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Scientometrics for the humanities and social sciences



AUTHOR:

Radhamany Sooryamoorthy

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Nelius Boshoff^{1,2}

AFFILIATIONS:

¹Centre for Research on Evaluation, Science and Technology (CREST), Stellenbosch University, Stellenbosch, South Africa

²DSI-NRF CoE in Scientometrics and Science, Technology and Innovation Policy (SciSTIP), Stellenbosch University, Stellenbosch, South Africa

EMAIL:

scb@sun.ac.za

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Exploring the potential of scientometrics for the humanities and social sciences: Towards the future

Professor Sooryamoorthy's inspiration for writing a book on scientometrics for the humanities and social sciences (HSS) originated with a question he personally had wrestled with as a social scientist: why do HSS scholars seem indifferent to scientometric studies in their own disciplines, while the few HSS scholars who do conduct scientometric studies mostly do so with the science disciplines in mind? Considering this question, his goal for the book was to attract HSS scholars to the field of scientometrics by being both informative and illustrative – informative, by giving researchers in the HSS a broad overview of the scientometric approach, and illustrative, by showing, through cases, the application of scientometric techniques in the HSS. Sooryamoorthy's book consists of five chapters, each of which aims to bring to the attention of HSS scholars the potential of scientometrics as a method for descriptive and evaluative analyses in the HSS.

Chapter one will appeal to anyone interested in learning about the origins of scientometrics, its link with the sociology of science, and how the emergence of scientometrics ties with the emergence of citation indexes for the study of science. This is in addition to a discussion of typical 'laws' that provide useful models for the behaviour of scientometric indicators. Exploring the differences between scientometrics and bibliometrics in this chapter was of particular interest to me, as the two terms are often used interchangeably. Perhaps the book could also be called bibliometrics for the HSS, as the focus remains largely on publication data. It is important to note that metrics other than bibliometrics can also be regarded as instances of scientometrics. Examples in the South African context are financial and human resource indicators derived from the South African National Survey of Research and Experimental Development, and from the Higher Education Management and Information System (HEMIS) of the South African Department of Higher Education and Training (DHET). Chapter two builds on the general orientation of chapter one by focusing on the current applications of scientometrics across disciplines, with special attention given to the types of analyses that are possible.

Chapter three is the first of two chapters that explicitly deal with the HSS. It highlights reasons for the limited interest in scientometrics as an analytical approach in the HSS. Among the main reasons are the divergent publication patterns of disciplines in the HSS, and the insufficient publication coverage of HSS outputs in the main databases used for scientometric analysis. Sooryamoorthy brings together the insights of various studies in this regard and emphasises solutions: the replacement or supplementation of large international databases with national databases that have complete coverage of publication outputs in the HSS (not only journal articles but also monographs and other forms of output) and the collection and analysis of data from a set of journals specific to the HSS (which may not be indexed in the international databases). These proposals also reflect the principles and approaches set out by the European Network for Research Evaluation in the Social Sciences and Humanities (ENRESSH). For instance, to improve research evaluation for the social sciences and humanities (SSH), ENRESSH encourages all stakeholders to:

Develop databases reflecting all types of SSH research output, [which must be] useful for researchers as means of dissemination and information retrieval [and to] reflect upon the role of national and international authoritative lists of publication channels, and the definition of minimal standards for scholarly publications.¹

Chapter four is especially noteworthy as it gives a 'voice' to existing scientometric studies in the HSS, by systematically presenting and discussing 24 such cases. The cases span different HSS disciplines (e.g. drama, political science and tourism) and were chosen to illustrate applications such as mapping disciplines and subjects, collaboration and co-authorship, and citation analysis. What may be missing are similar cases to illustrate what Sooryamoorthy describes in chapter five as a promising way forward to attract HSS scholars to scientometrics: the analysis of qualitative data. The most important parts of qualitative information in the scientometric analysis of publications are found in the titles of publications, the publications' keywords, abstracts and cited references and obviously in the full text of publications. Although the examples of subject mapping in chapter four briefly refer to content analysis based on abstract keywords, more examples of applications of content analysis in scientometric studies (of which there are also South African examples^{2,3}) would have enriched the concluding chapter, especially an explanation of the difference between quantitative and qualitative analysis of qualitative content (text) in scientometric analysis.

Sooryamoorthy has delivered a unique book to guide HSS researchers in the application of the scientometric approach, a book which also paves the way for the future. The future could be one in which HSS scholars view collections of publications as rich sources of qualitative data for scientometric analysis in their respective disciplines.

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