# Evaluation optics of the nation state: The past, present, and future of public documentation (EVALUNATION) PI: Hilde Reinertsen

# 1.1. State of the art, knowledge needs and project objectives

Independent evaluation of public spending is a cornerstone of contemporary democracies. Each year, vast amounts of evaluation reports are commissioned by parliaments, governmental agencies, and state-funded organizations. The act of documenting that desired results are achieved as planned has become an integral part of government and also an explicit public expectation. In Norway, evaluation of governmental interventions was introduced in the 1970s (Reinertsen 2016), while the systematic auditing of governmental accounts by the Office of the Auditor General (Riksrevisjonen) was institutionalized more than 200 years ago (Espeli & Nilsen 2016). Over the past decades, evaluation and audit, once methodologically and professionally distinct fields, have started to merge: The Auditor General routinely undertakes 'performance audits' of state agencies' achievements; the 'big four' international auditing firms are establishing evaluation units bidding for public assignments; and the evaluation profession is struggling to balance the sometimes contradictory objectives of accountability and learning (Reinertsen et.al 2017). Given the critical democratic function and widespread deployment of both evaluation and performance audit in Norway, the lack of academic attention and scholarly analysis of these phenomena is surprising (notable exceptions are Halvorsen et.al 2013 and Høydal 2019).

Internationally, the adverse effects of evaluation and audit upon public administration have been highlighted within the fields of critical accounting studies and the sociology of evaluation (e.g. Dahler-Larsen 2013, Lamont 2011, Power 1997, Vedung 2010). While these scholarly traditions offer fundamental insights into the social and organizational aspects of evaluation and audit, their tendency to categorize these practices as symbols, rituals, or examples of New Public Management risks bypassing a fundamental historical premise of democratic societies: that the transparency and accountability of state actions and accounts vis-á-vis parliament and citizens is a hard-fought victory that should not be taken for granted (du Gay 2000, Kafka 2009). While critical investigations of state power is clearly one of social science's imperatives, an *a priori* critical stance towards bureaucratic practices may in effect overlook the very meaning, rationale, experiences, and practical workings of state bureaucracies and evaluation actors. In doing so, the specific tools, methods, practices, and infrastructures of evaluation – that which makes evaluation a distinct professional field – are left underanalyzed. This lack of attention to history and technology in turn makes it difficult to understand how and why evaluation emerged as a field; how evaluation has gained such strong influence in democratic societies; how evaluations are done and used in practice; how technological transformations are now changing the field; and how different modes of evaluation might be possible.

This <u>research gap</u> is precisely what EVALUNATION will address. The project attains an agnostic, pragmatic approach to both critical scholarship and practice-based discussions. Rather than positioning itself within one of these two, EVALUNATION will make the evaluation experiences themselves the object of independent academic analysis. This in turn makes the project valuable for practitioners and academics alike.

EVALUNATION's objectives are twofold: The <u>primary objective</u> is to understand and conceptualize the historical developments and ongoing transformations of evaluation practice in Norway, with special attention to (a) the intersections between evaluation and audit and (b) the digitalization of evaluation tools, methods, and infrastructures. The <u>secondary objective</u> is to spark professional reflection and reorientation within the evaluation community and the public at large through interactive data collection and experimental research communication throughout the project period.

In order to achieve these objectives, a new combination of methods is needed that transgresses the traditional dichotomies of historical/contemporary; qualitative/quantitative; physical/digital; and researchers/informants. The *project team* is assembled for precisely this purpose: It unites six young scholars from academic institutions in Norway, Sweden, Denmark, and the US with training across history, anthropology, information science, bibliometrics, and participatory design, whose work all intersects within the interdisciplinary field of Science and Technology Studies (STS). This vibrant research field serves as EVALUNATION's theoretical foundation and enables a novel methodological toolbox for an explorative study of evaluation.

## 1.2. Novelty and ambition

The novelty of EVALUNATION is its <u>radical, experimental interdisciplinary approach</u> to an empirical phenomenon – evaluation – that is of deep societal importance and political relevance yet also surprisingly under-analyzed. The ambition of EVALUNATION is three-fold: to establish a rich empirical base of historical and current evaluation documents and experiences; to develop a versatile methodological toolbox for collecting, systematizing, and analyzing these empirics; and to articulate a powerful conceptual framework for analyzing evaluation as a professional practice and social phenomenon. To that end, EVALUNATION will advance the concept of <u>optics of evaluation</u> (Reinertsen 2016, 2018) to describe the specific tools, methods, and infrastructures of evaluation. The concept serves to highlight how these are never neutral means of observation and assessment. Instead, they must be understood as technologies that are developed and deployed by evaluation professionals in order to make the objects of evaluation visible and manageable. A key premise of this approach is that evaluation involves large amounts of texts, which means that analysis of the writing, circulation, and use of these texts is indispensable for understanding the role of evaluation in society. EVALUNATION thus aims to contribute substantially to the establishment of a distinct methodology for the study of how large-scale document-centered institutions, such as national audit agencies, are being transformed by digitalization.

#### 1.3. Research questions, theoretical approach and methodology

## Research questions

RQ1	How have different evaluation optics (tools, methods, and infrastructures) been introduced, employed, contested, and transformed in Norway during 1970–2020?
RQ2	How are evaluation optics currently employed and received in practice? More specifically, how are evaluation documents written, circulated, discussed, cited, interconnected, used, and stored?
RQ3	How is digitalization, big data, and machine learning transforming evaluation optics, and how is this in turn affecting public engagement with evaluation?
RQ4	May we envision radically different evaluation optics, and what are their implications for the nation at large?

## Theoretical approach

The thesis of 'the audit society' (Power 1997) has become a standard reference in academic analyses of evaluation and performance audit. The concept describes a shift within British public sector management in the 1980s and 1990s characterized by an 'indirect relation between auditing and its object' through the establishment of audit institutions that has as their primary task to check the internal quality assurance systems of governmental agencies, thus instigating 'control of control' as the primary mode of governmental accountability. The ensuing proliferation of audit processes and documentation demands in turn caused an 'audit explosion' (Power 1997), or, even, an 'audit implosion' due to the administrative burden imposed upon governmental bureaucracies (Power 2000). The reception and adoption of Power's theoretical framework has accentuated the critical aspects of control and its adverse effects upon public administration. EVALUNATION will engage actively with these theoretical discussions, yet not from within the traditions of critical accounting studies or the sociology of evaluation. Rather, it builds a novel theoretical platform for the study of evaluation upon a combination of Science and Technology Studies (STS), Information Science, and the Humanities (notably Rhetoric and Conceptual History).

<u>Science and Technology Studies (STS)</u> is an interdisciplinary research field analyzing the production and use of knowledge in society. In this field, knowledge production is seen as contingent not only upon social, political, cultural, and contextual factors, but also the material, technical, and infrastructural conditions in which it takes place (Shapin and Schaffer 1985, Daston and Galison 2007). Following this, scientific observation and analytics relies upon the employment of sophisticated 'inscription devices' (Latour and Woolgar 1986) that enable meticulous and systematic practices of writing, publication, and circulation of knowledge (Latour 1999). By extension, and in interaction with *Information Science*, STS research has shown the fundamental importance of 'information infrastructures' (Edwards 2010) that enable the retrieval, storage, and analysis of the rapidly expanding amounts of data not only in science (Ribes 2019), but also in politics and society (Jensen and Winthereik 2012, Finn 2018). Combining this insight with the concern for analyzing

practice, scholars have proposed the concept of 'infrastructuring' for analyzing how infrastructures are never static structures, but always needs to be crafted and maintained (Geirbo 2017). STS' theoretical approach to the study of science and knowledge has in recent years instigated a turn to politics and government. Key works have analyzed legal courts (Latour 2009), parliaments (Asdal and Hobæk 2016), business management (Czarniawska 1999), governmental agencies (Hull 2012, Mangset and Asdal 2018), international development (Rottenburg 2009), and national audit (Jensen & Winthereik 2012). These contributions clearly demonstrate how documents are always an integrated part of bureaucratic practice. Furthermore, documents are never neutral objects, but always produced and used within specific practices and contexts that in combination determine their degree of authority and influence (Riles 2006, Hilgartner 2000). This approach to documents is corroborated by longstanding theoretical insights from *the Humanities*, notably from Rhetoric, which holds that the textual genres are also always 'social actions' (Miller 1984), and from Conceptual History, which holds that the emergence of new concepts must be understood as 'speech acts' (Skinner 1970) that unfold as temporal processes in complex social and political contexts (Koselleck 2002).

In combination, these scholarly traditions equip EVALUNATION with a theoretical approach that enables analysis of the most striking feature of evaluation and performance audit: That these are simultaneously practices of knowledge production (new insight about society is being produced) and of government (they are tools for management and policy intervention). The concept of 'optics of evaluation' is developed to describe precisely this phenomenon, and enables a rich, yet clearly delineated analysis of how evaluation has emerged historically, how it is being practiced today, and how technological development may transform this practice.

## Methodology

The theoretical approach described above directly informs EVALUNATION's research methodology, which combines historical, ethnographic, digital, and bibliographic methods to the study of evaluation. The rationale for this choice is the urgent need for a methodological toolbox that may handle the unprecedented explosion of evaluation data and documents. As scholars, this challenges us to face the double imperative of (1) making the rapidly changing evaluation methods the main object of analysis and (2) develop new methods for the study of these evaluation methods. The concept of 'optics of evaluation' in combination with the method of 'practice-oriented document analysis' (Asdal 2015), which encourages a sophisticated combination of qualitative methods, provides the foundation for enabling precisely this.

Empirically, EVALUNATION will center its analysis on one key actor: the *Norwegian Office of the Auditor General* ('Riksrevisjonen', hereon: OAG). Established in 1816, OAG initially performed routine annual audits of the government's accounts on behalf of Parliament. During the past 30 years, however, this practice has been expanded into 'performance audits' which investigate whether the government is fulfilling the political decisions of Parliament. Every audit mission is finalized with a detailed report to Parliament that is also presented for the public, and that often causes heated debates. In addition to a close study of the OAG, EVALUNATION will analyze *the broader field of evaluation in Norway*. Since the 1970s, the government has developed internal reporting routines and formal evaluation systems, today supervised by the Norwegian Government Agency for Financial Management (hereon: AFM). In response, numerous governmental agencies, research units, and private evaluation companies have emerged, today loosely organized through the Norwegian Evaluation Association (hereon: NEA). All these actors unite around the commissioning, writing, circulation, and use of evaluation reports.

In order to gain a rich and varied empirical material, EVALUNATION will undertake archival studies, ethnographic fieldwork, interviews, and digital data collection; build a document database; and experiment with participatory techniques. Then, as a means to both delineate the study further and analyze parts of the material in depth, the analysis will be guided by the concept of 'optics of evaluation' and the role of documents in practice. The project team will experiment with combining qualitative and quantitative methods of document analysis in order to trace evaluation reports from its making inside the Office of the Auditor General, through audit missions in governmental agencies, into Parliament, and out into the public sphere, where it is discussed in both established media and social media. More specifically, EVALUNATION's toolbox includes:

(a) Archival studies within the Office of the Auditor General, the Norwegian Government Agency for Financial Management and the Norwegian Evaluation Association. This work will concentrate on when, how, and why new optics were introduced, employed, and contested, and thus enable a combined broad

mapping and deep analysis of the history of evaluation optics in Norway.

(b) Oral history interviews with key actors who have introduced, modified, and contested new evaluation optics. This will produce rich descriptions of evaluation experiences, temporal change, and the making of evaluation as a distinct field of expertise. In order to complement the interviewees reached through the prechosen field sites, EVALUNATION will broadly invite the submission of 'evaluation stories', administered as a web-based survey and verified through follow-up interviews.

- (c) Extended ethnographic fieldwork within the Office of the Auditor General. This will give access to the day-to-day reality of evaluation practice and documentation work. The ethnography will pay special attention to how actors in practice delineate between evaluation and audit, the methodological dilemmas they face, and the ongoing introduction of big data, artificial intelligence, and machine learning. The ethnography will be integrated with the historical methods of (a) and (b), as championed by Hecht (2011).
- (d) Interactive workshops based upon participatory design methods (Geirbo 2019) will enable evaluation practitioners to articulate challenges, dilemmas, and alternatives to current practice. The workshops will be based upon preliminary project findings, while also itself contributing to produce new data and adjust preliminary analyses. The workshops will integrate the 'card game method' (Felt et.al 2018) for interviews with professional experts in order to enable creative situations allowing for free associations and reflections.
- (e) <u>Bibliographic and corpus-linguistic methods</u> currently developed within digital humanities will be employed for the analysis of a large corpus of evaluation reports: AFM's database 'Evalueringsportalen', which currently includes 3000 governmental evaluation reports. State-of-the-art programming tools will be used to explore these texts through 'distant reading' (Moretti 2013) and enable complex visualizations (Nelhans 2017). This will enable mapping and analysis of changes across time and sectors, changes in the evaluation report genre, and analysis of the interrelations between documents.
- (f) <u>Close reading</u> in the classical hermeneutical sense of a selection of evaluation documents will be critical for deepening the archival and bibliometric analyses of changes in the evaluation report genre. A strategic selection from the text corpus will be complemented with all related documents written prior, during, and after the evaluation process. These sources will be retrieved during fieldwork and archival studies, thus adding a temporal, dynamic dimension to the static text corpus that allows for in-depth analyses of changing drafts and textual transformations.
- (g) <u>Digital issue-mapping</u> (Birkbak & Munk 2017) will makes it possible to follow a report published by the Office of the Auditor General into the public sphere by collecting and analyzing online public debates in real-time. This will include (1) newspaper articles (accessible from existing databases) to observe the moderated public debates on evaluation, and (2) open social media sites where evaluation reports are discussed by non-experts in un-facilitated fora. These digital sources will be combined with the text corpus described above in order to trace the 'chains of documents' (Reinertsen 2016) from within the evaluation agencies and out into the public sphere.

# 2. Implementation

## 2.1. Project organization

EVALUNATION will be organized as four work packages (WPs) that relate directly to the project objectives and to the four research questions. The project group will be strategically involved in project design and in experimenting with methods for data collection and analysis.

<u>Work Package 1: The Past.</u> Responsible: PI. WP1 will trace the history of evaluation optics in Norway from 1970 to the present. It answers to EVALUNATION's primary objective ('historical developments') and Research Question 1. WP1 will involve data collection in archives, publication databases, and oral history interviews. The main empirical scope will be the Office of the Auditor General, the Norwegian Government Agency for Financial Management (and its historical predecessors), and the Norwegian Evaluation Association. This WP will serve as the empirical foundation for data collection and analysis in WPs 2-4.

<u>Work Package 2: The Present.</u> Responsible: PhD student. Contributions from PI. WP2 will provide a rich multi-sited ethnography of evaluation optics in practice. It answers to EVALUNATION's primary objective ('ongoing transformations') and Research Question 2. The main field site will be the Office of the Auditor General, in which the Ph.D student will observe and analyze evaluation processes in real-time. In order for the fieldwork to encompass the entire scope of an performance audit, observation must be split into two parallel

processes: 'evaluation #1' will be followed from articulation of the initial idea to start-up of the evaluation mission; 'evaluation #2' will be followed from start-up of mission to publication and reception in Parliament, press, and online. The specific evaluation topics and sectors chosen for detailed analysis will have to depend on actual planned and ongoing evaluations.

Work Package 3: The Future. Responsible: PI. Data collection by PhD student. Analytical contributions from whole team. WP3 will include ethnographic fieldwork (as part of the PhD project) and in-depth interviews with key actors involved. This work will explore how digital evaluation optics (notably big data, artificial intelligence, machine learning, and digital information infrastructures) are transforming evaluation as a field of practice. This WP answers to EVALUNATION's primary objective ('ongoing transformations', part b: 'digitalization'), and concentrates on two main sites: (1) the newly established 'Data Science Department' within the Office of the Auditor General, which develops new software and technical solutions for the organization at large; and (2) the newly initiated 'KUDOS project', in which the Norwegian Government Agency for Financial Management cooperates with the National Library in rebuilding its existing evaluation database ('Evalueringsportalen', cf. WP4) into an expanded digital infrastructure for enhancing the use of evaluation reports. The PI has secured access to observing both field sites.

Work Package 4: Experiments. Responsible: PI. Analytical contributions from whole team. This WP has to dimensions: (a) experimenting with new radically interdisciplinary research methods for the study of evaluation documents and (b) including informants in experimental methods for reflection about evaluation methods. The WP answers to EVALUNATION's secondary objective ('spark reflection and reorientation') and the ambition of methodological innovation. In WP4-a, the project team will experiment with analyzing evaluation documents digitally and quantitatively. The text corpus has two parts: (1) the governmental database 'Evalueringsportalen' and (2) social media and online news articles. By connecting these distinct datasets, the team will experiment both with establishing heterogenous 'chains of documents' and with analyzing public reactions to evaluation reports as these are launched in real-time. WP4-b builds upon the historical analyses of WP1 and the ongoing fieldwork in WP2 and WP3 to engage informants and other key actors in explorative exercises. A key aim will be to create a space for informants to reflect upon aspects they find important and challenging in their own work, let them be creative, and experiment with new and untried evaluation optics.

# 2.2. Project management

The core group will consist of project manager and principal investigator Hilde Reinertsen and a PhD candidate (hired through an open, international call and enrolled in the host institution's PhD program). The project group complements the PI's background and expands the project's methodological repertoire into digital humanities, digital STS, bibliometrics, informatics, and the anthropology of infrastructure: Andreas Birkbak, Technology and Anthropology Lab, Aalborg University; Hanne Cecilie Geirbo, Oslo School of Architecture and Design; Gustaf Nelhans, Swedish School of Library and Information Science, University of Borås; and David Ribes, Data Ecologies Lab, University of Washington. The project's research infrastructure will be provided by the National Library of Norway (NLN) and the University of Oslo's University Centre for Information Technology (USIT).

## 3. Impact

#### 3.1. Potential impact of the proposed research

EVALUNATION holds the potential for substantial scientific impact in three main ways: 1) by fostering a broader and deeper understanding of evaluation as a professional practice and societal phenomenon; 2) by developing a cohesive methodological approach for the study of documents in practice that combines qualitative and quantitative methods; and 3) by establishing the concept of 'optics of evaluation' as a theoretical foundation within interdisciplinary evaluation research. The three-part potential will be realized by addressing both the project's core research field (STS) and adjacent fields (history, computer science, and digital humanities). Detailed means of scientific dissemination are described in chapter 2.2. EVALUNATION holds the potential for long term scientific impact by expanding into broader research projects, as it will produce both a conceptual framework, a methodological toolbox, and a thoroughly analyzed case study suited for comparative cross-national analysis. This may include both case studies of Scandinavian and American

optics of evaluation (and the interrelation between these national experiences) and of transnational initiatives within the OECD, the EU, the World Bank, and the UN that have long been informing national developments. The composition of the project group makes it well-placed for extending EVALUNATION's approach into a project of such international scope. The team will respond to calls from funding agencies in Norway, Sweden, Denmark, the US, and the EU (notably a COST Action on evaluation studies and an ERC StG application). In the Norwegian context, the PI will invite key stakeholders to develop an application to the Norwegian Research Council's 'Public Sector Ph.D' scheme.

The potential societal impact of EVALUNATION is a recalibration of both the evaluation community's internal reflection over their own practice, particularly the implications of their tools and methods, and of the wider public's expectations to and engagement with evaluation. EVALUNATION will thereby contribute to challenge the current understanding of evaluation as the taken-for granted preferable method for ensuring accountability and trust between the nation state's citizens and government. As stated in the project's secondary objective, societal impact is a core concern of EVALUNATION, and experimental intervention and communication has therefore been built into the very project design. Key actors in the field have signaled a strong interest in the project's aim of offering a neutral ground for research-based professional reflection. Detailed means of communication, intervention, and exploitation are described in chapter 2.2.

EVALUNATION will indirectly contribute to the Sustainable Development Goals, notably SDGs 16 and 17, which concern the transparency and accountability of governments vis-à-vis their citizens. However, a fundamental challenge of the SDGs is how to evaluate whether actions have led to the expected results and impacts. To enable this, all SDGs have detailed targets and indicators. These indicators have been contested, especially pertaining to whether they actually do measure the desired outcomes or in effect redirect attention and efforts to that which is measurable. This meta-debate is of direct relevance to EVALUNATION, as the project will both investigate the practical dilemmas produced by grand policy goals and initiate methodological debates about how such goals may best be evaluated. EVALUNATION will thus contribute relevant knowledge for an informed public and policy debate about the SDGs.

## 3.2. Measures for communication and exploitation

EVALUNATION will pursue communication targeted to a wide range of actors: (1) academic publications and events to reach scientific communities; (2) interactive, dialogue-based contact with the professional evaluation community; and (3) easily accessible information about the project and its results through varied forms of communication in order to reach the wider public (including parliament and government). Activities in (2) and (3) will be ongoing throughout the project period and feed back into the research activities as data and testing of preliminary analyses. This design will strengthen the research and enhance the exploitation of project findings by actively maintaining interest and trust among stakeholders.

(1) Academic publications and events						
Format	Working titles and potential outlet	Work Package	Who?			
Monograph	"Evaluation Nation". International publisher.	WP 1-4	PI			
PhD dissertation*	"Audit and edit: An ethnography of evaluation documents in offices and online".	WP 2+3	PhD candidate			
Journal article #1	"Optics of Evaluation" (conceptual article). Intended for <i>Social Studies of Science</i> .	WP 1	PI			
Journal article #2	"New methods, old dilemmas: Evaluation as a field of practice in Norway, 1972-2022". Intended for <i>Journal of Contemporary History</i> .	WP1	PI			
Journal article #3	"Evaluation reports as 'the great unread': Exploring the documents of public government". Intended for <i>Digital Humanities Quarterly</i> .	WP4	PI, Nelhans, National Library			
Journal article #4	"Infrastructuring evaluation: The transformative promise of big data and digital tools in the Norwegian public sector". Intended for <i>Information, Communication and Society.</i>	WP3	PI, PhD candidate, Geirbo, Ribes			

Journal article #5	"Evaluating evaluation: Public engagement with public sector	WP4	PI, Birkbak &
	evaluations in news media and online fora." Intended for <i>Public</i>		TANTlab team
	Understanding of Science.		
2 conference panels	"Evaluation tools, texts, and methods", Annual Meeting of the	WP 1-4	PI and team
	Society for Social Studies of Science (4S) and Nordic Conference		
	of Science and Technology Studies.		
Edited special issue	Centered around one of the articles above		PI or PhD candidate
Talks and lectures	Conference presentations, research visits, invited talks		PI & PhD candidate

<sup>\*</sup> The details of the publication plan is contingent on the Ph.D. candidate's field and interests, which will determine the Ph.D. dissertation's academic orientation and format (monograph or article-based). If choosing article-based, the Ph.D. candidate will be lead author of two of articles 3-5 and single author of one article based on the ethnographic fieldwork.

#### 4. References

Asdal, K. 2015. "What is the issue? The transformative capacity of documents", *Distinktion: Scandinavian Journal of Social Theory* 16(1): 74-90.

Asdal, K. & B. Hobæk 2016. "Assembling the Whale: Parliaments in the Politics of Nature", Science as Culture 25(1): 96-116.

Birkbak, A. & A.K. Munk 2017. Digitale metoder. Hans Reitzels Forlag.

Czarniawska, B. 1999. Writing Management. Organization Theory as a Literary Genre. Oxford University Press.

Dahler-Larsen, P. 2013. The Evaluation Society. Stanford University Press.

Daston, L. & P. Galison 2010. Objectivity. Zone Books.

Edwards, P. 2010. A Vast Machine. Computer Models, Climate Data, and the Politics of Global Warming. MIT Press.

Espeli, H. & Y. Nilsen 2016. Riksrevisjonens historie 1816-2016. Fagbokforlaget.

Felt, U., M. Fochler & L. Sigl 2018. "IMAGINE RRI. A card-based method for reflecting on responsibility in life science research", *Journal of Responsible Innovation*, 5(2): 201-224.

Finn, M. 2018. Documenting Aftermath. Information Infrastructures in the Wake of Disasters. MIT Press.

du Gay, P. 2000. In praise of bureaucracy. Weber, organization, ethics. Sage Publications.

Geirbo, H.C. 2017. Crafting connections - practices of infrastructuring. An ethnographic study of developing a village electricity grid in Bangladesh. Ph.D. dissertation, Department of Informatics, University of Oslo.

Geirbo, H.C. 2019. "Knowing through relations. On the epistemology and methodology of being a reflexive insider", *Interaction Design and Architecture(s)*, 38: 107-123.

Halvorsen, A. et.al 2013. Evaluering. Tradisjoner, praksis, mangfold. Fagbokforlaget.

Hecht, G. 2011. Being Nuclear: Africans and the Global Uranium Trade. MIT Press.

Hilgartner, S. 2000. Science on Stage: Expert Advice as Public Drama. Stanford University Press.

Hull, M.S. 2012. Government of Paper. The Materiality of Bureaucracy in Urban Pakistan. University of California Press.

Høydal 2019. Evaluering. Symbol og metode. Ph.D dissertation, School of Social Work, Oslo Metropolitan University.

Jensen, C.B. & B.R. Winthereik 2013. Monitoring Movements in Developing Aid. Recursive Partnerships and Infrastructures. MIT Press.

Kafka, B. 2012. The Demon of Writing. Powers and Failures of Paperwork. Zone Books.

Koselleck, R. 2002. The Practice of Conceptual History. Timing History, Spacing Concepts. Standford University Press.

Lamont, M. 2012. "Toward a Comparative Sociology of Valuation and Evaluation", Annual Review of Sociology 38(21): 201-221.

Latour, B. 1999. Pandora's Hope: Essays on the Reality of Science Studies. Harvard University Press.

Latour, B. 2010 [2002]. The Making of Law: An Ethnography of the Conseil d'Etat. Polity Press.

Latour, B. & S. Woolgar 1986 [1979]. Laboratory Life. The Construction of Scientific Facts. Princeton University Press.

Mangset, M. & K. Asdal 2019. "Bureaucratic power in note-writing: authoritative expertise within the state", *British Journal of Sociology*,70(2): 569-588.

Miller, C. 1984. "Genre as social action", Quarterly Journal of Speech 70(2): 151-167.

Moretti, F. 2013. Distant Reading. Verso Books.

Nelhans, G. 2013. Citeringens praktiker: det vetenskapliga publicerandet som teori, metod och forskningspolitik. Ph.D dissertation, Department of Philosophy, Linguistics and Theory of Science, University of Gothenburg.

Power, M. 1997. The Audit Society: Rituals of Verification. Oxford University Press.

Power, M. 2000. The Audit Implosion. Regulating risk from the inside. ICAEW.

Reinertsen, H. 2016. Optics of Evaluation. Making Norwegian foreign aid an evaluable object, 1980-1992. Ph.D. dissertation, TIK Centre for Technology, Innovation and Culture, Faculty of Social Sciences, University of Oslo, Norway.

Reinertsen, H., K. Bjørkdahl & D. McNeill 2017. Confronting the contradiction. An exploration into the dual purpose of accountability and learning in aid evaluation. EBA Report Series 6/2017. Swedish Expert Group on Aid Studies.

Reinertsen, Hilde 2018. "Aldri nok rapporter? Om evalueringens optikk og bistandens resultater", in Bjørkdahl. K. (ed.), Rapporten: Sjanger og styringsverktøy. Pax Forlag, pp. 60-87.

Ribes, D. 2019. "STS, Meet Data Science, Once Again", Science, Technology & Human Values, 44 (3): 514-539.

Riles, A. 2006. Documents: Artifacts of Modern Knowledge. University of Michigan Press.

 $Rottenburg,\,R.\,\,2009.\,\textit{Far-Fetched Facts.}\,\,\textit{A Parable of Development Aid.}\,\,\textit{MIT Press.}$ 

Shapin, S, & S. Schaffer 1985. Leviathan and the Air-Pump: Hobbes, Boyle and the Experimental Life. Princeton University Press.

Skinner, Q. "Conventions and the Understanding of Speech Acts", The Philosophical Quarterly 20(79): 118-138.

Vedung E. 2010. "Four Waves of Evaluation Diffusion", Evaluation 16(3): 263-277.

Vertesi, J. & D. Ribes 2019. digitalSTS. A Field Guide for Science & Technology Studies. Princeton University Press.