



Report

Bend until it breaks? On interactions between research evaluation, research conduct, and science-society relations

Professor Sarah de Rijcke, Leiden University

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The [rise of statistics](#) in society can be [traced](#) into the twentieth, nineteenth and perhaps even prior centuries. [Some](#) commentators also view big data as adding an entirely new qualitative dimension to these developments. Today we are certainly witnessing the datafication of just about everything. The strive for 'objective' criteria for measurement, classification and evaluation has undoubtedly also had an impact on academia. Sarah de Rijcke, Professor of Science, Technology and Innovation Studies and Scientific Director at the Centre for Science and Technology Studies (CWTS) at Leiden University, is one of the leading scholars specialising in the social studies of research evaluation. Her work examines the repercussions of research evaluation not only on the academic profession and research practices, but more broadly on policy and decision-making as well as the manifold relations between science and society.

Bridging the Gap

In her lecture, Professor de Rijcke explained how the metric system was layered on top of the academic system throughout of the 1970s and 1980s. This represented a shift in how quality was defined in academic work. Perhaps it is also a symptom of the growing distance between the academic 'work floor' and the higher levels of decision-making: To bridge the growing gap, decision-makers started to increasingly rely on numbers – to the detriment of contextual considerations.

Promise and Delivery

There are good reasons to use metrics and in general to evaluate scientific research. One of the central aims is to encourage excellence by rewarding scientific output. Another aim is to encourage science with societal relevance by establishing a link between research and policy priorities: Here, the underlying interventionist agenda becomes manifest. Public demands for science to follow societal priorities are legitimate, not least because academic institutions in most countries still largely depend on public funding. Professor de Rijcke therefore emphasised that one of the motivations behind evaluation is to "help science deliver its promise to society".

Bend Until It Breaks?

However, Professor de Rijcke did not fail to mention the other side of the argument: Research evaluation can have detrimental consequences and arguably does not 'deliver on all of its promises' either. The dependence on metrics pressures researchers into publishing, which is not always conducive to quality and depth. Quantification also tends to produce a dynamic known as the '[Matthew effect](#)', where advantages in publishing opportunities and funding are accumulated, leading to ever further advantages: "the rich get richer and the poor get poorer". In this context, the question of whether 'excellence' can even be defined in any meaningful sense becomes ever more pertinent. Furthermore, it is questionable whether metrics are apt to measure 'relevance' at all, and whether they in fact exac-



erbate already existing path dependencies in publishing and funding. There is also well-founded scepticism about whether established funding criteria – such as interdisciplinarity, team-science or mission-oriented research, as in the case of the EU – are transposable and can be equally fulfilled by all academic disciplines. The underlying question that concerns Professor de Rijcke is thus of course: How far can research evaluation go before it stops being beneficial and starts being detrimental to the overall ‘health’ of science and academia?

Evaluation and ‘Fluid’ Knowledge

Professor de Rijcke’s current ERC-funded [research project](#) examines how evaluation shapes the field of ocean science. The aim is to better understand how research agendas in ocean science are being shaped and developed, to “describe the values that guide concrete science policy steering efforts with respect to the role of ocean science in and for society” and to “develop new concepts to theoretically grasp whether and how research evaluation shapes knowledge-making”.

Daniel Romanchenko, February 2020

