

The Social Space of Sustainability Science:

A Bibliometric Study of Leading Journals (1990-2021)

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A bibliometric study of a scientific field's core journals reveals key characteristics of the history of the field, and its conceptual and social organisation, e.g., the most researched topics or the most prolific authors. The number of bibliometric studies concerning the emerging field of sustainability science is still limited. Nevertheless, detailed analyses of the field's history and organisation are urged by several factors, such as the different conceptualisations of "sustainability," the contributions of several research domains to its theories and methods, and the origin of the topic in the domain of policy. Moreover, the theoretical framework of Pierre Bourdieu (2004), although it has inspired valuable bibliometric research (see e.g., Katchanov & Markova, 2017), has not been fully utilised in this field.

Therefore, the present work-in-progress paper analyses the history and organisation of sustainability science through the Bourdieusian perspective of research fields as "social spaces." The paper's bibliometric approach also includes Geometric Data Analysis (GDA)—the statistical methodology employed by Bourdieu, and later developed by his collaborators. For this purpose, a dataset of more than 90,000 documents published between 1990 and 2021 in 18 leading journals in the field was imported from the database *Web of Science* into the R environment and analysed with the science mapping package *bibliometrix* (Aria & Cuccurullo, 2017) and other R packages developed for GDA. The resulting findings are discussed in light of current bibliometric research, Bourdieu's sociology of science, and the historical development of the sustainability science field, including its recent trends.

References

- Aria, M., & Cuccurullo, C. (2017). *bibliometrix*: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11(4), 959-975. <https://doi.org/10.1016/j.joi.2017.08.007>
- Bourdieu, P. (2004). *Science of science and reflexivity*. University of Chicago Press.
- Katchanov, Y. L., & Markova, Y. V. (2017). The "space of physics journals": topological structure and the Journal Impact Factor. *Scientometrics*, 113(1), 313-333. <https://doi.org/10.1007/s11192-017-2471-2>