

Interactive comment on “ESD Ideas: It is not an Anthropocene; it is really the Technocene: names matter in decision making under Planetary Crisis” by Oliver López-Corona and Gustavo Magallanes-Guijón

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The authors present ideas that have been articulated und debated in the literature for long: a) in the context of the anthropocene discussion, especially with reference to the technosphere notion (e.g. Peter Haff), even using the same term 'technocene' (for an overview, see Malhi, Yadvinder. 2017. The Concept of the Anthropocene. Annual Review of Environment and Resources 42, 1, 77–104. b) in the rich and complex literature following Dawkin's 'Extended Phenotype' book (1982), including very substantial contributions such as Kim Sterelny's. In that context, one should be aware that the notion

C1

of 'culture', as used in evolutionary anthropology, includes artefacts, hence technology. Therefore, there is also a well developed modelling literature following the trail of Boyd and Richerson. This reviewer does not pay respect to modesty in pointing out that I have developed a very similar model and diagram as the authors sketch, in the book 'Foundations of Economic Evolution' (2013), explicitly building on niche construction theory and co-evolutionary theory. That means, I do not think that the authors present a new idea. If they really want to contribute a new idea in this field, I recommend that they should concentrate on the question whether certain universal evolutionary principles apply across all ontological levels, such as thermodynamic imperatives. But even here they must build on what we already have, such as Peter Haff's contributions. There is also a rich literature on evolutionary modelling of technology which employs generic evolutionary concepts, such as the replicator notion, which the authors may find inspiring.

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C2