Subverting ID from above and below: The uncertain shaping of India's new instrument of e-governance

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To be published in Surveillance & Society <http://www.surveillance-and-society.org/ > (forthcoming 2013). Please cite the version in Surveillance & Society when published.

Abstract

This article traces the contours of a new biometric project in India that aims to develop a universal biometric database for the unique identification of India's residents (UID, The Indian Unique Identification Project). It was launched in 2009 and by mid-2013 registered 430 million enrolments, making it the largest biometric experiment in the world. What is the rationale for and structure of this new instrument of governance and how does it affect the relation between citizens and state institutions? We discuss the legal framing of the project and present an ethnographic case study about its implementation among poor people in Delhi. We argue that within the heterogeneous social space of India the biometric project has opened up a terrain for multiple social negotiations. While the new technology propels fantasies about a corruption free well-ordered society the implementation runs up against innumerable challenges. The project struggles to find a definite legal form and suitable goals. Furthermore, the emerging link between people, computer generated data and projects of governance remains weak. By unpacking the relation between new technologies, emerging legalities, cultural bodies and social classifications, we evidence that UID is not one but many projects. Rather than a truth statement about identity UID is a ground for testing new relations between citizens and the state. They concern political question of the desire for order versus fear of control, and epistemological question of the inter-relation between regimes of transparency and social complexity.

Introduction

Surveillance is often depicted as being a purposeful, systematic and focussed activity. This notion of surveillance as rationally directed undertaking informs both utopian and dystopian images of surveillance society (Lyon 2008). The introduction of new technology recurrently triggers fantasies of perfected control, hopes for more efficient governance and simultaneously raises the spectres of totalitarian control and human rights infringements.

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However, surveillance studies has long established that practices are much more contingent and the impact of surveillance technologies highly contextual. They emerge out of complex social processes of adaptation, appropriation and subversion (Cardoso 2012; Hier et al. 2007; Rhodes 1998; Rabinow 1993). In this article we push this analysis further, questioning assumptions that the implementation of surveillance follows a clear aim that can rely on a broadly shared taken for granted interpretation of the function of technology. While the invention of new surveillance texts is based on a certain confidence in the governability of prior unchartered terrains, the material artefacts that are created produce new complexities. Our article examines such complexities as they unravel in the process of planning and implementing biometric technologies for identification. We discuss open-ended negotiations that translate the abstract ideal of universal identification into legal frameworks and technologies of governance. What happens if policy makers render policy effective by promoting compromises rather than agreeing on one unified approach? What happens to the truth claim of a new technology of governance when it is perpetually questioned or rendered liquid in the process of defining its boundaries, usages and procedures? Our article is both an evaluation of a concrete Indian policy, as well as an argument about the difficulties of naturalising a claim to universality across a diverse set of social domains.

In 2009 the Indian government launched the Unique Identification Project (UID, Hindi: *aadhaar*) with the aim to make available a system for unique identification of all residents. Enrolment is proceeding rapidly and by September 2013 the UIDAI (Unique Identification Authority of India, also known as the National Identification Authority of India NIAI)[3] counts close to 430 million enrolments, giving coverage of about one quarter of India's population. India's experiment with biometrics on a scale never before attempted is of global significance. It now exceeds Japan's ID system Jukinet which has only about half as many registrants, is said to be influencing developments in Indonesia, another of the world's largest countries, and the UIDAI is already active in assisting Papua New Guinea in the development of an ID system (Zelazney 2012).

This recent proliferation of biometric technological for the purpose of civil identification continues a more than 100-year old history of experimenting with body imprints for the purpose of improving governance. Towards the end of the nineteenth century the British colonial administration in India 'invented' fingerprinting as means to uniquely identify individuals among the large non-white population (Cole 2001). The project was mired in technical difficulties of cataloguing fingerprints in ways that would allow matching fresh fingerprints to prior recordings stored in large archives. In the course of its subsequent global development – mainly for criminal record keeping but increasingly also for civil identification – fingerprinting has been haunted by debates about the accuracy of recording and reading, the possibility of forgery and corruption, and concerns about infringements on civil liberties (Cole 2001). Advanced computer technology provided a seeming solution to the technical challenges of accuracy and matching, so that today it appears that legal

[3] When UID was first rolled out the body governing the scheme was called UIDAI (Unique Identification Authority of India). However once the new legislation regarding UID is passed NIAI (National Identification Authority of India) will be the official name for the central authority governing the program. In this text we will use both names in the context in which they occur. The institution they refer to is the same.

restrictions are the only guard against the (misplaced) expectations as to the absolute infallibility and transparency of fingerprints (Cole 2001: 257; see also Edmond & San Roque, this volume).

India's biometric project begins with this confidence that computer technology has advanced sufficiently to render also huge heterogeneous populations legible. Its expansion follows the aim to make governance more effective and more specifically promote social justice through inclusive growth (Rao 2013).[4] Policy makers in India believe that the lack of a formal proof of identity significantly contributes towards economic marginalisation of poor people, and hope that universal biometric registration will provide a solid basis for an efficient and effective welfare state and improve the integration of poor people into the formal economy.[5] Two immediate utilities in Indian policy drove UIDAI soon after its inception. Firstly, India seeks to use UID to expand its banking services to previously unreached people, who by saving and accessing insurances would be enabled to protect themselves from financial shock (Standing Committee on Finance 2011). Secondly, the new system aims to protect the welfare systems from users of incomplete, fake or duplicate identities and thus enable efficient targeting of entitled populations. It would cut short corruption through middle-men and link needy citizens through technology directly to optimised government programs.[6] Against such planning optimism stands a host of critiques (Chander 2010; Dass 2011; Greenleaf 2010). Engineers raise severe doubt about the ability of current technology to reliably handle the amount of data required to manage up to 1.2 billion Indians. There is concern about potential identity theft and data misuse through hacking and manipulation of entries. The program is also very expensive considering that its results are contingent.

So far missing in the vigorous debates about advantages and disadvantages, utilities and failures is a focus on practice. This paper investigates the human action that shapes UID. It is a truism that the technology has both empowering and surveillance potential. But in order to know what (and indeed which) these are and how they play out we must study the

[4] Rapid growth, the government of India noted in its 11th five-year plan (2007-2012), does not automatically trickle down. It is the responsibility of the state to ensure through targeted programs that poor people are given equal opportunity to contribute to and profit from economic growth. The plan identifies state directed creation of employment opportunities, improvement of access to essential services in health and education and programs for skill development as key areas for social investment. The policy strongly recommends developing new channels for distribution, to combat leakage, prevent fraud and guarantee equality of access. Biometric technology is introduced as means to achieve greater transparency, efficiency and justice.

[5] The initiative for universal biometric registration is historically liked to a project that seeks to assist those 'below the poverty line' (BPL), by proving BPL families with a unique ID, a scheme which was given administrative approval in 2006. A need was perceived for a neutral agency to hold the BPL ID data, but after a series of meetings in 2007-8 the UIDAI emerged as a body that would create IDs for all residents of India, ostensibly to avoid replicating the exercise for different social groups (Standing Committee on Finance, 2011).

[6] Planning Commission 2012: The Planning Commission acknowledges that determining service entitlement is a process separate from identification. NIAI documents do not offer a separate discussion on the predicaments of determining eligibility. Identification features as a root service that form the basis for various social tasks and figures as technology that is socially neutral because it exists prior to any social classification for which it might subsequently be used.

"terrain of plausible action, the terrain on which citizens' transactions with the state and the market agencies occurs will change" (Maringanti 2009: 38). Such a project takes into account recent insights from the sociology of the state. A proliferating number of studies demonstrate that states are not coherent, unified entities, but are made up of a multiplicity of institutions, intentions and performances (Das & Poole 2004; Hansen 2001). Consequently, governance is an open ended social process saturated with negotiations that create multiple effects and many unintended consequences (Li 2007; Scott 1998; Rao 2010). The question that emerges then is how biometric technology is changing the way the state is imagined and power relations negotiated.

David Lyon (2003) emphasised the growing significance of "social sorting" as a consequence of biometric governance. Attention to personal details in electronic surveillance permits the managing or manipulating of behaviour for the sake of preventing crime, increasing profit or enhancing efficiency. The case is demonstrated in studies of e-borders that evidence the growing importance of policing strategic entry points as part of routinized governance. E-gates protect and enhance the freedom of people who are trusted to exhibit appropriate habits permitted and required in spaces of regulated sociality. In turn, those whose activities and desires are perceived as burdensome, unattractive or destructive, are forced to stay outside (Epstein 2007; Fuller 2003). In contrast to this discriminatory logic, India's UID project prides itself to be inclusive and universal. UID does not aim to deter disadvantaged citizens from entering spaces of affluence, but seeks to open up participation in the official economy to all and provide easy access to welfare. However, like e-passports it permits participation only of those who pass the 'gate', whose bodies have been registered and rendered legible in the systems of the state. Here then is a double danger. The trust in the universality and accuracy of biometric technology can generate new forms of injustice through exclusion and accusation. UID might also develop a life beyond its current brief to become an instrument for enhanced surveillance by the police or government.

While the theoretical advantages and dangers have been discussed heatedly in the Indian public sphere, they are yet to be tested against the evolving utilities. This article captures the social practise that shape UID. It began as a conversation between two scholars of law and anthropology both struggling with the same problem that in comparison to the rhetoric of its safety and usefulness, in practice UID seemed undeveloped and ill-defined. It functions while it is being developed. It is a social fact – used and appropriated by citizens and the state before it has a legal shape and is deployed for social security programs before technology for biometric authentication is operational. By studying the processes of debating, appropriating and using UID, we demonstrate that UID is not a unified technology but has multiple social lives. We address four significant arenas of social action: conflict over and contradictions in legal framing, enrolment practices, welfare usages and banking activities.

We begin with a critical reading of legal texts and interpretation of debates that accompany the making of UID's legal frameworks. It is based on an extensive reading of official texts documenting the emergence of the UID from 2009 onwards as well as news reports and critiques by opponents and advocates of the scheme as it developed. Some of these texts proposed, and others assumed, the legal framework within which the UID would operate, and for a year or so the UID scheme followed the normal course of evolution of such schemes, with the National Identification Authority of India Bill being proposed to the Lok

Sabha (the 'House of the People', ie. the lower house of the Parliament of India) in 2010 for enactment. There the Bill has remained, in Parliamentary gridlock and the subject of strongly contested Committee reports recommending it be re-drafted. Nearly three years later the Bill remains in legal limbo. This required that the actual uses of the UID that have emerged (and are still emerging) in the legal vacuum must be read against both the promises made when it was proposed, and the proposals for regulation contained in the un-enacted Bill. At this point the legal framing is not a significant constraint on the development of the UID, but it could again become so, and might have unexpected consequences for some de facto uses that have emerged, if and when the Lok Sabha decides to legislate.

In the second part of the following article we explore the practical usage of UID. We summarise the experiences of homeless citizens during enrolment processes the social life of the first UID enabled welfare project in Delhi (Delhi Grain Scheme) and finally the implementation of the "inclusive banking" policy. Data about processes of implementation was collected by Ursula Rao during ten months of ethnographic fieldwork during the years 2010, 2012 and 2013. Research methods included semi-structured interviews, informal discussions and participant observation as well as formal interviews at the UID head office and among the employees of sub-contracted IT companies implementing roll out, representatives of the Delhi government designing UID enabled projects, and bank employees working for "financial inclusion". Field observations and informal discussions involved the homeless community in central Delhi and inhabitants of the labour class suburbs of Ghevra-Savda and Bawana in West and North-West Delhi. The researcher followed enrolment procedures over a course of two months at three enrolment stations and with the help of NGOs traced the processes through which poor people applied for bank accounts and UID enabled projects.

We conclude that in its current form the UID is neither a totalising project nor an effective universal management tool. It is an arena for the negotiation of new possible relations between citizens, state agencies, and market actors. Its social life is shaped through multiple negotiations about the desirability, possibility and practicality of control. We encounter well established ideological conflicts and new emerging compromises that contribute towards popularising UID while undermining its unity and transparency. Rather than acting as a technology for universal identification, UID promotes a better understanding of the many divisions that characterise social life in India.

Evolving legalities

The UID exists in a legal vacuum, since no bill regulating its operations has been passed yet. The *National Identification Authority of India Bill* (NIAI Bill) has been before the Lok Sabha since 2010, but has not been enacted. Despite this lack of legislation the UIDAI continues to receive budget appropriations, its Chairman is treated as a Cabinet-level appointee, and it has been authorised to increase its UID enrolments from 210 to 600 million by June 2013 'in its stronghold areas of operation'[7] (Zelazny 2012: 25). Officials are now starting to go from door to door with enrolment forms, and 31.19 crore (312 million) UIDs were issued by April

[7] Delhi; Andhra Pradesh, Gujarat, Haryana; Himachal Pradesh; Jarkand; Karnataka; Kerala; Punjab; Maharashtra; Goa; Madhya Pradesh; Rajasthan; Sikkim; Tripura; Pondicherry; Chandigarh; Daman and Diu.

2013[8]. In 2011 an exceptionally hostile report by a Committee of both houses of the legislature (Standing Committee on Finance 2011) opposed the project arguing that the bill was 'conceptualized with no clarity of purpose', leaves too much to be sorted out after implementation, provides UIDs to non-citizens, and is extremely dangerous to privacy in the absence of the prior enactment of national data protection legislation. The committee opposed the bill by a 13/3 majority and recommended that the Indian government either reconsider the whole UID scheme (with a new Bill) or abandon it and transfer its existing data to the National Population Register (NPR). The following analysis of the yet to be enacted draft bill will demonstrate the loopholes in the proposed legal framework, the lack of clarity regarding the data to be collected and potential and actual function creep that turns a voluntary scheme into an instrument for surveillance.

When UID was conceived in 2009 the policy document (UIDAI 2009) referred to the collection of 'photographs' and 'finger prints' as biometric data to support identification. However, the approach changed quickly and already by late 2009 the project had expanded to include a larger number of fingerprints and iris scans to be taken in an attempt to overcome 'the risk that fingerprints might not be sufficient to ensure uniqueness', and because iris scans are considered more reliable from a very young age (UIDAI Committee on Biometrics 2009). Even after this addition the NIAI draft bill puts no restrictions on further expansion of the data required for registration. It allows collection of 'biometric information' defined as 'a set of such biological attributes of an individual as may be specified by regulation' (s2(e)). Such regulations to expand demographics and biometrics are to be made by the NIAI itself (s2(p)), not even by the government, and thus will lack any democratic legitimisation.

A matter of even greater concern is the lack of clarity with regards to social data to be included. The draft bill states the NIAI will collect 'information relating to the name, age, gender and address of an individual (other than race, religion, caste, tribe, ethnicity, language, income or health), and such other information as maybe specified in the regulations for the purpose of issuing an *aadhaar* number' (s2(h)). There is further specification that information is not supposed to be collected on a person's 'race, religion, caste, tribe, ethnicity, language, income or health' (s9). However, regardless of this provision and in line with the larger welfare aim, the UIDAI is supposed to 'take special measures to issue *aadhaar* number to women, children, senior citizens, persons with disability, migrant unskilled and unorganised workers, nomadic tribes or to such other persons who do not have permanent dwelling house and such other categories of individuals as may be specified by regulations' (s10). This of course is impossible without precise social data: for example, how is it possible to take special measures for 'nomadic tribes' without collecting information on a person's 'tribe, ethnicity, [or] language'?

These vague formulations are an invitation to function creep by way of the (self-regulated) progressive expansion of the power of the UIDAI. Such concern is justified considering that the voluntary nature of registration has already been abandoned. The NIAI draft bill states that 'every resident shall be entitled to obtain an *aadhaar* number' (s3) with

[8] CIOL website 25 April 2013 at http://www.ciol.com/ciol/news/187597/government-declares-uid-npr-enrolment-india

no mention of being compelled to obtain one. But this was and is a sleight of hand, because there is nothing in the Bill, or in any other current Indian law, to stop any organisation, public or private, from making possession of an *aadhaar* a condition of obtaining any and every benefit. UIDAI was also careful to state in the fine print that 'in time, certain service providers may require a person to have a UID to deliver services' (UIDAI 2009a: FAQ 10), and that both governments and Registrars (public and private sector) 'may mandate enrolment' by their clienteles (UIDAI, 2009: p6). Any of India's Central, State and Territory governments may require UIDs for particular purposes. The myriad of public sector and private sector Registrars could also accept mass involuntary registrations of individuals by supply of data from other databases, because India has no data privacy laws to prevent this occurring. When children will be allocated a UID at birth, any voluntariness would in any event disappear.

Over the last three years we have seen the systematic erosion of voluntariness. Such development was predictable if the UID is indeed planned to serve reliable delivery of services. Previously scattered developments are now crystallising into a mandatory linking of *aadhaar* use and the availability of social benefits. Public sector oil marketing companies started making it mandatory in three cities for *aadhaar* numbers to be provided in order to obtain refills for subsidised cooking gas (domestic LPG), or to obtain a new connection, aiming to plug alleged subsidy leakage (Mishra 2011). The Karnataka state government decided to make seven major welfare services[9] '*aadhaar* enabled', which officials confirmed to mean that failure to provide a UID would mean suspension of services or refusal to issue new services: '[l]inking this would help them prevent pilferage and leakage of services and also eliminate duplicate and ghost entries' (Chandrashekar 2012). By the time of the 20th crore UID launch by the Prime Minister and Sonia Gandhi in 2012, '*Aadhaar* enabled' schemes were mushrooming across India (*Daily Bhaskar* 2012).

Yet, it appears that acquiring an UID is also becoming mandatory even where it is not attached to any entitlements due to the procedures laid down for enrolment. In 2012 various state institutions agreed that the UIDAI will capture the biometric data of people in 16 States (and 600 million enrolments) and the Home Ministry's National Population Register (NPR) will cover the balance. Disputes between the NPR and the UIDAI over the quality and use of each other's biometrics delayed enrolment progress until 2013 but now seems to be resolved[10]. This means 'that an individual's registration in the NPR will entail automatic enrolment in the UID. The *Citizenship (Registration of Citizens and Issue of National Identity Cards) Rules 2003* make it mandatory for everyone to be enrolled in the National Population Register. Thus, although the Aadhar number does not confer citizenship, one cannot now be(come) a citizen anymore without owning an Aadhar number' (Privacy International 2012: 63). The NIAI draft bill further specifies that once a person has entered the UID system – whether voluntarily or not – will be compelled to 'update their demographic information and biometric information from time to time in such manner as may be specified' (s8). There are

[9] 'Social security pensions, IP pumpsets, membership of Milk Co-operative Federations, Bhagyalakshmi scheme, LPG connection, ration card and Mahatma Gandhi National Rural Employment Scheme (MGNREGS)'.
[10] 'Compromise reached on UID project row', CIOL website, 30 January 2013, at http://www.ciol.com/ciol/news/105429/compromise-reached-uid-project-row

no provisions allowing a UID to be renounced. And if a person does not do what the NIAI 'requires', they are in breach of the law; thus new reasons for excluding participants from other benefits have arisen from the UID system itself.

India has no general data privacy legislation, and the NIAI Bill has not been enacted. Even if the Bill was enacted, it would provide few privacy protections. It does not, for example, include any provisions for civil remedies against Registrars or the NIAI, and no offences for misuse of information may be prosecuted except at the instigation of the NIAI itself (s40). The only current protection against misuse of the personal information that Indians hand over as part of the enrolment process is the ill-defined law of breach of confidence, and some very general constitutional protections of privacy (Greenleaf 2011). In this *lacuna*, the UIDAI and all of the organisations with which it collaborates have been quick to exploit opportunities to have people sign away any rights they might have, so as to authorise unlimited use of the information they hand over. The UIDAI, despite its constant claims to protect the confidentiality of the information it is given, undermines this by its policies and the agreements it requires and that it itself enters into with other agencies.

The forms used for the enrolment process do require that the 'resident's consent for information sharing' (by the UIDAI) must be obtained, and according to one report the registration process cannot continue unless this consent is obtained (Privacy International, 2012: 65). The NIAI Bill (although without legal authority), however, allows the NIAI to share data of *aadhaar* holders 'with their written consent, with such agencies engaged in delivery of public benefits and public services' as it decides (cl 23(1)(k)). The practice of the UIDAI, and the policy of the NIAI Bill, appears to be to established data matching of information between public agencies in India, using the UID as the matching key. With the effective merger of the UID and NPR data sets, the inclusion of the extended biometric data takes on significant importance, because it is exactly the information that is desired by the security apparatus, and is increasingly commonly used in procedures in many countries for border control. Zelazny notes the 'undeniable security benefit' of the iris biometric (2012: 9). One of the principal tensions between the UIDAI and the NPR is that, because UIDAI enrols residents, non-citizens may be enrolled, whereas 'NPR views its mandate from a security and immigration perspective, which could be at odds with a philosophy and inclusion and mobility of identity' (Zelazny 2012: 25). Following their compromise agreement, 'UID is reviewing its enrolment procedures in response to security concerns raised by the NPR' (Zelazny 2012: 25). If UIDs become limited to citizens, the UIDAI will have moved beyond its avowed mission of establishing identity and have moved into establishing entitlements, starting with citizenship.

In summary, in less than four years since its announcement, the framework of the UID system has shifted. In an unclear and undefined legal environment we observe the fine tuning of biometric registration for various purposes to satisfy the aims of the welfare state and security forces. As a tool in the making the legal vacuum not only allows fantasies of perfected population management to multiply, but provides space for actual shifts in practices of recording and usage. The development is open-ended, allowing for the continuation of both utopian and dystopian imaginations. Meanwhile UID is developing a social life on the streets. Here coded technology meets vulnerable human bodies and welfare institutions struggle to manage conflicts between institutions and poorly documented citizens during the

roll out of new welfare schemes. Practical implementation has multiplied the potential areas of usage while at the same time limiting its usefulness as instrument for efficient sorting.

When bodies meet machines

Turning now to the local practices associated with the rollout of the UID, this following case study describes the experience of Delhi's homeless citizens during enrolment. It is based on observations in three enrolment stations surveyed during a period of two months in 2010. This investigation threw up a number of questioned followed up during later investigation of usage in Delhi that lasted for 10 months. UID registration in Delhi commenced with the attempted enrolment of homeless citizens. Their case is interesting because as a highly marginalised group they are among the declared target groups of biometric identification. Their formal recognition by way of registration became possible due to the engagement of an NGO, which we will call the *Homeless Service*. In 2009 the NGO conducted a survey capturing the social data of 72,854 homeless citizens. Social workers hoped that official registration would reduce the invisibility of this itinerant population to the welfare state, and enable reliable access to social security. Participation in the survey certainly opened an alternative avenue for UID enrolment. Ordinarily UID registration requires identification through an official document such as a driving licence, passport or voter ID.[11] However, people without such documents were permitted to rely on officially registered introducers. India has an established practice of allowing people without documents to establish their identity through personal introduction by an authority. Institutions regulate whom they accept as introducer, which may be such persons as prior members of the institution, persons with official documents or state employees. The UID defines introducers as "individuals (for example, Registrar's employees, elected members, members of local administration bodies, postmen, influencers such as teachers & doctors, Anganwadi / ASHA workers, representative of local NGO's etc.) identified by a Registrar and registered in UIDAI's CIDR as 'Introducers'".[12] The status of introduces is typically also given to employees of NGOs involved in the propagation of UID. The *Homeless Service* too had registered introducers and would vouch for all those homeless citizens who existed in their data base. But like most social intervention, enrolment of homeless citizens started with a compromise. The survey had become an advantage for more stationary homeless people with permanent sleeping places. .The sedentary citizens of Delhi's streets proceeded to gain a new identity that resulted from negotiations between bodies and machines. But more mobile populations either missed the survey or could not be traced after they had left the recorded location

Enrolment proved to be difficult. As homeless citizens began enrolling they found their fingers to be wanting. The first effort at encoding a perfect set of ten fingerprints usually failed. The machines could not identify the unique contours of fingers damaged during a harsh life on the streets. Enrollers began a struggle against the dust that had settled into the skin of manual labourers. A wet towel was passed from person to person. "Rub your hands

[11] Refer for details instructions on the official website of the UIDAI, http://uidai.gov.in/how-to-enrol-for-aadhaar.html

[12] http://uidai.gov.in/index.php/component/fsf/?view=faq&catid=0&tmpl=component&faqid=354, accessed on 23 August 2013.

strongly" technicians would repeat up to five times to produce a sufficiently detailed reading. It improved the success rate, but could not help those with who had lost fingers or fingertips. They were told to wait for a specially authorised enroller to arrive who could certify their disabled status. This person never showed up. Thus all those bearing the marks of a high risk construction industry in form of deep scars, severed fingers or mutilated hands, or those whose biometric data could not otherwise be registered remained excluded.

Gender posed a second rather different challenge. Women had little issue with finger prints. Their predicament was less physical and more habitual. Many women could not get the photograph and their iris scan right. Trained to lower their gazes or veil their faces in an act of modesty, they were uncomfortable when staring straight into the light of a camera. Their bodies resisted the humiliating intrusion by blinking and producing streams of tears. A box of tissue and the authoritarian hands of enrollers – which arrested heads and pulled the tissue below and above the eyes to discipline nervous eyelids – helped the process roll on. Sometimes the younger unmarried sister in law was called to cover up for a freshly married shy *bahu* (daughter-in-law) who could not be entrusted to the crude hands of a young non-related male.

The difficultly to recognise the entire range of bodies through biometric technology has been observed also in other contexts. Pugliese (2009) quotes from user manuals written for technicians in the United States. They warn operators about chances of high failure rates when enrolling dark-skinned faces and Asian fingerprints.[13] In India Dr. R Ramakumar, an expert witness before the Lok Sabha Finance Committee stated that 'it has been proven again and again that in the Indian environment the failure to enrol with fingerprints is as high as 15% due to the prevalence of a huge population dependent on manual labour' (Standing Committee on Finance 2011: 11). It seems that at the level of enrolling potential welfare recipients the most significant issue at this time is not the risk of greater surveillance but a high likelihood of exclusion. Further, the need for frequent repetition and the high error rate during enrolment processes raises the spectre of accumulated error in the future when the data are used for the purpose of identification. What happens if individuals are not recognisable as against the data stored for them? Will such failure of readings lead to exclusion? How many repetitions would be allowed for determining whether there is a match? And will there be mechanisms for re-recording if a person experiences permanent problems? Judging by prior experience about the difficult relation between poor citizens and state institutions we should expect that more technology is unlikely to flatten social hierarchies and ease access (Anjaria 2011; Gupta 2012; Rao 2013). Yet, as we shift the focus to enter the domain of implementation we can see how the UID system is evolving in spite of what would seem to be fundamental failures. The study of the Delhi Grain Scheme demonstrates that the problem

[13] Biometric technology entertains a historical relation with other racialised systems of knowledge. Maguire (2009, 2012) recounts the unsuccessful efforts of imperial scientists to define rules for recognising race through fingerprints, a program drive by the desire to use biometric measures for achieving social classifications. The ultimate triumph of biometric technology promotes an ideology of individualism that stands in contrast to the beliefs in racial determinism of evolutionist science. Maguire describes the achievement of the French police officer and biometric researcher Alphonse Bertillon as the discovery that "recoding the body's markers, normally common to all, in sufficient detail [...] renders them specific to one." (2009: 12). Biometric registration became a function of governing collectives through recognising individuals.

of high failure rate might not play out in expected ways. Those involved in the provision of welfare payments in UID enabled projects may well find ways to function without biometric authentication. We see that the new tool of management is entangled with long standing bureaucratic procedures.

Managing Welfare with UID

In 2012 the Delhi government decided to confront a chronic shortage of affordable food supply for poor people. The Public Distribution System routinely provides subsidised cereals, sugar and cooking gas to people living below the poverty line. For this purpose the national government fixes quotas of eligible people for each state, with Delhi receiving subsidies for approximately 409,000 citizens. However, a vulnerability survey conducted in the city between 2009 and 2010 provided evidence that the number of needy people far exceeded this figure. As a solution the Delhi government launched the Delhi Grain Scheme (Dilli Annashree Yojana) with the intention that is would eventually support up to 200,000 people living below the poverty line, but are not receiving subsidised rations, with necessary resources for survival. Eligible participants were selected from the data base of the vulnerability survey and encouraged to submit an application, which consisted of the application form, a document as proof of address and identity, the UID number and details of a bank account linked to the UID number. Successful applicants were to be paid an amount of Rs 600 (€ 8.50) directly into their accounts.[14] This amount would cover the difference between the official market rates and subsidised rates of grains sold in fair trade shops for an equivalent quantity of food provided to beneficiaries of the Public Distribution System.

Early in 2013 Ursula Rao traced the functioning of this scheme. She interviewed the inventors of the project in the Delhi Government, officers in the Department of Food and Supplies who operationalized the scheme and employee of NGOs responsible for its implementation. She got involved in assisting social workers in processing applications in two working class neighbourhoods and conduced informal conversations with beneficiaries. Two immediate findings stand out. Firstly, while all applicants had to submit their UID number, it was not accepted as sole proof of identity, but had to be accompanied by another more established document such as a voter ID card. Secondly, at no point in the application process were people actually asked to ascertain their identity by way of biometric authentication. Neither the banks that opened UID linked accounts, nor the government agencies, had any mechanisms in place for checking whether the UID numbers submitted actually belonged to the applicants.

For a person familiar with the Indian bureaucracy none of this is particularly surprising, and it is consistent with other studies. Many studies show (Hull 2003, 2008; Rao, forthcoming; Tarlo 2003), that documents develop their own social life that is usually quite distinct from the aim they are said to serve. Rather than being a departure into a new era of population management, UID is integrated into standard procedures that ignored the most salient feature of biometric registration, its function to match entitlements to bodies. In case

[14] The name of each applicant had to be cleared by the Department of Food and Supply, which would confirm that the application was not receiving rations through the Public Distribution System.

of the Delhi Grain Scheme subversion took place from above. Authorities used the requirement for an UID not for the purpose of identification per se, but to entice people to acquire bank accounts, and to thus enable the shift in welfare delivery towards easily traceable cashless payments. In 2013 the most palpable outcome of the Grain Scheme was a new enthusiasm for UID enrolment and a flurry of banking activities. With the help of participating NGOs thousands of slum dwellers began opening bank accounts. In this sense the Indian government did achieve one of its core aims, namely to expand the formal economy by increasing banking activities. The Planning Commission (2010: iii) explicitly argues that one purpose of UID is to "help poor residents easily establish their identity to banks. As a result, banks will be able to scale up their branchless banking deployments and reach out to a wider population at lower costs." However, despite this local experience, the link between UID and banking remains weak. Banks did not use UID for authenticating the identity of account holders, but to participate in money circuits maintained by the state. The rupture between intentions and practices becomes increasingly clear as we move deeper into the various usages of UID. The last example elaborates this aspect of banking using the case study of homeless citizens discussed before.

Homeless Banking

Historically homeless citizens in India have rarely been included in welfare schemes. The homeless survey, discussed above, was intended to change this situation and provide access to welfare payment through possession of a bank account. Homeless citizens had been told that banking would bring improvement to their lives, and that having an UID would enable the opening a bank account. Ranu from the *Homeless Service* took up the mission of helping their clients become regular bank customers. However, when interviewed in 2012 she was annoyed. "Since a year I have been visiting banks. They keep telling us that it is not mandatory for a bank to accept UID as a basis for opening a bank account. Even national banks are unwilling to help homeless citizens to acquire no-frills[15] accounts despite the fact that the National Reserve Bank instituted the no-frills account in 2005 specifically for disadvantaged and poor citizens:

> "With a view to achieving the objective of greater financial inclusion, all banks should make available a basic banking 'no-frills' account either with 'nil' or very low minimum balance as well as charges that would make such accounts accessible to vast sections of population. […] All banks should also give wide publicity to the facility of such a 'no-frills' account including on their web sites indicating the facilities and charges in a transparent manner."[16]

During her visit in 2012 Ursula Rao decided to follow up on the access to banking for the homeless. Together with Sema, an employee of the *Homeless Service*, she approached the

[15] No-frills accounts allow people to save and withdraw money up to 50,000 Rs

[16] Reserve Bank of India, document, DBOD No.Leg.BC.18/09.07.006/2011-12, 1 July 2011, http://rbidocs.rbi.org.in/rdocs/notification/PDFs/56LD300611FL.pdf, accessed on 20 August 2012. In 2012, the term no-frills account was replaced by the name Basic Saving Accounts to avoid negative stereotyping (The Economic Times 2012, Business Standard 2012).

manager of the Old Delhi branch of the Business Bank. The manager explained that a new customer would have to be introduced by a current account holder, provide a signature and present a photo ID with address. Would a UID registration be accepted as identity proof? The bank manager answered that UID would not help them identify the whereabouts of the client. "We need an address for the purpose of correspondence", the officer asserted. We replied: "What about a village address? Homeless citizens could submit their hometown address? Would that suffice?" The officer remained unmoved and explained patiently that a Delhi branch caters to Delhi residents and homeless were not legitimate, registered and authorised urban settlers. We tried for another half an hour and then took leave to return with more documents and the head of the *Homeless Service* next time and try again.

Our conversation with the bank manager illustrates an obvious collision of two meanings of the term identity. While the UID authority uses the term in the very narrow sense of accounting for physical uniqueness, corporate managers are concerned with social standing, trust and desirability of a relation. Identity in this sociological sense is based on social classifications that cast homeless as unattractive customers, based on expectations about their behaviour. Yet, not all efforts at banking were unsuccessful. Further inquiry brought me to the Social Bank near one of Delhi's permanent homeless shelters. Here the manager generously opened no-frills accounts for all owners of homeless ID cards. The bank was not concerned with the UID but relied instead on the registration with the *Homeless Service*. Their representative Mohammad vouched for homeless customers and trained them in the activity of saving:

> "It is difficult to convince people to trust banks and consider that their money is safe and does not get swallowed up, like it can happen when they give it to a rich business man to look out for, who might then run away with it. I have to explain a lot at night when we sit in groups. Sometimes I also put pressure and coax people into saving by telling them that the bank is getting annoyed with their slack attitude and threatens to close their accounts." (Interview 29.6.2012)

Through Mohammad's effort 500 homeless citizens had opened accounts in the Social Bank. Mohammed regretted that only 100 of these were active and only 10 operated regularly. The financial incentive for him as warden, who earned 2% from each transaction, was slim. The bank admitted too that with 400 empty accounts and 100 with savings between Rs 100 and Rs 800 the scheme was not exactly a financial success. Clearly more is required for social inclusion than technological innovation. Technology offers no pedagogy of life. Biometrics can discriminate between compliant and non-compliant bodies on the basis of programmed codes, yet is cannot establish trust, teach the logic of banking or provide incentives for investing in the formal economy.

The lack of take up of no frills back accounts (and the low levels of activity) prompted further investigation into the questions of why, then did homeless citizens sign up for UID, if banking was no priority? Rao's interviews produced different variations of the following dialogue.

Ursula: "Why did you enrol in UID?"

Raju "We will get an identity card."
Ursula: "How does that help?"
Raju "The Police won't harass us!"
Ursula "What else can you do with the card?"
Raju "I don't know. You tell me!"

The answers point towards an open future and the *perceived* usefulness of possessing an 'ID card' especially when confronted with the penalising state. Homeless citizens provided animated accounts of nightly encounters with the police, when their UID card had prevented the police from beating them up or chasing them away. Here subversion of the technology from above discussed in the last section meets creative appropriation from below. Just like the Delhi government, homeless citizens began to invent utilities for biometric registration on the basis of established parameters of the state-citizens relations. It worked instantly, because it required no computer or electricity, no certificate of eligibility or any other document of authorisation. Social acceptance was instantaneous and based on the assumption that registered bodies must be authorised bodies.

Conclusions

In this paper we argue that the uncertain status of the biometric project is not restricted to its unclear legal formulations, but is a characteristic of the entire operation from conception to execution. As we moved through the various areas of UID related activities our attention has shifted. The discussion of legal uncertainties raised the spectre of surveillance society and the dangers of a creeping expansion of the powers of an institution not legitimised by democratically established legislative or regulatory frameworks. The actual enrolment practice demonstrated that exclusion of the most vulnerable people becomes a distinct possibility. However, this concern is complicated and to some extent undermined by the experience of implementation that simply ignores the biometric function of the new registration for the sake of quick implementation, or turns instead to older, established bureaucratic and familiar relationships to enable either enrolment or access to apparently UID dependent services.

The rapid spread of UID into diverse sites of social interaction has turned biometric technology into a routine instrument for governance, while at the same time undermining the goals of unity, transparency and universality. Four years after its inception UID has diversified to become many things. There are still those who maintain that the project's sole technical goal is the reliable identification of individuals, while it is also justified as a fundament of a new comprehensive approach to social welfare and economic inclusion. As a legal entity UID remains undefined and open for reinterpretation at any point. At the level of practice UID is treated to be a mouldable technology that is flexibly adapted to the highly contextual conditions and needs. It is a truism that in this situation there is no reliable safeguard against misuse and no guarantee of inclusion. So far there is also no indication that clarity and transparency are distinct characteristic of the biometric endeavor.

At the conceptual level UID confronts us with the fragile character of universal truth claims. UID as a technology for the production of one universal truth about the body as

identity is staged and maintained against a multiplicity of desires and aims, physical and social conditions. However, rather than transcending these diversities, the biometric project become entangled in them. Policy makers maintain legal loopholes in order to leave space for possible future usages of an evolving technology. Enrollers struggle with incompatible bodies, banks defend their institutions against the equalizing effects of inclusive banking, and bureaucrats invent usages that will raise the profile of UID at the cost of undermining technical accuracy. For a technology to become universal more is required than the dissemination of the same machines across a certain space. Cole (2001) impressively demonstrates why anthropometry lost out against fingerprinting. Practical experiences demonstrated that local usage of tools for measuring the body created intolerable variances that prevented effective comparison. Fingerprints in turn appeared objective, because their facilitated reliable comparison across time and space. Not withstanding limitations, the technology became idealized as being independent of the enroller allowing it to become an accepted tool in the criminal justice system (see Edmond & San Roque, this volume).

The rapid expansion of electronic fingerprinting for the purpose of *civil* identification presents new challenges. Confronting the multiple legal, social and administrative challenges of implementing UID in India, heightens awareness of how much the popular notion of fingerprinting as objective technology is linked to its specific and targeted usage in the context of the highly structured criminal justice system. Compared to the Indian case, also the use of biometric technology at e-borders has clear aims and procedures and handles a fairly homogenous population of frequent travelers (Epstein 2007). In the ill-defined Indian case the ruptures, translations and social mediations move to the forefront. The claim that biometric technology rests on an unproblematic objective mediation between body and machine becomes broadly implausible. In the process of observing the intervention of actors who define the usage of and handle the inconclusive new technologies, our attention is drawn to the multiple assumptions that inform processes of policy making and the techniques that shape habitual approaches to governance. In India, governance remains a highly contextual activity that requires extensive negotiations across huge social divides. Considering this situation it is uncertain whether UID can develop a life as unproblematic technology able to hide its multiple mediations behind a veil of taken-for-granted operations. At this point the declaration of universality is undermined not only by political and academic critique but also reflections that follow on from practical compromises of everyday usage.

Acknowledgments

We would like to thank the University of New South Wales, the University of Leipzig and the Australian Research Council for supporting field research for this article. Ursula Rao is grateful for the generous supported she received during data collection by the staff of Ankur, the Mother NGO and many other informants. We are grateful to the reviewers of *Surveillance and Society* for their extremely helpful comments and are particularly indebted to the editors of this special volume for their continuous critical engagement. The collegial discussions significantly helped us to shape the final argument of this paper.

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