Seeing with Paper: Government Documents and Material Participation

Megan Finn Microsoft Research New England megfinn@gmail.com Janaki Srinivasan Virginia Tech janaki3@vt.edu Rajesh Veeraraghavan* University of California Berkeley rajesh@berkeley.edu

Abstract

Government documents such as welfare applications or accounting records are often considered mundane artifacts that signify shared practice and routine. In this paper we examine cases where these "everyday documents" are sites of creation and contestation of the dominant information order. We argue that the circulation of everyday government documents opens up the possibility for a population to gaze back and "see" the state. In three cases, we show how the materiality of everyday documents in welfare schemes takes center-stage in mediating public participation in India and in the US.

1. Introduction

Government documents don't have a good reputation: they have been variously perceived as instruments wielded by the state to "see" its population and control it better [18, 45]; as creating inefficiencies and structural violence [22]; and as an endpoint to justify the existence of bureaucratic agents. We consider three instances where the much maligned government document allowed citizens to 'see' the ideology of the state and at times, even to contest it. In these instances, we find that the materiality of government documents was critical in bringing about this visibility into the state.

The paper form provides stability to documents, facilitating their circulation across geographic and temporal contexts of organization, even allowing us to think of them as "immutable mobiles" [32]. But circulation also takes paper-based documents to new audiences. Government documents, for instance, circulate from their creators in the state to the public. We argue that as members of the public encounter these documents or put them to use, they may start to 'see' the state differently.

"Seeing with Paper" refers to the idea of "seeing" as laid out in James Scott's *Seeing Like a State* [45] and then by Corbridge and his coauthors in *Seeing the State* [10]. "Seeing" in their and our accounts refers to more than the physical act of seeing a state

or a population as a monolithic entity. Instead, it refers to an understanding of the implicit ideology and logic that drives bureaucratic practice. To these discussions on how states and citizens 'see' each other, we introduce the concept of materiality. As visible material interfaces between citizens and the government, we suggest that documents provide citizens both a way to see the state - by understanding the calculations behind particular methods of apportioning welfare within a population - and a site where citizens can contest underlying state ideology or disrupt routine bureaucratic practices. We suggest that these cases illustrate Marres's notion of "material participation" [36] – a form of public engagement that is "an embodied activity that takes place in particular locations and involves the use of specific objects, technologies and materials."

We present three cases of welfare schemes where paper-based government documents reflected state ideology and their use produced visibility into the state. Two cases examine welfare schemes that were designed at the turn of the 20th century, one for victims of earthquakes in California, USA and the other for famine victims in Rajasthan, India. In addition to their common goal of welfare provision. the schemes also had similar concerns regarding program execution: that people would take more than what was deemed to be their share of welfare and. worse, be "pauperized" by the state. We show how documents involved in planning and administering these schemes reflected these concerns, but also made it possible for potential welfare beneficiaries to contest the underlying state logics. Our third case examines how present day state-sponsored social auditors use documents to monitor the working of a welfare scheme in Andhra Pradesh, India. In order to check the veracity of documents maintained in administering the scheme, auditors read them out to beneficiaries of the scheme. They then create audit documents that are used to challenge the original, official document. We examine the role played by materiality in shaping these diverse encounters between state and citizen.

2. Documents and the State



^{*}The co-authors contributed equally to this paper.

Document theorists have noted that the origin of the contemporary sense of "document," as record, as evidence or as informative, can be traced to government-related practices at the beginning of the Enlightenment [9]. Indeed, historians have long made use of bureaucratic documents to look at "paper work" [30], or past "information orders" [2]. Today, social scientists from several disciplines use government documents to understand the social world in which these documents are created and circulated. We build on the work of researchers who understand governance as a communicative practice that is organized by documents such as maps, files and memos, or study the "social life" [1] of such documents including their circulation [20, 27, 29, 42, 46].

Bureaucratic documents can have a "mundane" [21] quality that can make them "analytically invisible," [6] despite being "fundamental to organizations" [23]. But in spite of their banality (or perhaps because of it), government documents and "paper shuffling" are the source of a power that fundamentally shapes society [4, 6, 22]. The concepts of "governmentality" and "legibility" offer ways to interrogate the role of government documents while keeping in mind the power relations that mediate state-citizen interactions.

Governmentality is an understanding of governing as the "conduct of conduct" [18]. In explaining the term, Foucault argues that modern governments focus not just on controlling territory, but also on extending power and rule over a population. Moreover, they no longer rely solely on explicit coercion or on laws to achieve these goals; instead, they shape the conduct of individuals and manage a population by introducing new forms of disciplinary knowledge and administrative techniques. The first step in managing a population is to "know" it, or what Scott has described as making that population "legible" [45]. Being part of the government "infrastructure," documents play an important role in this process [5]. They also reflect the ideology of the government that created them, down to the fields on documents such as forms.

The process of enumeration shapes the content and form of documents [45]. Making 'a people' or 'populations' legible is neither straightforward, nor exhaustive [10, 22, 45]. Following Star, those not made legible through the attributes on documents, especially forms, can be described as infrastructural "orphans." Orphans of a welfare information infrastructure are rendered invisible within a state benefit system [15] and may suffer because of their exclusion. Finally, besides the processes of creation

and enumeration, the reception of documents too is complicated and contested by different populations in their encounters with the state [3, 10]. It is also through such encounters that citizens come to make sense of the state [10].

The role of documents in governing a population has been extensively researched. Hull summarizes the insights of the anthropological literature on government documents thus: "that documents are not simply instruments of bureaucratic organizations, but rather are constitutive of bureaucratic rules, ideologies, knowledge, practices, subjectivities, objects, outcomes, and even the organizations themselves" [27]. However, documents are not "simply embodiments of social relations in the bureaucratic arena, idols of statist proceduralism whose qualities can be dissolved in a bath of context" [25]. Instead, Hull suggests, documents can be "unexpected sources of action" that are used to remake "relations with the government" [25: 504]. It is precisely this aspect of government documents that we wish to present in this paper. Specifically, our focus is on the ways that citizens use documents, originally intended to make welfare recipients legible, to remake their relations with the state or, to make the state itself legible. In this way, we also use our cases to move away from the emphasis on how documents help organize shared, routine work practices and day-to-day relationships amongst bureaucrats [7, 40]. We highlight how the material form of documents has made conflicts in relations between states and their populations visible, and disruptions from existing practices and routines

But, as Hull observes, anthropological accounts of bureaucratic documents tend to consider documents and even writing as instruments of control [26], focus on their knowledge function or understand them as representations through which people encounter and imagine the state. This renders the specificities of individual documents [25], as well as their material properties [36, 37, 41] largely unimportant in this literature. We turn to researchers in organization studies for approaches to study the materiality of documents. While our focus is the relations between state and population, and much of the organization studies literature to which we refer was developed in corporate settings, we find the concept of "sociomateriality" addresses the complexity of considering how social relations (such as statecitizen) are bound up with the materiality of objects [e.g. 31, 33, 34, 35, 39, 40, 38, 53]. Starting in the 1990s, researchers noted that the genre of communication (e.g. a memo) shapes decisionmaking and has consequences for power relationships

within an organization [35, 38, 53]. Further studies have noted the definitional and philosophical challenges inherent in focusing on materiality, pointing especially to issues of determinism, denial of human agency, and the affordances of material objects [31, 33, 34].

From our literature review, then, we take the idea that the documents developed by state bureaucracies reflect the state's politics and priorities. We find that documents help the state see their citizens, but that they also help researchers see the state. Where citizens want to be made legible in welfare schemes, they are likely to interact with the state through the documents required for enrollment or participation. It is in these moments - in which researchers can see the state in documents - that citizens too may see the state. The literature on materiality, meanwhile, alerts us to be careful how much we ascribe to or take away from materiality in our study of government documents, yet persuades us that the material form is critical in our accounts of state-citizen relations.

3. Cases

3.1. Methodological overview

We selected cases that would allow us to do "theory elaboration" [52] or reconstruction [8] of two ideas: "legibility in statecraft" [45] and "seeing the state" [10]. In our work, we looked for examples where paper instruments of legibility were also sites where the gaze was reversed, and there was evidence of this being disruptive. More specifically, we were interested in cases where documents did not just allow the state to see the population, or the researcher to see the state, but for citizens to see the state. In each case, we examined: (1) how ideologies of the state were inscribed in the document [5, 22] (2) instances where we had evidence that citizens became aware of the implicit logic shaping how welfare was apportioned, and (3) contested this logic in some way. Following the logic of "theory elaboration," we believe that the variety of our cases helps us concretely understand how the government documents differently mediate social relationships. Collectively, the cases help us explore how states see and are seen through documents in the context of welfare schemes

Three cases of state-sponsored welfare programs help us elaborate on the legibility of the state: Our first case examines the role of registration and aid application documents in the provision of relief to earthquake victims in California, USA in 1906 and 1989. The second considers the part played by famine commission reports and labor rolls in the operation of

famine relief programs in India in the late 1800s and then in the 1980s in Rajasthan, India. Finally, we consider the role of audit documents in a present day guaranteed employment works program in Andhra Pradesh, India.

While identifying connections between our cases, we identified three significant types of documents in our analysis: planning documents, everyday documents and reporting documents. By planning documents, we refer to documents that outline a government's vision for its programs or actions. These may not in any way determine action, but help understand the ideology of those who conceptualized a welfare scheme. Everyday documents are the artifacts that document the day-today operations of programs. While mundane to program administrators, everyday documents are rarely so banal to welfare applicants and recipients. Everyday documents have multiple physical instances, but each instance is populated with different data. Last, we examine reporting documents, which describe government actions, events, or projects after the fact, and are emblematic of a Giddensian reflexivity [20]. Identifying the variety of documents involved in these processes of seeing helped us locate possible sites of resistance. While we draw on all these types of documents, our focus for analysis within each case is on "everyday" welfare documents. In all our cases, we present moments where such documents became sites for enhanced public participation.

Borrowing from Bowker and Star, we approached government forms as infrastructure [5]. In reading documents, we borrowed techniques from Star's "ethnography of infrastructure" which suggests that studying information infrastructure requires reading a document as an artifact, a record, and a veridical representation of infrastructure [50]. These different methods imply different ways of studying documents in the context of state-citizen relations. For example, everyday documents can be analyzed as artifacts by focusing on material attributes. Planning documents can be read as records or traces of what bureaucrats imagined or wished would happen with everyday documents. Reporting documents can be understood as veridical representations of what bureaucrats thought happened.

We used archival and ethnographic research to construct our field sites. The California case is based on archival research conducted between 2008 and 2013 [17]. We followed the techniques of anthropologists studying historical disasters by

1

¹ We use footnotes to describe archival and primary sources and the bibliography for scholarly work.

conscientious constructing of the archive [19]. We assembled a number of primary and secondary sources, treating the archive as a field site [13]. The case of the Indian famine relief works is based on archival and ethnographic research on the work of a political movement that was conducted in 2009 in Rajasthan [49] and document analysis of famine reports in 2013. The Andhra case is based on a yearlong ethnography of the Andhra bureaucracy in 2011-2012, where one of the authors lived and performed different roles associated with the welfare scheme. While significantly different in their geography, timelines and methods of enquiry, our cases are tied together by the crucial role of documents in contesting the state.

3.2. Earthquake Relief in California

Although there was a tradition of the US federal government setting aside money for the relief of people affected by different kinds of disasters [11], the methods of distributing the state money were less systematic. Thus, when a large earthquake shook the city of San Francisco on April 18, 1906. President Roosevelt instructed that the relief funds be distributed through the American Red Cross, under supervision of the War Department [12, 28]. The American Red Cross formed a Relief Committee with local San Francisco politicians and other elites, and this relief committee distributed the relief funds.

The earthquake and fire of 1906 in San Francisco relocated about half of the city population over a four-day period from April 18 to 21. People fled across the San Francisco Bay to Oakland and Berkeley, and south and west within San Francisco. Refugees found lodging with friends and erected temporary shelters in parks and open areas. Initially, there were many ad hoc food distribution stations where various groups of people provided aid to others whenever they could [48]. However, this did not last as powerful people saw the refugees as "flocking promiscuously" to various food stations. A week after the earthquake San Francisco newspapers began reporting on the development of a food distribution registration system run by the Red Cross Society, in coordination with the US government. The goal of the registration system, which was based on relief systems used after the 1871 Chicago fires, was to defend against "pauperization," to enact charity" ideas about systematic "scientific

"California, San Francisco Earthquake & Fire 4/18/1906" (not dated, but written after 1908): 31

measurement, and to reduce what the program administrators perceived as people receiving more than their fair share [28].

The purpose of the registration system was laid out in "The Plan for Registration": "In order to unify the meods [sic] of relief, to regulate the issue of food, to keep a record of the work done at the various Relief Stations, and to facilitate the centralization of the relief work, it is necessary to enroll all applicants in a general register." The idea was to divide the city into different districts, each with identical procedures managed by a central bureau. According to "The Plan" each family would get a registration card to be filled out "by an executive official at the Station" or "by a canvasser of the Associated Charities." The information on the registration card would have to be completed with a visit to the place where the applicant was living to verify details. In its implementation though, the relief system was complicated. One relief worker wrote, "It can hardly be imagined what a colossal task it has been to merely register the persons receiving relief."4

After relief workers registered people, the registration card was kept by the relief administrators, and a food ration card was given to the family. The Plan for Registration said that families were to be issued food cards based on their needs and food cards were to be "placed in the hat band or pinned to the clothes while [sic] the person getting supplies." The cards were good for ten days at a time and marked after a registrant had received rations, "preferably by a punch, but if a punch is not available, by cutting a notch with scissors, crossing out the number with ink, blotting it out with a stamp, or in any other manner which will effectually prevent a second presentation of the ticket for that day." The materiality of the food card was key for the registration system to ensure that people only received what they were due - charity workers filled out registration cards, and they physically marked food cards when they provided rations.

Ultimately, the registration did what it was intended to do: reduce the amount of relief distributed.⁵ Red Cross leaders were enthusiastic

1518

² Adolphus W. Greely, "Army Report by Maj. Gen. A. W. Greely," RG200 National Archive Gift Collection, Records of the American National Red Cross 1881-1916, box 54, folder 815.02,

³ "The plan for Registration," Record Group 200, Records of the American National Red Cross 1881-1916, Box 55, Folder 815.6, "California, San Francisco Earthquake and Fire 4/18/06—Relief other than Health." National Archives, College Park, Maryland. For a variation, also see . "Instructions for Registering Applicants at Relief Stations," *Red Cross Bulletin* 3 (July 1906): 23.

⁴ Mary Roberts Smith, "Relief Work in its Social Bearings." *Charities and The Commons: A Weekly Journal of Philanthropy and Social Advance* XVI, No. 9. (June 2, 1906): 308-310. Publication Committee: Charity Organization of the City of New York

⁵ Russell Sage Foundation, San Francisco Relief Survey (New York, NY: Survey Associates, 1913)

about the new registration system and even suggested it as a potential model for the future, keeping it on file at the National Red Cross headquarters. However, the techniques of subdividing, centralizing, and registering inflamed some San Franciscans. One aid recipient wrote a pamphlet that described: "the hours of standing in line; the endless circuit from one relief station... all these were systematic means of conserving the supplies." Furthermore, the pamphlet described the process of filling out registration cards: "The only way to obtain supplies was to fill out cards containing humiliating and impertinent questions." The very document-based system that was designed to efficiently deliver relief was exactly what some refugees objected to.

The registration system was not only designed such that people avoided asking for aid, the registration document also reified an enduring trend in American disaster relief - aid distribution was according to what people possessed before a disaster rather than being distributed evenly amongst disaster victims [51]. The registration card asked for many details about an aid recipient's background such as their previous employment, property ownership, social associations including references and "plans for the future." Relief officials used these details in combination with personal assessments to decide who got aid, often opting to restore people to their pre-earthquake state, such that the poorest received nothing, while the middle class often got loans and housing assistance [12, 28]. This struck many as deeply unfair. Historians have documented a group called the United Refugees, which was formed in July 1906 to resist these distribution policies by sharing the relief funds cooperatively [12]. Interestingly, their plan also hinged on a type of a registration document -- members were to fill out an "Enrollment Card" which asked people to respond to a few questions that confirmed they had lost their home in the earthquake and wanted to be part of the cooperative aid sharing program.8 The enrollment card did not ask refugees to describe their previous class status, and questions were asked in the first person ("My true name is") rather than the impersonal registration card ("Surname and given names of family"). As historians have demonstrated, the core objection of the United Refugees was that outsiders conducted their relief-granting activities

⁶ A letter from Wm. W. Morrow. letter to Charles L. Magee, Secretary, American Red Cross, dated May 12, 1906, "California Relief," *Red Cross Bulletin* 3 (July 1906): 19 behind closed doors. The United Refugees advocated unsuccessfully that the State of California create a "public relief commission" that would oversee the distribution of funds [12: 82-83].

Relief and registration systems changed in the 80 years following the 1906 earthquake. However, some of the ideals behind the registration documents in 1906 endured, only to be contested again, this time more successfully. In 1989 there was another large earthquake in the San Francisco Bay Area. While not as destructive as the 1906 earthquake, it involved a large federal response. Federal programs both granted people temporary housing and provided loans for the reconstruction of different buildings. As with the 1906 earthquake, the poorest members of society were the ones who suffered the most after the 1989 Loma Prieta earthquake because they had the least resources to fall back on when aid was delayed, lived in the poorest quality housing, and were often the most reliant on public assistance and shelter after a disaster. Also like in 1906, victims in 1989 were being given aid based on what they had before the earthquake, and the system discriminated against the poor. Much like with the 1906 quake, the forms used in the aid system reinforced class divides where the poorest were refused help. However, in 1989, advocacy groups were able to successfully contest FEMA's housing policy, winning \$23.04 million to replace low-income housing in a law suit.9

3.3. Famine Relief in Rajasthan

If earthquakes were common in California, parts of the India subcontinent had a long history of famines and systems for famine relief. In 1880, the British formalized the role of the state in relief administration. Documents played an important part in that system As a system where "reports legitimate(d) policy, manuals engineer(ed) it and records form(ed) the basis of the entire system," documents played a crucial role in India under the British Crown [47]. Documents were pivotal because British officers, frequently transferred between locations, found themselves "helplessly dependent" on native officers, yet distrustful of them [24]. Writing and documents became part of the British administration's "graphic regime of surveillance and control." Documents included detailed manuals and codes that laid out administrative procedures to guide action. In the famine relief administration, documents were involved in recommending famine relief policy and in recording how this policy was implemented.

⁷ Margaret Mahoney M. D., pamphlet, *The Earthquake, the Fire, the Relief* (July 28 1906)

^{8 &}quot;Enrollment Card," Rene Bine Papers, California Historical Society.

⁹ California Seismic Safety Commission. Loma Prieta's Call to Action. Sacramento, CA: California Seismic Safety Commission, 1991.

By the 1880s, Britain's concern with averting famines in India was at an all-time high [14]. The British formalized and standardized the role of the state in famine relief by laying out "authoritative guidelines to the local administration for the anticipation, recognition and relief of famines"-a Famine Relief Code [14]. The Famine Code and subsequent famine policy were based on "Famine Commission Reports" that described all components of famine relief where the state played a role. 10 This included the administration of "Famine Relief Works" where people would labor for aid. It also granted gratuitous relief to those unable to labor at such worksites, and to a lesser extent, regulated grain markets. The Famine reports reflected the prevalent quandaries of the time, especially on the appropriate role of the government during periods of famine.

Famine Commissions were concerned with the provision of "unnecessary" or "excess" relief at Famine Relief work sites and wanted to reduce the expenditure on such relief works. They were also convinced that excess or unnecessary relief would make the population permanently dependent on government largesse and break down existing mechanisms of self-help and the practice of frugality within communities. For these reasons, recommendations in the 1880 report focused on maintaining documentation that could filter out the undeserving, ensure that able-bodied individuals were provided wages only in exchange for work, and that they were paid only subsistence wages. Famine relief administrators were required to keep detailed records to: "prevent" over-paying or under-working workers; keep the costs of public works down; supervise workers; and systematize the calculation of the cost and benefit of relief across provinces. A key everyday document was the muster roll, which recorded many details about workers such as their capacity to work or skill level (different levels were paid differently), their gender and age (men, women and children were paid differently), attendance, the amount they worked and their work groups. Wages were calculated based on all these details and then recorded on the muster roll. The muster roll was essentially a labor payroll maintained in paper form. It was frequently mentioned in Famine Commission Reports as well as in other accounts of famine works.¹¹ The Famine Code and subsequent reports also specified a chain of command to monitor the muster rolls. The muster roll, thus, reflected the priorities of the colonial state and also made relief workers and work sites legible to administrators. However, a concerted effort to use muster rolls to understand these priorities was still a 100 years away.

In spite of the dramatic changes in the nature of the Indian state in the 20th century, the administration of relief works on the ground in the 1980s looked very similar to what we just described from a century earlier [14]. Muster rolls from the 1980s, for example, closely mirrored their counterparts from the Famine Commission Reports of the late 1800s in form and circulation. Moreover, much like in British India, muster rolls continued to be for the eyes of bureaucrats alone in the 1980s in postcolonial India. Debates on whether wages should be based on worker attendance or on the completion of a task, and on establishing an acceptable wage level were reminiscent of the British era. 12 As in the 1880s, these debates drew on ideas within the state about identifying and providing relief only to the deserving poor and on ensuring that wages would only be sufficient for subsistence. Thus, in spite of the profoundly different times and regimes in which they existed, the muster rolls of the 1890s and the 1980s did not appear fundamentally different.

While a muster roll's contents and material form were mostly unchanged through the century, the way it was leveraged underwent a radical shift in parts of the state of Rajasthan in the late 1980s. A political movement called the Mazdoor Kisaan Shakti Sangathan (MKSS) found that workers were being paid less than the minimum wage at famine relief work sites [44, 49]. When asked why, the bureaucrats at the site told them and the workers that according to the muster roll entries, the workers had not completed their allocated task, thus earning lower wages. When workers insisted that they had completed their allocated tasks, they were told to prove it: Only muster rolls were valid as proof in the eyes of the state. But workers were never allowed to view muster rolls; only higher-level bureaucrats could access the documents. MKSS workers organized around this issue in two ways: first, through a campaign asking that relief site workers be allowed to see muster rolls; and second, by using oral accounts from these workers as a contrast to the testimony of muster rolls. By gaining access to muster rolls and changing their

¹⁰

This section draws on the following Famine Commission Reports unless otherwise mentioned: Government of India (1880). Report of the Indian Famine Commission 1880 (London: Her Majesty's Stationery Office); Government of India (1898) Report of the Indian Famine Commission 1898 (Simla); Government of India (1901). Report of the Indian Famine Commission 1901(Calcutta).

¹¹ Merewether, Francis Henry Shafton. 1898. A Tour Through the Famine District of India. A. Innes.

¹² See Sanjit Roy vs. State of Rajasthan (1983) 1 Supreme Court Cases 525. Writ Petition no. 6816 of 1981, for a case on minimum wages and task vs. time basis of payments in public work schemes.

material form by reading them aloud, even those who couldn't read had access to those documents for the first time. When muster rolls were read out aloud in a public place, people could publicly contest them.

Both campaigns continued over the next decade and eventually contributed to a nationwide Right to Information Act that gained Indian citizens the right to view government records in 2005. However, what also became equally clear in the course of these campaigns was how critical paperwork was to the functioning of the bureaucracy. The state's own need for a paper trail — essentially viewed as a matter internal to the state and for efficient administration and internal accountability — also became a way for workers to challenge the working of the state.

The right to information campaign put in place both the legal mechanism and the practices that other communities have since leveraged to address corruption in the administration of welfare schemes. MKSS popularized a process that enabled people (in theory) to "see the state" [10] and thereby to hold the government accountable. This mode of auditing government records that were formerly closed to the public came to be referred to as "social audits." By using a detailed public verification of government records by citizens and a mediator (often an organization), social audits attempt to make complex government records public and comprehensible to a largely non-literate population. The state government of Andhra Pradesh has gone a step further and institutionalized such audits.

3.4. Guaranteed Work in Andhra Pradesh

The Andhra Pradesh government adopted and institutionalized the public form of audits at an unprecedented scale in the context of the National Rural Employment Guarantee Act (NREGA) 2005. NREGA is a Government of India program whose main objective is to provide up to one hundred days of guaranteed paid employment to every household willing to do manual labor at minimum wage. The work typically consists of digging ditches, building agricultural bunds, or canals, and other measurable labor often on public lands. Social audits of NREGA works are fully funded by the state and are now a routine affair in the villages of Andhra. The law stipulates that the social audit is to be conducted every six months and the audits are supposed to be done by the local villagers. To ensure objectivity to the process, the composition of the audit team is crucial. The audit team has a certain "embedded autonomy," in that it was funded by the state but independent of the implementing agency [16]. The audit team comprises a central team that travels around the region and a local contingent from the village. Village auditors are typically the literate children of NREGA workers, and are hired and trained on a per-audit basis from the village.

The social audit mechanism consists of three stages: First, social auditors 'open up' everyday government documents that were previously not publicly available, such as muster rolls and measurement books that maintain dimensions of NREGA works and their location, to workers. In the course of an audit, auditors: measure worksites to match their dimensions to records; read muster rolls out aloud to verify whether the details in these documents match what the worker recalls; and finally, record all discrepancies between the official records and what is learned in the course of the audit.

In the second stage, these informed workers produce written testimonies countering the government records. The household surveys include private discussions where workers are able to air their grievances. Where workers are willing, these private discussions are recorded in an audit document that also has the worker's signature or thumbprint.

In the third stage of the audit, the audit documents are deliberated over in a public hearing where both the government record and the audit report are presented to the public. The audit report is read and the public is offered a chance to speak. A government officer presides over this meeting and levies penalties in the form of fines, suspensions or termination to bureaucrats who have been found corrupt. Workers, activists, and government officials from the local village assembly attend the public hearing. In some cases, there are representatives from the media and in troubled regions, the police. Social audit report documents are presented in public at the village level (gram sabha), and then at the regional (mandal public hearing) administrative hub where it is convenient for the district bureaucrats to attend.

Public hearings offer new opportunities to mount a critique of the state. Audit forums are sites where two documents, the original everyday documents and the testimony of workers, are pitted against each other. But the audit ultimately relies on the production of a third document, the written decision of the presiding officer. Unless something is written down, it does not exist in the bureaucratic realm [22]. Contestations by workers therefore had to be presented in the form of written audit reports, though the initial production of the audit report is often a largely oral activity consisting of public and private verbal discussions.

The audit relies on the existence of paper documents. Government documents typically produced at the completion of public works served as

an input to the audit process. However, in order for audits to be meaningful, paper documents did not just have to be circulated beyond the bureaucracy and the auditors; paper documents had to be converted to an oral form with which the public could engage. Changes in the material form of documents enabled the solicitation of broader participation because workers were often not literate and unable to read these documents.

In many ways, the Andhra Pradesh audit is a unique experiment to ensure that both these sets of translations -- from written to oral and from oral to written form -- happen reliably and at a large scale to allow for meaningful public participation.

4. Discussion and Conclusions

In this section, we draw together findings from the three cases to elaborate theories of how legibility is attempted and contested through the use of everyday government documents. Following previous research in this area, we showed how the ideology of those executing welfare schemes (in our cases, different levels of the state) was inscribed into everyday documents, particularly in the fields of government forms that describe welfare recipients. That ideology became clear to the welfare participants as they repeatedly interacted with administrators in filling out forms. When these documents reached the welfare applicants who needed to fill them out, applicants found that the values inscribed in these documents did not always align with their own. Finally, as documents circulated, people contested them. In all our cases, we presented moments where documents became sites for enhanced public participation.

We organize our discussion of findings around these three phases of the everyday documents that we focused on in our cases: their creation (the making of their structure and fields); the act of filling forms out; and finally, document circulation.

4.1 Creation

We found that welfare documentation systems were designed for states to make recipients legible along particular attributes [45]. Some documents were created with the goal of preventing welfare benefits reaching those who did not 'deserve' them in the eyes of relief administrators. Administrators designed documents like the earthquake registration card and the muster roll with ideas about who they ought to help and how. For example, people were to be restored to their conditions prior to the quake in the California earthquake case. These ideas were

inscribed into welfare forms or cards by means of the attributes they chose to document: in the case above, income or assets. The muster roll document had fields to gather the age, gender, and work capacity of workers to decide how much to pay them.

4.2 Filling out

Documents such as the muster roll and the registration card were very small pieces of a much larger document infrastructure supporting large-scale relief programs. But these everyday documents and the act of filling them out mattered because these documents were often a crucial and rare material interface between the public and the state. As welfare recipients filled out forms, they encountered the state [10], both through their interactions with the bureaucrats who were helping them to fill out forms out, and by interacting with the forms themselves. In the case of the Andhra audits, the process of answering questions about discrepancies in official records provided a relatively novel opportunity and form of engagement for workers.

The bureaucrats designing a welfare policy or its documents and the bureaucrats filling out documents for welfare recipients were seldom the same people. However, as described above, the paper forms and their fields stood in for the priorities of the absent bureaucrats in some sense. Instances abounded in the earthquake and famine cases where relief was distributed in a manner that did not correspond in any straightforward way to the letter of the law, or even the spirit of the state's vision. For recipients, being eligible did not ensure legibility and being legible did not always ensure welfare payments. Thus, the role of government documents or their material form should not be read in any way as completely determining how a form was filled out or what occurred once the forms were filled in.

Furthermore, the stakes were very different for welfare administrators and welfare recipients when they interacted with the everyday documents. Even in the more 'mundane' instances, filling out everyday documents was only mundane for welfare administrators: welfare for applicants, documents were a matter of their livelihoods and anything but routine. After all, the relationship between documents and their users depends crucially on the user's understanding of the document's context [39] and this differed dramatically between welfare administrators and recipients.

4.3 Circulation

In this phase, mediating agencies were often key

in generating, sustaining, or drawing attention to resistance. In the Californian case, advocacy groups helped the underserved population to file a court case against FEMA in 1989. In the Rajasthan case, the involvement of MKSS in the 1980s made it possible for workers at relief work sites to engage in public altercations with state agents and eventually contributed to right to information campaigns and a national legislation. In Andhra Pradesh, the social audit unit translated the documents into a form that workers could use to contest the state at the local level. Throughout, the fixity of the material form of the paper-based documents was crucial to circulation within and beyond the state bureaucracies that created them.

The material form of government documents proved critical in this regard since paper-based government documents in the correct format brought with them the stamp of official sanction. This was especially apparent in the Andhra case and MKSS's work in the Rajasthan case. Public hearings explicitly drew on the legitimacy accorded to written documents in a bureaucracy, especially the need for a paper trail and records. Without these paper-based, written documents, a comparison of the official and unofficial narratives of how the welfare schemes worked would not have been possible. However, since a paper trail was essential to the operation of public work schemes, public hearings did become possible.

As paper-based documents circulated, they were also translated to other material forms to make them comprehensible to a wider range of the population. This translation was then leveraged to cross some boundaries between the local state and its population. For example, in the Andhra case, audit documents were read out orally to groups of residents who could then argue over and make sense of them collectively. The translation from written document to oral testimonies, and back to written documents for official action, illustrates how material form shapes encounters between state and population.

4.4 Some Limitations

While our cases are comparable for the central role played by the materiality of government documents in each, we do not want to draw too smooth a generalization across them. We examined everyday documents as relational artifacts of communicative practice in multiple welfare schemes. But the historical and material specificity of each was crucial in making sense of several aspects of that case. With the San Francisco earthquake, aid recipients did not merely possess forms, but were also required to wear

them to verify that they were registered and were only receiving their apportioned share of aid. In Rajasthan, the Indian government's bureaucratic requirement for maintaining a paper trail of everyday documents made it possible for activists to challenge details from these documents in public hearings and, thus, to contest the state. In Andhra Pradesh, social audits were sponsored by the state and this allowed for workers' orally expressed grievances to be translated back into written bureaucratic decisions that had official sanction. Literacy (or lack thereof) played an important role. Knowledge of how government documents worked in a place shaped how well they could be leveraged. The act of seeing the state, we found, was not simply about seeing the paper created by that state in isolation. Sometimes, it involved the creation of more documents, or the translation of a document into another material form before the state could be seen in that place and time. Thus, while the material form of everyday documents was pivotal to the unfolding of events in our cases, these events took a form that was situated in the local history and politics of their region.

10. References

- [1] Appadurai, A., ed, The Social Life of Things: Commodities in Cultural Perspective, Cambridge University Press, Cambridge UK, 1998.
- [2] Bayly, C.A., Empire and Information: Intelligence Gathering and Social Communication in India, 1780-1870, Cambridge University Press, 2000.
- [3] Benjamin, S., "Occupancy Urbanism: Ten Theses", SARAI Reader 2007: Frontiers, 2007, pp. 538-562.
- [4] Blanchette, J.-F., Burdens of Proof: Cryptographic Culture and Evidence Law in the Age of Electronic Documents, MIT Press, Cambridge Mass, 2012.
- [5] Bowker, G.C., and Star, S.L., Sorting Things Out: Classification and Its Consequences, MIT Press, 2000.
- [6] Brenneis, D., "Reforming Promise", in Riles, A. ed. Documents: Artifacts of Modern Knowledge, University of Michigan Press, Ann Arbor, 2006, pp. 41-70.
- [7] Brown, J. S and P. Duguid, "Borderline Issues: Social and Material Aspects of Design", Human-Computer Interaction 9, 1994, p. 3-36.
- [8] Burawoy, M., Global Ethnography: Forces, Connections, and Imaginations in a Postmodern World, University of California Press, 2000.
- [9] Burke, P., A Social History of Knowledge: From Gutenberg to Diderot, Polity, Cambridge, 2000.
- [10] Corbridge, S., Williams, G., Srivastava, M., and Véron, R., Seeing the State: Governance and Governmentality in India, Cambridge University Press, 2005.
- [11] Dauber, M. L. The Sympathetic State: Disaster Relief and the Origins of the American Welfare State, University of Chicago Press, Chicago, IL, 2013.
- [12] Davies, A.R., Saving San Francisco: Relief and Recovery after the 1906 Disaster, Temple University Press, Philadelphia, 2012.

- [13] Des Chene, M., "Locating the Past", Anthropological Locations: Boundaries and Grounds of a Field Science, 1997, pp. 66-85.
- [14] Drèze, J., "Famine Prevention in India", WIDER Working Papers, World Institute for Development Economics Research of the United Nations University, 1988,
- [15] Edwards, P.N., Jackson, S.J., Bowker, G.C., and Knobel, C.P., "Report of a Workshop on 'History & Theory of Infrastructure: Lessons for New Scientific Cyberinfrastructures," Ann Arbor, MI, 2007.
- [16] Evans, P.B., Embedded Autonomy: States and Industrial Transformation, Cambridge University Press, 1995.
- [17] Finn, M., Californians and Their Earthquakes. PhD Dissertation, University of California, Berkeley, 2012.
 [18] Foucault, M., Burchell, G., Gordon, C., and Miller, P., The Foucault Effect: Studies in Governmentality, University of Chicago Press, 1991.
- [19] Garcia-Acosta, V., "Historical Disaster Research", Catastrophe and Culture: The Anthropology of Disaster, School of American Research Press/James Currey, Santa Fe/Oxford, 2002, pp. 49-66.
- [20] Giddens, A., The Constitution of Society, Polity, Cambridge, 1984.
- [21] Goody, J., The Logic of Writing and the Organization of Society, Cambridge University Press, 1986.
- [22] Gupta, A., Red Tape: Bureaucracy, Structural Violence, and Poverty in India, Duke University Press Durham, NC, 2012.
- [23] Harper, R.H., Inside the IMF: An Ethnography of Documents, Technology and Organizational Action, Routledge, 1998.
- [24] Hull, M.S., "The File: Agency, Authority, and Autography in an Islamabad Bureaucracy", Language & Communication, 23(3), 2003, pp. 287-314.
- [25] Hull, M.S., "Ruled by Records: The Expropriation of Land and the Misappropriation of Lists in Islamabad", American Ethnologist, 35(4), 2008, pp. 501-518.
- [26] Hull, M.S., Government of Paper: The Materiality of Bureaucracy in Urban Pakistan, University of California Press, 2012.
- [27] Hull, M.S., "Documents and Bureaucracy", Annual Review of Anthropology, 41(1), 2012, pp. 251-267.
- [28] Jones, M.M., The American Red Cross from Clara Barton to the New Deal, JHU Press, 2012.
- [29] Kafka, B., "Paperwork: The State of the Discipline", Book History, 12(1), 2009, pp. 340-353.
- [30] Kafka, B., The Demon of Writing, Zone Books, New York, 2012.
- [31] Kallinkos, J., "Farewell to Constructivism: Technology and Context-Embedded Action", in Avgerou, C., Ciborra, C., Land, F. ed. The Social Study of Information and Communication Technology, Oxford University Press, 2013.
- [32] Latour, B., Science in Action: How to Follow Scientists and Engineers through Society, Harvard University Press, 1987.
- [33] Leonardi, P. M., Theoretical Foundations for the Study of Sociomateriality, Information and Organization, 23(2), 2013, p 59-76.

- [34] Leonardi, P.M., Nardi, B., and Kallinikos, J., ed.
 Materiality and Organizing: Social Interaction in a
 Technological World, Oxford University Press, 2012.
 [35] Levina, N., and Orlikowski, W.J., "Understanding
 Shifting Power Relations within and across Organizations:
 A Critical Genre Analysis", Academy of Management
 Journal, 52(4), 2009, pp. 672-703.
- [36] Marres, N., Material Participation: Technology, the Environment and Everyday Publics, Palgrave Macmillan, 2012.
- [37] Miller, D., "Materiality: An Introduction", in Miller, D. ed. Materiality, Duke University Press, 2005, pp. 1-50. [38] Orlikowski, W.J., and Yates, J., "It's About Time: Temporal Structuring in Organizations", Organization Science, 13(6), 2002, pp. 684-700.
- [39] Østerlund, C., "The Materiality of Communicative Practices", Scandinavian Journal of Information Systems, 20(1), 2008, pp. 7-40.
- [40] Østerlund, C and Carlile, P., "Relations in Practice: Sorting Through Practice Theories on Knowledge Sharing in Complex Organizations," The Information Society, 21, 2005, p 91–107.
- [41] Pellegram, A., "The Message in Paper", Material Cultures: Why Some things Matter, University of Chicago Press, 1998, pp. 103-120.
- [42] Raman, B., Document Raj: Writing and Scribes in Early Colonial South India, University of Chicago Press, 2012
- [43] Riles, A., Documents: Artifacts of Modern Knowledge, University of Michigan Press, 2006.
- [44] Roy, A., Dey N., Singh S.', Singh A., "Delivery Systems of Poverty Alleviation Programmes for the Rural Poor: A Study in Bhim and Devgarh Tehsils of Rajsamand District, Rajasthan", Institute of Development Studies, Jaipur, Rajasthan, 1992
- [45] Scott, J.C., Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed, Yale University Press, 1998.
- [46] Sharma, A., and Gupta, A., ed. The Anthropology of the State: A Reader, Wiley, 2009.
- [47] Smith, R.S., "Rule-by-Records and Rule-by-Reports: Complementary Aspects of the British Imperial Rule of Law", Contributions to Indian Sociology, 19(1), 1985, pp. 153-176.
- [48] Solnit, R., A Paradise Built in Hell: The Extraordinary Communities That Arise in Disaster, Penguin., 2010.
 [49] Srinivasan, J., The Political Life of Information:"
 Information" and the Practice of Governance in India, University of California, Berkeley, 2011.
- [50] Star, S.L., "The Ethnography of Infrastructure",
 American Behavioral Scientist, 43(3), 1999, pp. 377-391.
 [51] Steinberg, T., Acts of God: The Unnatural History of Natural Disaster in America, Oxford University Press, 2006
- [52] Vaughan, D., "Theory Elaboration: The Heuristics of Case Analysis", What is a Case?, 1992, pp. 173-202.
 [53] Yates, J., and Orlikowski, W.J., "Genres of Organizational Communication: A Structurational Approach to Studying Communication and Media", The Academy of Management Review, 17 (2) (April 1), 1992, p