

## Peer Review Report

# Review Report on Crafting Attributes of a Geological Now

Original Research, Earth Sci. Syst. Soc.

Reviewer: Adam Izdebski

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### EVALUATION

#### **Q 1** Please summarize the main findings of the study.

The academic debate of whether the Anthropocene should be understood as epoch or event could be addressed in an intellectually fruitful way by science technology studies (STS). The author uses in particular recent theory of Juergen Renn's evolution of knowledge to demonstrate this possibility.

#### **Q 2** Please highlight the limitations and strengths.

The main merit of the paper is to identify the problem. Also the choice of Renn's theory is a good one, although one could easily imagine many alternative theoretical framings within the STS (e.g. Latour & ANT as most obvious) that could be more dynamic and lead to different observations. One particular strength is extensive bibliography (it is clear the paper is based on extensive bibliographic search), although the fact that for instance the insights of Bonneuil and Fressoz 2016 are not incorporated leave room for improvement in terms of properly reflecting the literature in the field (also the author clearly prefers Chakrabarty to Bonneuil and Fressoz).

The major limitation, in my view, is that while the paper identifies the problem, it does little in terms of demonstrating of what is the benefit of identifying it and defining it the way it does. Fine, this is a borderline problem, and "so what?". Does it impact the way discussion should proceed? Does it mean other stakeholders should be listened too? The paper in its current state could be useful as an overview of the debate that points out that the debate that is framed within geology/ESS reaches far beyond these fields. Its limitation in this respect, however, is the clear taking side of the author on the "Anthropocen-as-epoch" side of the debate, and rather unfortunate or simply condescending reporting of the other side in the paper (suggesting for instance the event understanding is powerless in terms of its transformative power for contemporary societies).

Another limitation is the language: quite technical, sometimes it feels like automatic translation from a different language (or perhaps a text that has been rewritten several times and lost grammatical flow). For this essay to have broader impact, the language, its correctness, accessibility and flow, need to be substantially improved.

At the same time, I would like to emphasise that as an insider of this debate I appreciated the author's efforts and I enjoyed reading this paper, it brings in novel ideas. However, readers not acquainted with all of the context (including Renn's book), might be left dissatisfied after reading it.

#### **Q 3** Please comment on the methods, results and data interpretation. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

The topic is important and I would suggest encouraging the author to revise and resubmit the paper.

#### **Q 4** Check List

Is the English language of sufficient quality?

No.

Is the quality of the figures and tables satisfactory?

Not Applicable.

Does the reference list cover the relevant literature adequately and in an unbiased manner?

Yes.

Are the statistical methods valid and correctly applied? (e.g. sample size, choice of test)

Not Applicable.

If relevant, are the methods sufficiently documented to allow replication studies?

No.

Are the data underlying the study available in either the article, supplement, or deposited in a repository? (Sequence/expression data, protein/molecule characterizations, annotations, and taxonomy data are required to be deposited in public repositories prior to publication)

Not Applicable.

Does the study adhere to ethical standards including ethics committee approval and consent procedure?

Not Applicable.

If relevant, have standard biosecurity and institutional safety procedures been adhered to?

Not Applicable.

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**Q 5** Please provide your detailed review report to the editor and authors (including any comments on the Q4 Check List):

lines 19–33: this paragraph would be needed in a formal thesis (e.g. MA thesis, graduate essay), but I think it is diffusing the reader's attention in an academic essay that should have a very clear goal; either develop all of these points (not needed in my opinion), or remove entirely

lines 246–247 a good example of a sentence that is stylistically strange and is not understandable

261–263: if "material" means "made of physical matter/material objects" in this definition (which I would assume, this is the standard meaning of material) then the author's persistent reference to institutions (which are human organisations, not material objects, throughout the paper (e.g. IPCC is not a material object, while IPCC's report is) is wrong (e.g. 272–273, 284–287, 550–551)

292–298: one of many examples how long quotations are used as part of the author's own sentences and how they completely distort grammar and hence meaning

355 intra-academic: please define, many ways of understanding possible

505–510 political connotations of event vs epoch definition are not elaborated at all, while in lines 514–517 clear (and value-loaded) narrative-political connotations of event vs epoch are portrayed: they are introduced a priori, without any argumentation, while this could be fascinating (and is far from obvious, contrary to what the author supposes)

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**QUALITY ASSESSMENT**

**Q 6** Originality



**Q 7** Rigor



**Q 8** Significance to the field



**Q 9** Interest to a general audience



**Q 10** Quality of the writing



**Q 11** Overall quality of the study

