

## ***Interactive comment on “Review article: Towards a context-driven research: a state-of-the-art review of resilience research on climate change” by Ringo Ossewaarde et al.***

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Dear referee,

Thank you very kindly for your comments on our paper and for your critical and constructive feedback that will enable us to improve it. You give us seven points of feedback. We wish to work with your feedback in the following way.

1. You mention that the first sections (up to the proposed research agenda section) are difficult to follow for natural scientists and policy-focused scientists. In many ways this is the core of your feedback that also informs some of the other points of your feed-

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back. We will take this point of feedback seriously, keeping your advice in mind (given in the points below) and revise the article – particularly up to the research agenda section. Specifically, we will ensure that the article’s writing style, formulations, line of argumentation, conceptualization, choice of words etc. are easy to follow for a broader audience. 2. The second point of your feedback stresses that the writing style is difficult to follow, which is linked to your first point. In line with your advice, we will improve the writing style, replacing complex terms and shortening sentences. We will also ensure that concepts are clearly defined, and better explained, illustrated and concretized, without introducing too many concepts. Further, we will have a careful look at the grammar and clarity of sentences. You give examples of unclear sentences, which we will address with care, and we will go through each sentence to ensure clarity throughout the paper. 3. Your third comment refers to the framing of the article. You give the useful suggestion that the article should be framed as resilience research in the social sciences and with the focus on climate change from the very beginning, in the introduction section (and in the abstract). We will implement this suggestion by the first author of our paper. 4. Your fourth comment refers to providing more historical background of the SES notion of resilience. This should include how it was debated in the 1990s and 2000s in the environmental sustainability field and the growing field of research on global environmental change. And as you suggest, we will emphasize the debates that occurred in the 2000s, to define resilience as opposed to vulnerability. Thank you for suggesting relevant references for describing and acknowledging this background. We take this fourth comment at heart and we will include the discussion on the historical background, along the lines that you suggest. 5. You wonder why we do not emphasize adaptive capacity in our discussion, given that adaptive capacity has provided an analytical framework for much governance research on global environmental change. You suggest to link that strand of literature in our discussion of adaptive and transformative change. From our side, there were no principal reasons for omitting that body-of-literature in our discussion. We take your advice at heart and link up with that body of literature. In our revised article we will specifically work with the questions that

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you provided, namely, 'how is that strand of literature linked to the growing interest in adaptive and transformative change? In what ways do the later concepts offer fresh and new insights?' In our revised article we will specifically work with the questions that you provided, namely, 'how is that strand of literature linked to the growing interest in adaptive and transformative change? In what ways do the later concepts offer fresh and new insights?' Amongst other things, we will refer to Ziervogel, G., Cowen, A., & Ziniades, J. (2016). Moving from adaptive to transformative capacity: Building foundations for inclusive, thriving, and regenerative urban settlements. *Sustainability (Switzerland)*, 8(9). <https://doi.org/10.3390/su8090955> 6. You stress that the particular focus on ABM and AI need to be better justified, and explained why they are mentioned more than others. And you stress that 'the discussions on Section 3 could provide more concrete examples of the methodological implications of taking one approach or another.' For us this is a comment and advise that we take seriously. We will work with the comment, doing our best to improve our justification and concretization. The focus on ABM we will justify more strictly as a typical and frequently used approach that we encounter in contemporary naturalist resilience research. We will mention other naturalist approaches that are found in naturalist resilience research. And we will better justify AI in terms of the so-called 'AI revolution' that is currently shaped by governance actors. And this 'AI revolution' has implications for both socio-ecological systems and for resilience research. 7. You suggest to improve the readability of the article with the use of figures and tables, for example to present definitions or how the core concepts of the paper relate to each other. In our revised article we will take this useful suggestion into consideration, as part of the general effort to improve readability of the article. Our plan is to develop a figure that visualizes how the core concepts of the paper relate to each other.

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