Playing the Indicator Game: Reflections on Strategies to Position an STS Group in a Multi-disciplinary Environment

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Abstract

Roland Bal analyzes the strategies his research group developed to deal with the interlinked dynamics of research evaluation in a multi-disciplinary institutional environment characteristic of much STS research. Scholars in such environments constantly need to navigate and negotiate the standards of evaluation, in complex choreographies of cooperation and competition with other disciplinary groups. Bal describes strategies his group has successfully used, and how these strategies have both shifted the way research quality is assessed within the department as well as changed the way his group works and publishes. In conclusion, he describes performance management systems and research practices as co-constituted and calls for a debate on which forms of evaluation infrastructures allow for better ways of doing research in STS.

Keywords

performance management; research policy

Introduction

Somewhat in a hurry and sweaty—I just came out of a meeting and had to cycle fast to be on time on an Indian summer day in 2007—I enter the Dean's office. Present are the Dean of the Medical School and the vice-Dean of the Department of Health Policy and Management, where I am employed. I sit down and thankfully accept a glass of water. On the agenda is whether the Dean can accept the advice made by the appointment committee of the chair of Healthcare Governance to appoint me, an STS scholar gone healthcare governance, as a professor. After some chitchat, the Dean briefly looks at a small piece of paper in front of him. Slightly nodding his head the Dean confirms that I can be appointed. Later, I learn from the vice-Dean that on the list are the names and ages of the candidates for the professorship, alongside the number of papers in international (that is: English language) peer reviewed journals they have published.

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By that time I was already accustomed to, embedded within and, yes, implicated in, a research tradition that puts the quantity of publications first. Coming from a humanities background, my first personal encounter with this tradition was during my first interview for an assistant professor position at the same department. At the time it was made clear that my publication list was not fitting with the departments' aims. The types of output on the list—e.g. many publications in Dutch, book chapters and other types of publications—simply did not count here. Later, I learned that this assessment was not just a reflection of a research tradition that I had not experienced before in this manner, but was in fact institutionalized to high degrees. The allocation of departmental research funding, for example, was completely based on publication output by the different research groups—health economics, health insurance, medical sociology, health law, health policy and management—and promotion policies were largely based on this as well (although other factors, such as teaching, visibility in the department and policy impact were not excluded). However, while there were clear differences with the tradition I came from, I also came to learn that those are largely differences in degree. For example, while doing research and publishing in my previous work setting was as much a collective effort, this collectivity was simply represented in different ways—e.g. collaborators were mentioned in the acknowledgements rather than as co-authors.

Of course, my experience is not unique. Many STS scholars work in academic contexts that are strange to STS itself. In fact, in a sense STS never had a "home of its own" and apart from some groups spread across the globe (but mostly in Northern Europe and the USA) STS scholars find themselves working in many different academic environments and traditions. This is not just because of the somewhat parasitic nature of STS—building on the work of other sciences and increasingly other types of practices—but often also an explicit strategy in trying to intervene in, or at least work with, alongside, or against other disciplines or practices. Thus STS scholars can be found in many science departments, but also increasingly in the social sciences or in policy research institutes. Given that all these disciplines have other ways of assessing performance and that career paths within all these disciplines differ[2], what does this mean for STS researchers? How do "we" adjust to all these different accountability contexts? In this paper I want to account for my (or rather "our," as this is always a collective effort) strategies in dealing with becoming part of a "strange" scholarly context, focusing specifically on how we have dealt with the system of performance management in which we have become embedded. I will focus on three such strategies of being implicated in the indicator game: changing the system, adjusting to the system, and ignoring the system.

This paper, besides analyzing our practices and strategies in an "auto-ethnography," is also somewhat of a discussion with those authors that take indicator systems as all-encompassing, stressing the disciplinary powers and tight couplings of indicators and the ways in which they are embedded within organizations (Sauder and Espeland 2009, Lorenz 2008). Indicator systems, as this tale will exemplify, always have overflows, and status or performance

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[2] With of course many differences even between universities and countries; no performance management system is the same.

assessment is never just one thing, but somewhat of a negotiated order between official performance management systems and the practices in which they are assumed to work and in which often different evaluation schemes are at play at the same time. That is, interactions between evaluation systems (plural), work contexts (again plural) and institutional work performed by those working within those contexts all get mingled up in how performance assessments can work and what consequences they produce. As performance assessment systems become parts of practices, their effects are thus always contingent on the dynamics of those practices in relation to several evaluation schemes that are part of those practices. But, before delving into the ways in which we tried to play with indicators, let me first bring you a little further into our world.

Research Funding in the Netherlands

Universities in the Netherlands have a complicated financial structure. In general, three money streams are distinguished, the first of which is direct funding from the Ministry of Education, Culture and Science. This first money stream is divided between the universities mainly on the basis of the amount of students and bachelor and master diplomas, as well as the amount of PhDs granted. After capping for university services and policies, universities divide this money between faculties. All universities have different ways of doing this, but again the amount of students and diplomas (including PhDs) is the dominant factor. The second money stream is also government money, but it is distributed to the universities in competition, mainly through research grants distributed by the Dutch Science Foundation (in Dutch: NWO). NWO money does not pay for all costs, so some form of matching is usually required. The third money stream, then, is contract research for private or public organizations and industries.[3] Research money from European grants (e.g. the framework programs or Horizon 2020) is also often defined as part of the third money stream. Contract research does usually cover all costs of research and sometimes allows for some profits.

In our department and group, the first money stream accounts for about half of the funding, and half of that is meant for teaching. The remaining half of first money stream money was until recently (see below) completely distributed over the different groups on the basis of research output. Three indicators were used for this: the amount of PhDs granted in each group, the share of each group in the total amount of second money stream funding, and publication points, for which an elaborate system was—and still is—in place.

When I arrived at the department, more than half of the research money went to one of the then seven groups: the health economists. Not only had this group developed the strongest research culture and infrastructure, it also benefitted immensely from the way in which research money was distributed, which was mainly based on the amount of publications in high impact journals. Below, I analyze the three strategies that we as a group of mainly STS and public

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[3] In medical research, often a fourth money stream is distinguished, which is money from patient funds. Our department doesn't make this distinction.

administration scholars focusing on processes of governance in healthcare have followed to cope with this situation:[4] changing the system (of research money distribution), adapting to the system, and ignoring the system.

Changing the System

A first strategy that we used was trying to change the system of performance management within the department. Just after I was appointed as professor a first opportunity for this arose, when the performance management system was reviewed by the board of the department (of which I was a member at that time). Given the uneven distribution of research money within the department, we focused on the necessity of keeping inter-disciplinarity in the department alive, meaning that all groups should at least have some research funding. Within the then existing system, especially the health law group—focusing very much on books and publications in Dutch—came out badly, but other groups were suffering as well (my group in fact did not do *that* bad, but clearly underperformed in relation to the economists, and produced a lot of "invisible" work). Whilst the performance management system produced competition between the groups— a value that was highly regarded, not in the least by the health economists, whose views were dominant—collaboration between the groups was also seen to be an essential condition for the survival of the department as a whole; first, because mixed methods and multi-disciplinary approaches became more fashionable in health services research, but also because most of the first money stream is in fact dependent on teaching and here multi-disciplinary approaches prevailed in our programs. Taking up these broader goals we succeeded in getting a discussion of the performance management system, which initially lead to some smaller changes. For example, publications in some Dutch journals that were peer reviewed were now counted, and under specific conditions—they had to be peer reviewed, a list of top publishers was introduced and there could never be higher points than the highest scoring paper—books and book chapters were included in the system as well.

The biggest change, however, concerned journal articles. Here we joined forces with some of the other groups, especially the health insurance people that were coming out badly in the existing system as well, to plea for relative journal impact factors (JIF) instead of absolute ones.[5] Moreover, the amount of words of a paper was taken up in the performance management system, to prevent publication slicing but also because longer papers (up to a 9,000 word limit) were thought to have a higher impact; the argument that journals have sometimes much lower word limits was easily tackled by showing that e.g. the *British Medical Journal* (word limit 2,400) often published papers of up to 9,000 words. The new system thus allowed for a better fit between the performance management system of the Department and the diverging research and publication practices of the groups that make up the Department. With the new system in place, a

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[4] Of course, strategy is a strong word for something that I can now retrospectively see has emerged over time, but probably this is just what strategy is (Jarzabkowski, Balogun, and Seidl 2007).
[5] Using the absolute JIF, medical but also economics journals scored much higher than social science journals, but under the relative JIF this disappears as the JIF is now calculated per scientific field.

more even distribution of the research money was reached, although some groups, including health law, still "underperformed."

The financial crisis, which hit the department hard from 2010 onwards, gave a further window of opportunity to change the performance management system. As the financial crisis mainly hit the second and (partly) the third money stream, it became clear that some groups now had very little leeway to do research. Using the argument that most of the first stream money was distributed by the ministry on the basis of the amount of teaching, and that in order to do good teaching, some research was necessary—and again referring to the inter-disciplinarity of the department and especially its teaching programs—we were able to diminish the part of the 1st money stream research money that was distributed on the basis of the performance management system. Now, not half, but a quarter is distributed this way, whereas the other quarter is distributed on the basis of the relative share of teaching in our bachelor and master programs— also adding an incentive to teach. By performing institutional work (Wallenburg, Quartz, and Bal 2016) and aligning with some of the other groups, we were thus able to creatively negotiate new performance arrangements. We helped to create a new "incentive structure" for the department in which at least some of the work that was invisible before (Dutch publications, teaching) now became more important, thus creating more leeway for such kinds of work.

We didn't succeed in all our efforts, of course, especially as the "incentivization" of research through output measures was still seen as a way forward, mainly by our economists. Nevertheless, reframing the relation between the groups in the department as a combination of competition and collaboration—mainly through the increased need for inter-disciplinarity in both research and teaching contexts—other valuations could be made more legitimate as a basis for research money distribution. Moreover, by then we as a group had proven to perform well within the "incentivized" structure by *adapting to* the system, which gave some credibility to our arguments.

Adapting to the System

Apart from changing the system to come to a more even distribution of research money, we also changed our own research and publication practices, learning from the research culture in the health economics group, but also adjusting our practices to the performance management system, which also reflects broader institutional patterns in research evaluation. This strategy of adaptation is well documented in the indicator literature under the heading of the performativity of evaluation systems (Weingart 2005, Hicks et al. 2015). For example, while at least some of the PhD theses in the group were still written in the form of Dutch language monographs, we changed to a system in which PhD theses had to be based on international journal articles, especially for students who want to pursue an academic career.[6] Moreover, we stimulated

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[6] Next to those, we actually do quite some supervisory work for "external" PhD students, mostly late career health professionals and managers; for those students, international publications are less important as they want to intervene in practical rather that academic discussions and Dutch language monographs for those students are still prevalent.

multiple authorships by redefining the research paper as a "project," for which project teams were assigned on the basis of the expertise needed to write particular papers. Targeting higher impact journals (within, but also outside our own direct fields, such as health services research) we were able to substantially increase our research output in terms of the performance management system.

Embedded within those changes were both individual and group logics—PhD students pursuing academic careers clearly were at an advantage when publishing papers rather than monographs (at least in the Dutch system where personal grants in the second money stream are, for example, highly based on research output in terms of English-language journal papers), and supervisors and co-writers of papers were rewarded for their work in this way; for the group as a whole it meant that paper production could be stimulated, leading to higher scores in the performance management system, which got us a larger share of first stream research money.

These changes did not go without friction in the group, however, and there were many discussions about, for example, single authorship. Pointing at publication practices within, for example, STS and public administration, some group members favored at least the possibility of single-authored papers. Also, there were discussions about the extent to which members of the group (or outsiders) had to be involved in the writing of papers to "earn" authorship, including discussion of the "added value" of such contributions. And in some thesis defense committees there were questions by scholars from these fields about what the candidate had exactly contributed to the research given that, except for the introduction and conclusion of the thesis, papers often were co-authored.

To accommodate the internal discussion, we formed guidelines for authorship, based on international guidelines in the social sciences and paying special attention to the position of PhD students—e.g. promoting that they write papers with others than only their supervisors and stipulating that PhD students write at least one single authored paper towards the end of their PhD. In addition, we created room for members of the group to work on single-authored publications by providing budgets. Changes in publication practices in fields such as STS and public administration also worked to reduce discussion. Multiple authorship in core journals in those fields has become more common, possibly showing similar tendencies in other groups across the world. As a result, discussions we had just a few years ago are now less heated.

Moreover, as part of the reorganization necessitated by the financial crisis, we went through a process of designing a more substantive research strategy, defining themes for research and target academic fields. With this, we tried to establish a more coherent identity for the group in order to facilitate teamwork on projects and publications, enabling researchers that hadn't collaborated in the past to take this up. For example, people working on task differentiation in healthcare practice and on concentrations of care now could collaborate on a more overarching theme of the "re-placing" of care (Oldenhof, Postma, and Bal 2016), and work on clinical guidelines, performance indicators and evaluation of "complex interventions" in healthcare could now be conceptualized under the overarching theme of "valuation and experimentation." Such a more thematic approach helped in fostering new collaborations within the group but also allowed for more visibility of the groups' academic contribution within and outside the

department, allowing us also to target more high-impact journals. Defining the core disciplines that we wanted to contribute to (i.e. STS, organization science and public administration) also helped in creating a clearer identity for the group, for example, in choosing which conferences to attend and what journals to aim for, which also helped PhD students to have a clearer academic focus. This of course also meant that some themes and publics fell of the table; e.g. the groups' earlier work in medical informatics (e.g. Pirnejad et al. 2009) has now been sidelined. Such redefinitions also allowed for new collaborations with policy actors, which brings me to our third strategy.

Ignoring the System

Until now, it might seem that in our research strategies we focused very much on the performance management system—either trying to change it to better represent our research practices, or adjusting those practices to make for a better match to the system. But this is only part of the story. Our third strategy was one in which we in fact tried to ignore the system. There are two reasons for this. First, the performance management system is only concerned with the 1st money stream, and as mentioned before, this accounts for only about half of the budget for the group—and, as other money streams are almost exclusively research money, only a third of the total amount of research budget. The 2nd and 3rd money stream are therefore much more important for the research in the group. And for these money streams, academic output in terms of international peer reviewed publications is important to a lesser extent.[7] In fact, the reputation of the group in doing policy-relevant research is much more important, as is the visibility for the group in Dutch health policy. Being active in policy debates, serving on policy committees, publishing in Dutch health policy journals—activities that are *not* rewarded in the performance management system—are all much more important than international publications in this regard (even though these help to settle the academic reputation of the group). While such work is not part of the performance management system, the department actually does value its visibility in the healthcare domain and many researchers—also from other groups—are active in advising policymakers of all sorts.[8] The institutional context thus also gave us the space to further this strategy.

Secondly, in terms of research strategy, we are interested in doing "interventionist" research (see e.g. Bal and Mastboom 2007, Zuiderent-Jerak et al. 2009). Again, this means that engagement with the publics we are trying to establish is important—i.e. working with and publishing for health professionals, health policy makers, healthcare organizations, patient groups, etc. As part of the strategy to deal with the financial crisis, for example, we set up longer-

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[7] For the 2nd money stream, only in rare occasions do the quality and quantity of publications really count. This is the case especially for individual funds. For programs that we usually target, the reputation of the group is much more important and this is only partly established through publications (although of course *not* publishing does not help here).
[8] In fact, in studying health policymaking in the Netherlands, it is very hard to miss researchers from the department (e.g. see Zuiderent-Jerak and van Egmond 2015 for an analysis of the work of researchers from the department in making a healthcare "market" in the Netherlands).

term partnerships with some of the key actors in the Dutch health policy sector, such as the healthcare inspectorate and the National Healthcare institute, in the form of academic collaboratives, which we had also studied in the context of public health policies in the Netherlands (Wehrens, Bekker, and Bal 2014); we also including endowed professorships within the group. Whilst for other groups within the department it is not uncommon to have such longer term collaboration, the extent to which we pursued this strategy as well as its focus on practice-based research is more uncommon and we had to go through some departmental discussions to secure those collaborations and be able to appoint the endowed professors, which all came from the external partners. Working with the core regulators in Dutch healthcare certainly helped in this regard, as their standing comes undisputed. Also, involving researchers from the other groups as well as from external academic groups has given us some leeway. Showing the success of these collaborations—both in terms of research output and practical impact—of course was also essential in order to secure continuation. While such forms of research collaboration also allow for academic output that is recognized within the performance management system, much of this research actually is focused on more specific issues and themes relevant to Dutch policymakers and is published in Dutch language reports and presented at policy meetings. Rather than focusing on academic output alone, such work thus is more relational and substantively oriented.

As Ruth Müller argues in her contribution to this thematic collection (Müller 2017), such a strategy comes with a cost, as it means playing on two (or more) boards: hitting the target of the performance management system *and* engaging in public discussions. At the individual level, such a price might be too hard to pay. At the group level—especially when successful in raising extra funding—it becomes much more doable and even a fruitful strategy in terms of the kinds of interventionist research strategies we pursue while also allowing for individual researchers to (temporarily) focus on academic or policy contexts. While acknowledging that people have different talents, we try to stimulate all members of the group to do both types of work. This is also connected to the *kinds* of interventions we pursue, which are often more conceptual in nature, albeit with strong practical impact—e.g. building on the heterogeneity of policy and regulatory practices to stimulate processes of "exnovation" (Mesman 2011) and experimentation (Winthereik and Jensen 2016). Moreover, such a strategy also, at least in part, allows us to work with another big concern with the "projectification" of research (Felt, 2017), as longer-term relationships with policy actors allow us to formulate more strategic research agendas. For example, within the context of the work with the healthcare inspectorate we have been able to formulate an agenda on the "experimentalist" nature of governance, studying different valuations of health(care) in the context of regulation whilst also helping the inspectorate to deal with issues of uncertainty in regulation.

Conclusions

Performance management and evaluation are increasingly seen as "machines" that create the very practices they are evaluating (Dahler-Larsen 2013), in the sense that they constitute the

criteria in which those practices come to define and organize themselves. In the research field, this has amounted to a literature arguing that research is increasingly transformed to match up with the evaluation criteria defined in the (biomedical and physical) sciences, such as the journal impact factor (Hicks et al. 2015). In this paper I have set out to analyze the ways in which we, as a group of STS researchers, have tried to cope with such a performance management system within an inter-disciplinary context.

From this analysis, a couple of things become clear. First, while we were certainly "implicated in the indicator game" this didn't mean that the performance management system was dictating the way we have organized our research practices. Rather than just adapting to the performance management system, we have also been active in changing the system to make it better represent the kinds of research we are engaged in, using the multi- and inter-disciplinary environment of the department to change the system from within. In this sense, performance management systems do not so much seem to constitute research practices, but are also constituted by them, making the relation between evaluation and practical work much more into a process of co-constitution (Jensen 2011). What helped here was that the institutional context in which we work might be more prone to intervention, as the performance management system is made at the departmental rather than faculty or university level, and that the department has a tradition of doing policy-relevant research. Nevertheless, changing the system required considerable work in reframing the valuation practices in the department.

Secondly, although the performance management system certainly was and is relevant to the way we organize our research practice, working around the system is maybe even more important for the academic work that we do—not only in terms of money flows but also in terms of our more substantive and methodological approaches, i.e. doing research that is engaged with and intervening in (Dutch) health policy. In this type of research, alternative evaluation mechanisms come to the fore, allowing us also to build our own informal systems of performance management, e.g. by engaging in academic collaboratives in which policy-relevant research and research output in terms of presentations to and publication for the groups we engage with become more important. While such research can also sometimes be translated back to the more prevalent evaluation schemes, by producing academic publications, it allows for much more variation in terms of output that "counts." It also allows for a mixing of what Paradeise and Thoenig (2013, cited Wouters 2017) describe as evaluations in terms of "reputation" and "excellence," thus allowing for a richer description of research practice.

In this sense, our entanglements with performance management can also be described as "experimental" (Winthereik and Jensen 2016), in that the processes we went through are also forms of trying to develop standards that are relevant to the work we do while at the same time coping with the performance management system that is part of our institutional setting. While being implicated, we were thus also in a sense able to "play with" the performance game— sometimes being bound by its rules, sometimes bending or ignoring them. This should not be seen as easy game, though, as sometimes the different strategies might—and do—clash, and it does involve playing different games at the same time. So, yes, more sweaty meetings were involved.

While this short auto-ethnography of our research strategies is specific to the research environment in which we are embedded—i.e. the particularities of the Dutch research system and the inter-disciplinary environment of our work—it does show that playing the indicator game is in practice much more multifaceted than often assumed in the literature on research evaluation. In that sense it calls for much more practice-based research on how such performance management systems interact with research practices (see e.g. Rushforth and de Rijcke 2015). Such research might ask how infrastructures for evaluation and research are built alongside each other and what types of research become possible (or not) within those co-evolving infrastructures. At least, this would allow for a much more pluriform strategy of doing research—and evaluating it.

STS as a field both has to deal with the inherent tensions in research evaluation and can build on it. Many STS groups find themselves in settings similar to ours, albeit under different institutional conditions. Sharing how we deal with the tensions involved—to which this thematic collection is a first attempt—can help us in creating new strategies to pursue our research agendas in sometimes hostile (but often also friendly) contexts. Research evaluation is, of course, also an important area of STS research in itself and insights from these studies can (and are) used to change existing evaluation systems. As research evaluation is now also hotly discussed within the sciences themselves (see e.g. the San Francisco declaration and Hicks et al. 2015) there is some momentum to perform the institutional work described in this paper on a larger scale.

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