

Afterword

**Lineaments of Biopower : the bureaucratic and technological
paradoxes of Aadhaar**

KEITH BRECKENRIDGE

WITS INSTITUTE FOR SOCIAL AND ECONOMIC RESEARCH,
UNIVERSITY OF THE WITWATERSRAND

The essays in this special issue demonstrate—in case anyone still believes otherwise—that the Aadhaar project is an exceptionally interesting problem for contemporary social science. Nandan Nilekani’s impossible programme of capturing proof of the names, births, addresses and fingerprint and iris biometrics from over a billion people has revealed new features of the politics of networked technologies, of bureaucratic rationality, and of ordinary people’s strategies for dealing with both. The project has both changed globally held perceptions of the possibilities for new forms of state capacity and confirmed the old, Arendtian, view of bureaucracy’s capacity for banal evil. The resulting debate between advocates and critics takes a grim Manichean form that makes it difficult to confront the real complexities of Aadhaar. This is unfortunate, perhaps especially for those of us trying to understand the project, and its global implications, from outside. But, as the essays here show, the paradoxes of Aadhaar can be explained and analysed; the combined result is a powerful theoretical account of the distinctive forms of bureaucratic rationality in India. The last sentence of the last paper of this volume, by Aakash Solanki, captures this theoretical project well, asking us to examine the “awkward coalition” between globalised neoliberal technologies and the “deeper cultural logic of management, accountability and transparency in India” (Solanki in this volume). In this essay I want, briefly, to highlight what the special issue reveals about the “deeper cultural logic” of bureaucracy in India, and to make some suggestions about what that means for the trajectories of biometric state building internationally.

Read together these papers identify foundational--and contradictory—elements of the project of biometric state-building in India that should encourage us to provincialise the theories of bureaucratic rationality that are derived from the European experience, especially Foucault’s very famous essays on the expansion of governmentality and biopolitics.¹

¹ Michel Foucault. *Security, Territory, Population: Lectures at the Collège de France, 1977–78* (New York: Palgrave Macmillan, 2007).

Foucault is, of course, correct, in general terms, that the post-Enlightenment pursuits of scientific knowledge, and especially the physiological health of the citizenry, encouraged states to design tools of enquiry and discipline to “address problems that existed at the level of the population” (Rao & Nair in this volume). But, as these studies show, that effort is shot through with contradictory forces that limit and mangle what we might call the biopolitical imperative. A consistent matrix of contradictions, perhaps unique to the Indian case, emerges clearly in these papers: the tensions between purely-digital administrative simplicity in the design of Aadhaar and the remaining, often intolerable, burden of paperwork; of the presumptions of universal network access and the realities of unreliable power supplies and signal distribution; of the insecurity and disorder produced by the very successful use of private intermediaries to vacuum up all Indians (and resolve the failures of the network); and, finally, of the pervasive, and distinctive, determination on the part of citizens, intermediaries and officials to comply with the (often unreasonable) bureaucratic injunctions of an overweening state. While each of these contradictions exists in the other societies undergoing what we might call the biometric transformation, the combination—especially the determination to make Aadhaar work at all levels—is distinctive to India. Likewise we can probably agree that the largest political goal motivating and resourcing the project of universal biometric registration in India, and elsewhere, is for the provision, using networked cash transfers, of a stripped down form of welfare, along the lines of Redfield’s “minimal biopolitics”. The results—not least because of the unresolved tensions between bureaucrats and engineers—are still far from that goal (Cohen in this volume).² Nor has the broader data-processing objective of the system builders—a paperless, uniquely indexed, universally-distributed database for biometric authentication and the adjudication of entitlements—yet

² See also James Ferguson. *Give a Man a Fish : Reflections on the New Politics of Distribution* (Durham NC: Duke University Press, 2015).

been achieved. Something similar applies to the database's effects on the citizen-state relationship. While there is abundant evidence in these papers that the effort to capture the population as a single, biometrically-ordered database has prompted and nourished new forms of agency and tactics of subversion, it also seems clear—at least immediately in the wake of the Supreme Court decision limiting the commercial uses of Aadhaar—that the old citizen-state relation is reworking the functions of the Aadhaar database, rather than the other way around (Rao & Nair in this volume).

It is important to acknowledge the astonishing technical success of the Aadhaar project (not least because so many social scientists—myself included—insisted that it would fail). In the decade after 2010 the Unique Identification Authority of India (UIDAI) managed to assemble a database of the records—including basic biographical details, address, and finger and iris biometrics—of more than 1.2 billion of the estimated 1.3 billion residents of India. Currently the database works to answer validation requests each month for about a billion fingerprints and about 200 million biographical queries. In both respects—the demographic scope of the database and its applied use in daily transactions—Aadhaar is unique. Most biometric regimes have spent decades issuing credentials and they confront intractable problems with the registration of large populations of the poor, the aged and the mobile. Much of this success has to do with the cunning design of the registration process (including the refusal to issue an identity card) and the pervasive use of incentivised outsourcing, but it also reflects the long history of bureaucratic identity certification, not least in the official categories of redress for caste inequalities. The project also suggests that the older public infrastructures of bureaucratic rationality function surprisingly well in India: most Africans would be astonished by the confidence Indians place in their postal service as the vehicle for the distribution of Aadhaar receipts (Chaudhuri, Nair in this volume). It is also clear that Aadhaar's success—like Safaricom's in Kenya—has provided many Indians

(perhaps the young and the technologically inclined especially) with a telos that breaks with the pessimism of the old paper-based forms of bureaucratic rationality precisely because it offers ordinary people new instruments for shaping these old processes (See Zaran's story in Nair in this issue). Data from IDInsight's most recent report suggests that the use of the Aadhaar number in regulating the allocation of government services is endorsed by almost all ordinary Indians, and that a majority endorse the use of live biometrics for authentication (Rao & Nair in this issue).³

It is strange, then, that the debate around Aadhaar often seems to take on a Manichean religious quality, with critics, especially, implying that support for the project, or even some of its constitutive elements, is anathema. The plaintive question that Lawrence Cohen's engineering colleague at Berkeley asks—"Why do you all despise us so much?"—seems to me to be worth considering in some detail (Cohen in this volume). Some of the animus may come from the bitterness generated by the two groups' very different abilities to act on the world, and, indeed, the breath-taking scale of the social engineering underway in Aadhaar, touching the lives, as it does, of a fifth of the human population. This ability to act, seems, interestingly, to have been much amplified by the efforts of ordinary people to make Aadhaar work. "We're doers," an employee told [Vijayanka Nair], as he sat in front of a poster that read "do(n't) (qu)it" (Nair in this volume). By contrast, the limited practical ambitions of social scientists-- constrained by their disciplines to offer critique and especially, after Scott, of large bureaucratic schemes—can be summarised in three words: "It'll never work." Yet there seems to be more at stake in this conflict, driven by the decisive place of individualised pathos as the currency of contemporary social science and, indeed, by the human interest stories that dominate popular culture. Like rancorous parents, both groups—engineers and social scientists—ventriloquize for the Indian poor, with one insisting on their investment in

³ IDInsight. "State of Aadhaar"[\[http://stateofaadhaar.in/\]](http://stateofaadhaar.in/), accessed 25 April 2019]

the refuge of opacity and the other endorsing strategies of recognition and formalisation. For some time the engineers seemed to be winning the argument, but it is still early days. Aadhaar has come of age amidst the somersault in global public attitudes towards technology and to surveillance in particular, and the project finds itself as the target of experienced international advocates (like the hacker-activist Baptiste Robert) who fear the implications of the project for their own or other societies (Solanki in this volume). Some of this international animus has certainly been triggered by the claims made on behalf of Aadhaar as a model for state building internationally, which raises the tricky question what kind of state the designers had in mind for it.

That Aadhaar's supporters in both the major political parties and the firms responsible have in mind the replacement of the fuels and grains of the PDS with frictionless cash transfers seems uncontroversial – Nilekani, certainly, is very clear about this; much more difficult is the question of what Aadhaar seeks to change institutionally. The Nehruvian political order is one quick answer, and especially the micro-economics of Indian socialism, which Cohen (in this volume) sees as the main target – the bogey – of Nilekani's 2008 manifesto.⁴ Cohen suggests that the engineers view Nehruvian socialism as the failed effort to care for the poor through the “control of markets,” or, perhaps more potently, as “one's father's technocracy.” There is, no doubt, truth in both of these points. But Nilekani also has a much more specific target : the Nehruvian “politics of reservation,” and especially the formal administrative allocation, registration and paper certification of caste status for individuals as a practical instrument for affirmative action and resource allocations. The genius of Aadhaar was to turn the obsessive registering energy of the Nehruvian state against itself by displacing the project of collective caste allocations with the technologies of radical individualisation. This raises two further questions. The first is why social scientists have

⁴ Nandan Nilekani. *Imagining India: Ideas for the New Century* (Allen Lane London, 2008).

been so quiet about the very unusual administrative systems of caste reservation⁵; the second is whether a system like Aadhaar, which requires citizens, firms, subcontractors and a host of state and semi-state agents to work together, can work elsewhere without a pre-existing administrative infrastructure and well-oiled habits of paper-based registration.

This prior history of caste status registration suggests another motivation for the explicit simplification that lies behind Aadhaar. The database, famously, adjudicates only national residence status – and not citizenship or migrancy – despite the attempts by nativist politicians to use it for those ends. There is another important contrast here with many African biometric identification systems, which reproduce the tribal categories of indirect rule inside the population register (and sometimes into the ID number itself). As Cohen shows, the engineers view the effort to weave nativist politics into the database as the contamination by the social of an otherwise clean and neutral instrument. The simplification of biographical questions to the three demographic tests of name, birth and address – scrupulously ignoring the explosive questions of citizenship and religion – has, by design, worked to expand the huge pool of successful applicants. Allowing registered family members or NGOs to attest for missing documents is also unusually flexible and it has also clearly been part of the effort to vacuum up the population in the shortest time. The IT workers who proclaim that the “more questions we ask, the more filter criteria we are putting, more exclusive [Aadhaar] will become” are expressing an important insight that could be

⁵ There are a few neglected exceptions. See Laura Dudley-Jenkins. *Identity and Identification in India: Defining the Disadvantaged* (Routledge, 2003); Avatthi Ramaiah. “Identifying Other Backward Classes.” *Economic and Political Weekly* 27, no. 23 (June 6, 1992): 1203–1207; Nomita Yadav. “Other Backward Classes: Then and Now.” *Economic and Political Weekly*, (2002): 4495–4500; Gang, Ira N., Kunal Sen, and Myeong-Su Yun. “Was the Mandal Commission Right? Differences in Living Standards between Social Groups.” *Economic and Political Weekly* 46, no. 39 (2011): 24.; Dipankar Gupta. “Positive Discrimination and the Question of Fraternity: Contrasting Ambedkar and Mandal on Reservations.” *Economic and Political Weekly* 32, no. 31 (1997): 1971–78.

usefully applied in, for example, contemporary Kenya (Singh in this volume; see also Baxi and Rao in this volume on simplifications and flexibility, and still remaining documentary constraints and disappointments). Yet there are some grounds, especially in Nilekani's explanation, to view the project's simplification of attributes as an attempt to halt the proliferation of reserved statuses, and administratively to impose, perhaps for the first time, a uniform individualism (linked to the intensely individualised technologies of credit transactions and risk evaluation).

A similar ambivalence—or perhaps it is a productive contradiction—applies to the impressive technological solutions that have been developed for Aadhaar. There is no space here to describe the technical arrangements that support the encrypted, always-available enrolment and authentication services that are provided by the UIDAI to a billion Indians. Suffice to say that the project is Google-like in its scale and capacities, and that the engineers have been careful in avoiding the problems of lock-in and control that have bedevilled many similar projects around the world (Singh in this volume; Aadhaar's database architectures are impressively public but information on the proprietary biometric systems provided by the Idemia subsidiaries is intriguingly scarce). Yet, notwithstanding the enormous resources in equipment, software and engineering, the distinctive and impressive commitment to openness, the open-ended scale of the project and the undeniable tenacity of the engineers, failure is a normal – and, as the papers here show, a constitutive – part of the way Aadhaar works as a system.

For years critics of Aadhaar have worried that lacing the number, and the requirement for on-line authentication, into the Public Distribution System (PDS) will effectively deny citizens access to welfare entitlements. The accusations of systemic failure have been met by denial, on-line dashboards that suggest the opposite, and – importantly – by revisions to the technical requirements to allow for exemptions and workarounds. Yet Indian states remain

impressively—and unusually—committed to live biometric authentication for access to the PDS. It is clear that failure is a normal part of this process—the argument may be said to have been finally settled by the authentication logs that Ajay Bhushan Pandey (the CEO of UIDAI) submitted to the Supreme Court hearings in 2018, which showed—presumably inadvertently—that his authentication attempts failed fully one-fifth of the time (Solanki in this volume). As the papers here show, for poor people interacting with Aadhaar over much more unreliable wireless and electricity infrastructures the normality of failure has nourished a widespread set of practical workarounds and, indeed, what can be described as a culture of dogged technological persuasion as they coax the networked automated tellers and point-of-sale machines to work. Again, what is impressive about this widely distributed effort to seduce the technology to perform, is the commitment and tenacity of ordinary people, intermediaries and officials to find working wireless signals or off-line (paper-based) workarounds. Nor is this requirement for persistent and ingenious care of the technology restricted to the extraction of resources. It is integral to the hidden administrative processes required to build the digital architectures around Aadhaar – seeding the number into the database for individual entitlements requires similar “sterling resolve and patience” in the face of routinized failure (Nair in this volume).

Ironically, then, Aadhaar—despite its efficient design, prodigious infrastructure, and the promise of frictionless performance—commonly serves to reanimate the administrative sludge that has long characterised the relations between citizens and the state. Some of this burden of administration is derived from the dependence on paper documents, and literate allies, in securing the digital credentials. There are some hidden paradoxes here. As anyone knows who has had to confront a bloody-minded bureaucrat (and South Africans have them in abundance), this can seem an intolerable and unconscionable hardship but there are also great social benefits—as Foucault shows—that follow, in the long term, from universal

downward pressure for paperwork. And those who complain of the burden of prior documentation should be alert to the purely digital, unconditional cash transfer (issued to all without a test of eligibility) as the logical remedy for the intolerable paperwork (Ferguson 2015). That, of course, may be Aadhaar's real goal.