REVIEW OF ROBERT SKRZYPCZYNSKY DOCTORAL DISSERTATION

"Self-sufficiency in basic resources as a strategy for resource management in settlements? A critical discussion and conceptual model to guide degrowth-oriented pursuits of self-sufficiency"

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Though I am not an expert on the topic, this thesis has impressed me for several reasons. First, the chosen topic is already a key reference for discussing and guiding the future development of our urban society. Researching on self-sufficiency for managing urban settlements is clearly a timely and needed theme in the City Sciences field. Second, research objectives and questions are well defined. Third, the rigorous and systematic research approach undertaken by the PhD candidate reflects the quality of his work. Fourth, the literature review carried out in this research is an astonishing effort for documenting the state of art and supporting his personal contributions. Fifth, the narrative is fluid, well-structured and written in good English.

As follows, I will comment, specifically on each chapter.

Chapter 1: Defining self-sufficiency

- Good coverage of self-sufficiency definitions.
- Tables 1 & 2 are of great help for synthesizing definitions.
- Section 1.2.1, spatial boundaries, it would be welcome some graphics illustrating concepts.

Chapter 2: Why self-sufficiency?

- Excellent coverage of existing approaches to self-sufficiency. Very much updated scientific references to the topic.
- It is a very long and dense chapter with a lot of information and concepts. For the benefit of the reader, I would alleviate the text by inserting graphics related to urban examples, particularly in section 2.3.
- Page 50, more conceptual models as shown in Figure 1 would be welcomed.
- Section 2.4, excellent summary which synthesizes self-sufficiency examples.

Chapter 3: Between planetary and local contexts

- In my opinion, this is the weakest chapter of the four.
- Regarding Study 1, I have reasonable doubts about the significance of the statistical analysis, considering such a small sample and such a large and diverse continent. May be survey aggregate results could be complemented by some comments about the specific conditions or European macro regions (Mediterranean countries, Nordic countries, Eastern countries, etc.).
- Regarding Study 2, the sample is so small that I wonder why the researcher has not complemented the statistical analysis with some qualitative semi-structured interviews. Qualitative opinions of local actors and stakeholders always are a valuable input.
- In general terms, section 3.4 regarding the development of case studies is weak compared to the rest of the analyses. This section could improve by the insertion and analysis of a conceptual model describing the generic functional system of an ecovillage.
- Section 3.4.3, some conceptual models showing transition processes would help reading and add value to the document.

Chapter 4: A conceptual model

- Section 4.1.3, excellent conceptual model, organized into five subsystems. Its full understanding may be improved if the researcher introduces before Figure 10 another figure with a more schematic model that shows model's basic components, avoiding detailed boxes and flows.
- The researcher may wish to consult my recent book (*Complejidad e incertidumbre en la ciudad actual*. Barcelona: Editorial Reverté, 2022), in which I dedicate a full chapter to conceptual models. Though written in Spanish, there are a lot of graphics easy to read in that book.
- Section 4.2 is extremely hard to read. Though the content is very well written, paragraphs are very long. Insertion of some graphics regarding spatial planning issues would help the reader.
- Section 4.3, excellent synthesis of the conceptual model (MFA model + 7 principles).

Conclusion

• No comments regarding the conclusion chapter.

General review

- The dissertation presents an original solution to the scientific problem stated in the document.
- The methodology employed by the researcher is adequate and scientifically rigorous.
- Research results are relevant to the field of City Sciences.
- Analyses are widely discussed, and conclusions are clear.
- Bibliography is very extensive and completely updated.
- Overall, the PhD candidate has proven his ability to conduct independently scientific work.

Therefore, I commend this dissertation for public defence in a Scientific Council.

Madrid, Spain, July 13th, 2023