Citeringens praktiker

Det vetenskapliga publicerandet som teori, metod och forskningspolitik

Gustaf Nelhans

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ABSTRACT

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Author: Gustaf Nelhans

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Department: Department of Philosophy, Linguistics and Theory of Science
University of Gothenburg, P. O. Box 200, SE 405 30 Gothenburg Sweden
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The thesis investigates the scientific citation and its various functions in the scientific community and develops it as a tool for research in theory of science, scientometrics and science studies. Through empirical and theoretical studies that utilize both qualitative and quantitative methods the citation’s history, method, as well as its use in research policy is examined.

Through a historical study the thesis shows three stages of development as required for the construction of the citation as an indicator of intrinsic aspects of science. These consisted of a) citations as technology, within the citation index, b) the citation as a research method as theorised within Mertonian sociology of science, and c) the citation as a research subject. Following this the “citation debate” in Science and Technology Studies (STS) is described and analysed, which questions the use of generalized quantitative methods. Inspired by an STS approach a performative model of “the mangle of the citation practice” is developed. This aims to understand the citation existing in a context where researchers, articles and the citation index are mutually creating and recreating each other. The thesis uses the HistCite scientometrics tool to develop a novel methodology that highlights local dynamics of citation practices between scientific authors and texts using a visual approach of identifying patterns of citations in graphic representations of articles and their citation patterns. For this a “citation typology” is created to identify specific patterns and phenomenon in HistCite graphic representations. The last empirical study is of the introduction of quantitatively based performance-based models for funding of research in Norwegian and Swedish research policy 2003-2010 which problematizes the part played by the citation in a research policy setting as “unobtrusive” indicators of scientific practice.

The thesis demonstrates the significance of the citation in research through its design as a reflection of the scientific reference, and result of it being constructed – and used – as an indicator of scientific quality. Furthermore, it shows an emerging awareness in the scientific community that quantifiable indicators of scientific achievement – of which the citation is perhaps the main element – has gained a prominent role in both internal and external domains of scientific practice.

Keywords: performativity, HistCite, citation practices, citation mangle, controversy studies, citation culture, citation networks, ontology, STS, theory of science, performativitet, citeringsskultur, citeringsmangel, citeringspraktiker, citeringsnätverk, citeringstypologi.