

About the boundaries of science

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Summary

In the years 2000, the emergence of the term « nano » catalyzed a considerable promotion of interdisciplinarity. In 2011, sociologist Terry Shinn proposed an analysis of the « new disciplinarity »: researchers in central positions within their domain were adopting a strategy consisting in exploring the disciplinary boundaries to establish alliances, then coming back to their central position in order to capitalize on these collaborations.

Bibliometric studies (Gingras & Larivière 2014) shed light on a marked tendency to the decrease of intra-disciplinary citations. What is then left of the role played by disciplines in the training of researchers? Is the spatial center-periphery metaphor still relevant? How can control measures be applied on research?

In view of shedding some light on these questions, we will use the concepts of "diversality" (Bontems, « Au nom de l'innovation : finalités et modalités de la recherche au XXIe siècle », 2023) and of "fractal boundaries" (Hatchuel & Bontems, « Sur le régime de création surcontemporain », 2020) and underline the current vulnerability of science facing the proliferation of "fake science" in the era of Artificial Intelligence.