, “the contemporary science and practice of sustainability” here

Table 1 Perceived COVID-challenged areas

Perceived COVID-challenged area	E-mail author's professional identity	Country the e-mail author works in
Ecological wisdom	Philosopher, permaculture practitioner, theologian	China, UK, USA
Ecosystem services	Urban planner, landscape architect, ecologist	China, Germany, Italy, UK
Privacy in big data	Data scientist, geographer, political scientist	USA
Public participation	Political scientist, sociologist, social worker	Malaysia, Sweden, USA,
Resilience	Urban planner, environmental engineer, ecologist	Brazil, Finland, The Netherlands
Smart growth vs urban sprawl	Urban planner, geographer, anthropologist	Australia, China, USA,
Sustainability	Anthropologist, economist, urban planner	Norway, Singapore, USA,
Transgenic art ^a	Bioethicist, visual art critic, archaeologist	France, USA
Urban regeneration and community development	Urban designer, civil engineer, urban sociologist	USA
Wildland urban interface (WUI) management	Ecological planner, forester	Canada, USA

An e-mail author may have more than one professional identity; he/she might have identified more than one COVID-challenged area in a single email

^aRepresenting the onset of this branch of contemporary art is the birth of Alba, a GFP bunny (green fluorescent protein bunny), in 2000. The mastermind behind the Alba project is the Brazilian–American bio-artist Eduardo Kac (Pallardy 2020) who elaborates the underlying rationales in a 2003 essay (Kac 2003). Transgenic art of this kind is politically charged, highly controversial (Harari 2015, pp. 398–399)

Still several others expressed concerns about the foreseeable impacts of data discontinuity and information irregularity due to the strict yet necessary COVID lockdowns, felt the need to revise the conceptual and analytical frameworks in their ongoing long-term research projects.⁴

Drawing on the opinions expressed in these emails, I compiled a list of “perceived COVID-challenged areas” (Table 1). Here, an area of professional practice or scholarly research is considered *COVID-challenged* if one or several of its theories, methods, programs, or policies is or are perceivably contested by the multipronged crisis caused by the COVID-19 pandemic. With the consent of the email authors, I include the tabulation in this editorial.

1.2 The *Aha!* moment

One day in late September 2020, while documenting the bemoaned pulse of this group of distinguished colleagues (see the resulting Table 1), suddenly I realized that these genuine,

spontaneous reactions could well be a precursor of an emerging intellectual movement of re-examination research. Eureka!

Re-examination, in its generic sense, is an action or process a person or group of people engages in to relook at someone or something and rethink carefully from a different standpoint (Merriam-Webster.com Dictionary 2020b). It is often, but certainly not always, motivated by a feeling of doubt or uncertainty, as described in Collins English Dictionary (2020a):

If a person or group of people *re-examines* [sic—the author] their ideas, beliefs, or attitudes, they think about them carefully because they are no longer sure if they are correct.

Then, what is re-examination research in this COVID-specific context? What is the intellectual movement of re-examination research about?

1.3 The intellectual movement of re-examination research perceived

Here, re-examination research is not intended to be an action or process of sheer doubt-motivated criticism; instead it is a careful, judicious evaluation, via the COVID glasses, of what have been taken for granted in practice, science, and life to be true, good, or useful under “normal” circumstances.⁵ The term “the COVID glasses” is a figurative description. It refers to an eclectic yet coherent collection of

Footnote 3 (continued)

refer to the modern sustainability movement since the early 1980s. For insightful discussions about this movement, see Kates (2011; 2012) and Wu (2013).

⁴ Despite a shared, profound sense of dissatisfaction and even sadness among the email authors, almost all of them demonstrated, in a more or less inadvertent and implicit fashion, an optimistic spirit. This is the same spirit of humanity, compassion, and collaboration undergirding the articles in a special COVID-19 section this journal published in September 2020 [For an introduction to the special theme section, see Xiang (2020a)]. With a telling theme *Fighting the COVID-19 pandemic with compassion and collaboration for the community of shared past, present, and future*, the special section includes 9 articles: Chen and Yuan (2020), Douglas (2020), Douglas et al. (2020), Forester and McKibbin (2020), Hu (2020), Niner et al. (2020), Palko and Xiang (2020), Wang (2020), and Zheng (2020).

⁵ Things that are “taken for granted” fall into either or both of the following two categories: They are accepted or assumed to be true, real, or expected without question; their values or merits are underappreciated (Collins English Dictionary 2020b; Merriam-Webster.com Dictionary 2020c). The focus of re-examination research is placed on the former in this special theme issue, but can be extended later to include the latter.

credible real-world evidence gathered during the COVID-19 pandemic through which one can examine and, based upon which, assess how well or badly those “taken for granted” fare under “abnormal”, adverse COVID conditions. The dual purpose of re-examination research is thus pure and simple:

- (1) to identify, analyze, and assess holes in those theories, methods, programs, or policies whose validity, merit, and usefulness have long been taken for granted under “normal,” non-COVID conditions;
- (2) to justify, inspire, and facilitate follow-up actions to attend these defects for the better—greater resilience, that is—in practice, science, and life.⁶

The intellectual movement of re-examination research as such is a scholarly effort, self-motivated and grassroots, to collectively advocate and pursue the achievement of the dual purpose abovementioned. It presents a window of opportunity for scholars and scholar-practitioners to fulfil their social and academic responsibilities;⁷ and, at the same time, provides the journal *Socio-Ecological Practice Research* (SEPR) with a golden chance to pursue its noble goal “to cultivate and celebrate topnotch scholarship in *Ecopracticology* [sic—the author], the study of socio-ecological practice” (Xiang 2019b, p. 1).

1.4 Inspirations

The spark of insight from the *Aha!* experience inspired me to explore the very idea of developing and publishing a special SEPR issue with the re-examination research theme; it also prompted me to look around for other, possibly more tangible, even materialized indications of this perceivably coming re-examination research movement. Luckily, I found several compelling cases in point: Commission on the Practice of Democratic Citizenship (2020), Douglas et al. (2020), Hoover and Lim (2021), Naidoo and Fisher (2020), The Editors of Lancet Public Health (2020), and The Editors of Nature

(2020). Together, they provide adequate, credible evidence to back the insight I gained from the *Aha!* experience and legitimate the theme for the special issue. Shared below is my reading of one of them.

2 A compelling, materialized case in point

In a July 9, 2020 article entitled *Sustainable development goals: pandemic reset* (Naidoo and Fisher 2020), American conservation scientist Robin Naidoo and environmental scientist Brendan Fisher present the findings of their re-examination research on the 17 sustainable development goals (SDGs, that is) adopted by the United Nations in 2015 (The United Nations 2015).

Reading their article and with cross-references, I learned that

- (1) there are three unstated “rosy hopes” or premises the planned SDGs attainment by 2030 is based upon (quote from Naidoo and Fisher 2020, p. 198; The Editors of Nature 2020, p. 331): sustained worldwide economic growth; continuous international collaboration; and no disruption of any kind at the global scale between 2015 and 2030 (e.g., that caused by world war or global pandemic);
- (2) most if not all of the people involved in crafting the SDGs inadvertently took the validity of these crucial premises for granted; the 193 world leaders accepted them without hesitation both during the 3-year painstaking diplomatic negotiation and at the official approval and kickoff of this worldwide program in 2015 (Bhattacharya et al. 2020; Naidoo and Fisher 2020, p. 198);
- (3) with 20/20 hindsight in 2020, people now see how fatal this collective blind spot is. Yet it is entirely understandable, given that this happened at arguably one of the finest and most optimistic moments in modern history when almost the entire world agreed to work together “to end poverty, fight inequality, and stop climate change by 2030” (quote from Bill & Melinda Gates Foundation 2020, p. 2; Naidoo and Fisher 2020, p. 198);
- (4) chiefly because of this hole in their premises, the SDGs are innately vulnerable to such stressors as global pandemics, worldwide economic slowdowns, and the rise of protectionism (Naidoo and Fisher 2020, p. 198, 200; The Editors of Nature 2020, p. 331);
- (5) it is thus little wonder that the COVID-19 pandemic can readily impede and severely disrupt the already-slow progress across all the SDGs, so much so that two-

⁶ Resilience here means one or any combination of the following human abilities in the face of a calamity (like COVID): (1) to recover from it, (2) to adjust easily to it, and (3) to become stronger in the wake of it.

⁷ (1) Engaging in this kind of re-examination research is in fact a fine, productive scholarly tradition. For example, there is a wealth of re-examination research literature on the 1918 influenza pandemic—“The mother of all pandemics” (Morens and Taubenberger 2018, p. 1449). It includes insightful and useful findings reported in, among many others, Aimone (2010), Barry (2004), Center for the History of Medicine (2020), Kolata (1999), Markel et al. (2007), Morens and Taubenberger (2018), Patterson and Pyle (1991), and U.S. Centers for Disease Control and Prevention (2006). (2) A scholar-practitioner is a scholar who is dedicated to generating new knowledge that is useful to practitioners and fellow scholars (Chen and Xiang 2020, footnote 4; Xiang 2019a, p. 7).

thirds of the 169 SDG targets are unlikely to be met by 2030 (Naidoo and Fisher 2020, pp. 198–199).⁸

After having had identified, analyzed, and assessed the fatal defect in the SDGs premises, Robin Naidoo and Brendan Fisher further demonstrated the wicked nature of the multipronged crisis the pandemic created (Naidoo and Fisher 2020, pp. 198–199)⁹; and offered suggestions for reforming the financing, oversight and implementation of the SDGs (*Ibid.*, p. 200).

Altogether, via the COVID glasses described in Sect. 1.3, Robin Naidoo and Brendan Fisher made a compelling case for the emerging intellectual movement of re-examination research. Their paper, I am convinced, exemplifies the kind of article the special SEPR theme issue looks for.

3 Articles the special issue seeks to include

The special issue *Re-examining theories, methods, programs, and policies in socio-ecological practice via the COVID glasses* aims to feature re-examination research articles that demonstrate the following four qualities.

3.1 Achieved the dual purpose described in Sect. 1.3

Manifesting this quality, special issue articles, like the one by Naidoo and Fisher (2020),

- (1) revealed and analyzed holes in a theory (a method, a program, or a policy) of socio-ecological practice or research whose validity (or merit, usefulness, progress) is now challenged by COVID;
- (2) assessed immediate impacts of the holes, through their host theory (or method, program, policy), on the state

⁸ (1) This assessment is in line with those by, respectively, the United Nations (2020, released on July 7, 2020) and the Bill & Malinda Gates Foundation (2020, released September 14, 2020). (2) Many remain optimistic about the prospects of the SDGs program despite this widely accepted estimate. See, for example, Bhattacharya et al. (2020), Sachs et al. (2020), Schaubroeck (2020), and The United Nations (2020).

⁹ They did so without using the term *wicked problems*. Wicked problems are a class of intractable and unsolvable socio-ecological problems collectively identified by American scholars Horst Rittel, Melvin Webber, and West Churchman in late 1960s [see Churchman (1967), Rittel and Webber (1973); for recent reviews, see Batty (2014, pp. 29–33), Coyne (2005), Xiang (2013, 2019a, p. 8)]. Wicked problems are widely recognized to be present in almost all pressing issue areas that matter to the human society today, especially those that are directly related to socio-ecological practice (Xiang 2019a, p. 8). The crisis the COVID-19 pandemic created is indeed a super wicked problem.

of pertinent socio-ecological practice [e.g., the progress of the 17 SDGs (Naidoo and Fisher 2020)] or research (e.g., the examples in the second paragraph of Sect. 1.1 of this editorial);

- (3) evaluated broader and long-term effects of the holes on the pertinent area(s) in practice, science, or life [e.g., the area of world sustainable development in Naidoo and Fisher (2020); the COVID-challenged areas in Table 1 of this editorial];
- (4) provided justifications and inspirations for due follow-up actions to attend the defect(s) for the better in socio-ecological practice and/or socio-ecological practice research¹⁰;
- (5) did all the above via the COVID glasses.

3.2 Met SEPR article requirements outlined in the inaugural editorial (Xiang 2019b, p. 4)

- (1) Attentiveness to the dual ambition of producing new knowledge and improving socio-ecological practice;
- (2) Interest in the usefulness of knowledge to both scholars and practitioners. A piece of useful knowledge in this context is directly relevant, immediately actionable, and foreseeably efficacious (Xiang 2019a, p. 9);
- (3) Commitment to scholarly rigor. Besides commonly used rigorous measures, a unique in-text citation style is used (see “Appendix”);
- (4) Writing with style, accuracy, brevity, and clarity; avoiding the prevalent 5-legged IMRAD format. Use a 3-level pyramid of section–subsection–subsubsection to bring more structural clarity to the article, number them sequentially and hierarchically, title them with substantive words or phrase(s) instead of normative words in IMRAD articles (i.e., the normative words of introduction, methods, results, discussion, conclusions)¹¹;
- (5) The quality of international appeal—appealing to the journal community of international scholars and

¹⁰ “Socio-ecological practice” and “socio-ecological practice research” are distinct yet interrelated concepts. “Socio-ecological practice is the human action and social process that take place in specific socio-ecological context to bring about a secure, harmonious, and sustainable socio-ecological condition serving human beings’ need for survival, development, and flourishing. It is the most fundamental and arguably primordial social practice *Homo sapiens* has been involuntarily engaging in over thousands of years of co-evolution with nature.” It “includes six distinct yet intertwining classes of human action and social process—planning, design, construction, restoration, conservation, and management.” (Xiang 2019a, p. 7) “Socio-ecological practice research” or “ecopracticology”, on the other hand, is “the study of socio-ecological practice” (*Ibid.*).

¹¹ Refer to section 3 of Chen and Xiang (2020) for an example of this 3-level pyramid and the use of substantive titles <https://doi.org/10.1007/s42532-020-00061-4>.

practitioners. This requires presenting re-examination research of local, regional, or national importance within an international context, and elaborating in ways understandable and intriguing to the international audience.

3.3 Used examples and were written in small words

Demonstrating this quality, special issue articles used example(s) of good/bad practice, avoided abstract theoretical discussions and were written in small words, refrained from jargon-laden writing. This is in line with the SEPR motto *From good practice for good practice we theorize; in small words for big circles we write*, as promulgated in a recent essay (Xiang 2020b).

3.4 Adopted fitting article types

SEPR offers a fleet of 11 article types that fall into five clusters [See Table 1 in Xiang (2019b, p. 2)]. Special issue articles adopted the types that best served the needs of effectively presenting the contents.

4 Prospectus preparation, submission, and selection

Prospective authors should send a prospectus (a text of 350–450 words) in a word document before or on March 5, 2021 to the editor in chief Wei-Ning Xiang at wxiang@uncc.edu. The prospectus should outline.

- (1) What the article is about—the aim(s), thesis, re-examination research question, and why they are worth pursuing;
- (2) Who would benefit from and potentially use the findings in their socio-ecological practice and/or socio-ecological practice research;
- (3) How the article contributes to the aims and scope of the special issue (as presented in Sects. 1.3 and 3.1 above);
- (4) Whether a manuscript can be submitted by July 7, 2021 should the prospectus be accepted;
- (5) A list of 7 key references (not counted toward the 350–450 word limit).

The prospectuses will be selected on a rolling basis against the following criteria:

- (1) Relevance to the theme of the special issue;
- (2) Compliance with the aims and scope outlined in Sects. 1.3 and 3.1;
- (3) Writing ABC (accuracy, brevity, clarity);

- (4) Sole authorship is preferred, coauthorship (2 authors) welcome, multi-authorship considered;
- (5) Commitment to meeting the manuscript submission deadline.

All questions should be directed to Wei-Ning Xiang at wxiang@uncc.edu; information about the journal and the articles it published can be found at <https://www.springer.com/journal/42532>.

5 Will “re-examination research via the COVID glasses” be also an enduring SEPR theme?

Yes, besides publishing this special issue, the journal will embrace “re-examination research via the COVID glasses” as a strategic, enduring theme for years to come. This conforms to SEPR’s commitment to cultivating knowledge implementation and impact research (i.e., *knowledge I&I research*) for socio-ecological practice, as pronounced in both its inaugural editorial and the seminal article on eco-practicology (i.e., Xiang 2019a, b, respectively).

As such, SEPR will continue to feature articles that report “re-examination research via the COVID glasses” beyond the special issue. Prospective authors who miss the prospectus submission deadline for this special issue are welcome to contact the editor in chief with their article ideas or simply submit manuscripts to our editorial system for review as a regular (non-special issue) article.

At any rate, an intellectual movement of re-examination research is in the offing; let’s put on the COVID glasses and be part of it, now or later!

Appendix: the SEPR in-text citation style¹²

1 Fine-grain in-text citation with page numbers

To help readers to readily find the pertinent sentences/paragraphs in an article or book upon which authors make a statement or argument in their article, SEPR requires that authors provide page numbers in doing the in-text citation of the article or book. For example [an excerpt from Chen and Xiang (2020, subsection “2.1 Compassion and compassion practice”)],

Compassion is an affective and motivational thought of a human being about the well-being of other human

¹² Articles that are in-text cited in the “Appendix” are not listed in “References”, except for Chen and Xiang (2020) and Xiang (2020a).

beings or even all sentient beings (Nussbaum 1996, p. 28; Nussbaum 2003, p. 14; Stellar et al. 2017, p. 201; The Dalai Lama 1999, pp. 123–124; 2009, p. 114). It comprises a dual mental state: a sympathetic emotion about the suffering of another individual or group and a concomitant desire to help assuage the suffering for the welfare of that individual or group (Bernhardt and Singer 2012, p. 3; Faulkner 2014, p. 107; Goetz et al. 2010, p. 351; Jimenez 2009, pp. 209–210; Kanov et al. 2004, p. 809; Merriam-Webster 2020; Nussbaum 1996, pp. 29–31; Strauss et al. 2016, p. 19; The Dalai Lama 1999, pp. 123–124; 2009, p. 114).

For direct quotations, page numbers are required as per the ordinary publication style.

2 General in-text citation without providing page numbers

It is understandable that some statements or arguments authors make are based on general ideas or overarching frameworks in a reference, rather than specific sentences or paragraphs. Should that be the case, authors may use the following format in in-text citation [an excerpt from Xiang (2020a, p. 200)],

It is a commonplace that personal observations and reflections deserve to be shared and preserved if and when they provide new and nuanced insights useful to others [for general references, see Mark (2015); Thoresen and Öhlén (2015); Yoshiaki (2015), among others].

3 In-text citation of articles without pagination

- (1) If the pertinent sentences/paragraphs upon which authors make a statement or argument in their article are in a short article (a couple of pages) without pagination, then the authors do not need provide page numbers in doing in-text citation;
- (2) If it is a long article without pagination, and authors' statement/argument is based upon a specific passage(s) in a section/subsection, then authors may put (last name + year, section x or subsection xx). For example, (Chen and Xiang 2020, subsection "2.1 Compassion and compassion practice");
- (3) If the long article has neither pagination nor sections/subsections, and authors' statement/argument is based upon a passage in a specific paragraph or upon contents on a specific page (or pages), then authors may put (last name + year, the first/second... paragraph on page xx); or (last name + year, pages xx–xx). For example,

(Smith 1950, the first paragraph on page 20), (Smith 1950, pages 20–22).

Whether (2) or (3), the basic idea is to provide readers with information as detailed as possible so that they can easily find the paragraph(s) or page(s) in the unpaginated article should they be interested in finding out.

References

- Aimone F (2010) The 1918 influenza epidemic in New York City: a review of the public health response. *Public Health Rep* 125:71–79
- Barry JM (2004) *The great influenza: the epic story of the deadliest plague in history*. Viking, New York
- Batty M (2014) Great planning disasters. In: Tewdwr-Jones M, Phelps NA, Freestone R (eds) *The planning imagination: Peter Hall and the study of urban and regional planning*. Routledge, London, pp 28–39
- Bhattacharya A, Kharas H, McArthur JW (2020) SDGs: a North Star to guide us through this dark time. *Nature* 584:344
- Bill & Melinda Gates Foundation (2020) COVID-19: a global perspective. 2020 goalkeepers report, September 14, 2020. <https://www.gatesfoundation.org/goalkeepers/report/2020-report/#GlobalPerspective>. Accessed 15 Sep 2020
- Center for the History of Medicine (2020) The American influenza epidemic of 1918–1919: a digital encyclopedia. The University of Michigan Center for the History of Medicine, <https://www.influenzaarchive.org/>. Accessed 29 Aug 2020
- Chen Y, Xiang W-N (2020) Why was Tao Lujia so willing and swift to greenlight the Red Flag Canal Project in 1960? New insights via a lens of compassion practice. *Socio Ecol Pract Res*. <https://doi.org/10.1007/s42532-020-00061-4>
- Chen L, Yuan X (2020) China's ongoing battle against the coronavirus: why did the lockdown strategy work well? *Socio Ecol Pract Res* 2(2):175–180. <https://doi.org/10.1007/s42532-020-00048-1>
- Churchman CW (1967) Wicked problems. *Manag Sci* 14(4):B141–B142
- Collins English Dictionary (2020a) Re-examine. Collins English Dictionary. <https://www.collinsdictionary.com/dictionary/english/re-examine>. Accessed 10 Oct 2020
- Collins English Dictionary (2020b) Take for granted. Collins English Dictionary. <https://www.collinsdictionary.com/dictionary/english/take-for-granted>. Accessed 12 Sep 2020
- Commission on the Practice of Democratic Citizenship (2020) Our common purpose: reinventing American democracy for the 21st century. American Academy of Arts and Sciences, Cambridge, Massachusetts https://www.amacad.org/sites/default/files/publication/downloads/2020-Democratic-Citizenship_Our-Common-Purpose_0.pdf. Accessed 14 Sep 2020
- Coyne R (2005) Wicked problems revisited. *Des Stud* 26(1):5–17
- Douglas I (2020) COVID-19 compassion in self-isolating old age: looking forward from family to regional and global concerns. *Socio Ecol Pract Res* 2(3):229–235. <https://doi.org/10.1007/s42532-020-00053-4>
- Douglas I, Champion M, Clancy J et al (2020) The COVID-19 pandemic: local to global implications as perceived by urban ecologists. *Socio Ecol Pract Res* 2(3):217–228. <https://doi.org/10.1007/s42532-020-00067-y>
- Forester J, McKibbin G (2020) Beyond blame: leadership, collaboration and compassion in the time of COVID-19. *Socio Ecol Pract Res* 2(3):205–216. <https://doi.org/10.1007/s42532-020-00057-0>

- Harari YN (2015) *Sapiens: a brief history of humankind*. Harper, New York
- Hoover F-A, Lim TC (2021) Engaging privilege and power in US urban parks and open space during the double crises of anti-black racism and COVID-19. *Socio Ecol Pract Res*. <https://doi.org/10.1007/s42532-020-00070-3>
- Hu R (2020) Reinventing community in COVID-19: a case in Canberra, Australia. *Socio Ecol Pract Res* 2(3):237–241. <https://doi.org/10.1007/s42532-020-00055-2>
- Kac E (2003) GFP bunny. *Leonardo* 36(2):97–102
- Kates RW (2011) What kind of a science is sustainability science? *PNAS* 108(49):19449–19450. <https://doi.org/10.1073/pnas.1116097108>
- Kates RW (2012) From the unity of nature to sustainability science: ideas and practice. In: Weinstein WP, Turner RE (eds) *Sustainability science: the emerging paradigm and the urban environment*. Springer Science, LLC, pp 3–19. https://doi.org/10.1007/978-1-4614-3188-6_1
- Kolata G (1999) Flu: the story of the great influenza pandemic of 1918 and the search for the virus that caused it. Farrar, Straus and Giroux, New York
- Markel H, Lipman HB, Navarro JA, Sloan A, Michalsen JR, Stern AM, Cetron MS (2007) Nonpharmaceutical interventions implemented by US cities during the 1918–1919 influenza pandemic. *J Am Med Assoc (JAMA)* 298(6):644–654
- Merriam-Webster.com Dictionary (2020a) COVID-19. Merriam-Webster.com dictionary. <https://www.merriam-webster.com/dictionary/COVID-19>. Accessed 17 Oct 2020
- Merriam-Webster.com Dictionary (2020b) reexamination. Merriam-Webster.com dictionary. <https://www.merriam-webster.com/dictionary/reexamination>. Accessed 18 Oct 2020
- Merriam-Webster.com Dictionary (2020c) Take for granted. Merriam-Webster.com dictionary. <https://www.merriam-webster.com/dictionary/take%20for%20granted>. Accessed 12 Sep 2020
- Morens DM, Taubenberger JK (2018) The mother of all pandemics is 100 years old (and going strong)! *Am J Public Health (AJPH)* 108(11):1449–1454
- Naidoo R, Fisher B (2020) Sustainable development goals: pandemic reset. *Nature* 583:198–201
- Niner H, Johri S, Meyer J, Wassermann SN (2020) The pandemic push: can COVID-19 reinvent conferences to methods rooted in sustainability, equitability and inclusion? *Socio Ecol Pract Res* 2(3):253–256. <https://doi.org/10.1007/s42532-020-00056-1>
- Palko HC, Xiang W-N (2020) In fighting common threats, people's deep commitment to taking collective action matters: examples from China's COVID-19 battle and her other combats. *Socio Ecol Pract Res* 2(3):257–264. <https://doi.org/10.1007/s42532-020-00056-1>
- Pallardy R (2020) Eduardo Kac: Brazilian American artist. *Encyclopedia Britannica*, Encyclopedia Britannica, Inc. <https://www.britannica.com/biography/Eduardo-Kac>. Accessed 25 Sep 2020
- Patterson KD, Pyle GF (1991) The geography and mortality of the 1918 influenza pandemic. *Bull Hist Med* 65(1):4–21
- Rittel HWJ, Webber MM (1973) Dilemmas in a general theory of planning. *Policy Sci* 4:155–169
- Sachs J, Schmidt-Traub G, Lafortune G (2020) SDGs: affordable and more essential now. *Nature* 584:344
- Schaubroeck T (2020) SDGs: aggregate to fix prioritization. *Nature* 584:344
- The Editors of Lancet Public Health (2020) Will the COVID-19 pandemic threaten the SDGs?. *Lancet Public Health*. doi:[https://doi.org/10.1016/S2468-2667\(20\)30189-4](https://doi.org/10.1016/S2468-2667(20)30189-4)
- The Editors of Nature (2020) Time to revise the sustainable development goals. *Nature* 583:331–332
- The United Nations (2015) Transforming our world: the 2030 agenda for sustainable development. <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>
- The United Nations (2020) The sustainable development goals report 2020. Officially released on July 7, 2020. <https://unstats.un.org/sdgs/report/2020/The-Sustainable-Development-Goals-Report-2020.pdf>
- U.S. Centers for Disease Control and Prevention (2006) Pandemic influenza: past, present, future: communicating today based on the lessons from the 1918–1919 influenza pandemic. In: Workshop Proceedings, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, October 17, 2006, Washington, DC <https://www.cdc.gov/flu/pandemic-resources/pdf/workshop.pdf>. Accessed 29 Aug 2020
- Wang Y (2020) China's ongoing battle against the coronavirus: a scholar-practitioner's experiences and reflections. *Socio Ecol Pract Res* 2(2):181–183. <https://doi.org/10.1007/s42532-020-00047-2>
- Wu J (2013) Landscape sustainability science: ecosystem services and human well-being in changing landscapes. *Landscape Ecol* 28:999–1023
- Xiang W-N (2013) Working with wicked problems in socio-ecological systems: awareness, acceptance, and adaptation. *Landsc Urban Plan* 110(1):1–4
- Xiang W-N (2019a) *Ecopracticology*: the study of socio-ecological practice. *Socio Ecol Pract Res* 1(1):7–14. <https://doi.org/10.1007/s42532-019-00006-6>
- Xiang W-N (2019b) Socio-Ecological Practice Research (SEPR): what does the journal have to offer? *Socio Ecol Pract Res* 1(1):1–5. <https://doi.org/10.1007/s42532-018-0001-y>
- Xiang W-N (2020a) Why does SEPR publish people's COVID-19 experience, observations, and reflections? *Socio Ecol Pract Res* 2(3):199–203. <https://doi.org/10.1007/s42532-020-00066-z>
- Xiang W-N (2020b) From good practice for good practice we theorize; in small words for big circles we write. *Socio Ecol Pract Res* 2(1):121–128. <https://doi.org/10.1007/s42532-020-00040-9>
- Zheng C (2020) Caring for the self and others: a reflection on everyday commoning amid the COVID-19 pandemic. *Socio Ecol Pract Res* 2(3):243–251. <https://doi.org/10.1007/s42532-020-00062-3>