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Seeing Like a Slum
Towards Open, Deliberative Development

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In a 2010 speech, the head of the World Bank, Robert Zoellick, announced "nothing short of an entirely new approach" to development, centered on "open data, open knowledge, and open solutions."[1] Through commitments to making data and processes transparent, the most prominent international development organization in the world made a strong claim that open information would "democratize development."

And it is not alone. Major donors have joined the International Aid Transparency Initiative in a commitment to publish what they fund, and dozens of countries—predominantly non-industrialized—have joined the Open Government Partnership to improve government through transparency. Proponents of this movement argue that transparency, the ability to legally and technically access and use information, in development initiatives will lead to better results through gains in efficiency and accountability.

As it matures, the movement for transparency in development must reflect critically on how it may reach its promise and overcome its shortcomings. With the process in its infancy, this concept not yet widespread, but it is beginning to take hold. While the World Bank is explicitly linking

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transparency to citizen engagement and collaboration through its concept of "open development," scholars are quick to note that transparency is "necessary but insufficient" for reforms.[2] Connecting the movement for transparency to theories of political change will enhance development practices.

Critical Theory of Technology.

The growth of the transparency movement is closely tied to the rapid diffusion of information and communication technologies (ICT) that are used to capture, process, and make available transparent information. Although it is common to consider ICT as a "democratizing" technology that enhances human freedom, philosophers of technology are less sanguine about its effects, and the literature is largely disconnected from the develop-

tation of a technological system, then it will serve to further marginalization, and the potential benefits of technology cannot be realized until power is more equally distributed in society. Thus, Feenberg calls for the democratization of both technology and politics. The failure to link technological questions to normative political questions can lead to undesirable outcomes.

Digitization of Land Tenure.

The Bhoomi e-government project undertaken in Karnataka, India, is one example of a transparency initiative with deleterious outcomes.[4] The program sought to digitize records of land ownership and make them available through computer kiosks for a small fee, thus removing the traditional middlemen, who were widely considered corrupt and inefficient.

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ment community. One point of widespread agreement is that the impact of a technology is "underdetermined" and is therefore dependent upon the wider context in which it is developed and used. Andrew Feenberg's "critical theory of technology" emphasizes that technology is frequently placed in the service of dominant or privileged groups.[3] Depending on the social context in which technology arises and is used, it can be employed in biased or discriminatory ways. If a sufficiently large portion of the population is not involved in the design and implemen-

By 2001, it had computerized 20 million records of land ownership of 6.7 million farmers, but the consequences of this formalization and centralization have been criticized as regressive.[5] Already well-off populations were best able to capitalize on the new system due to their existing capacity and ability to adapt.[6] Before the Bhoomi project, "bribes were locally negotiated and affordable, and these were usually differentiated by large and small farmers and linked to complex obligatory relationships in the village." With formalization and centralization

through the Bhoomi project, however, small and marginal farmers stood "almost no chance" of influencing the system. Instead, the land market was "increasingly dominated by large players."

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Legibility, Simplification and Power.
James Scott's (1998) *Seeing Like a State* suggested that the adverse impact of programs like Bhoomi arises from a tendency—even imperative—for the bureaucratic apparatus of modern states to make society legible through simplification. The idiosyncrasies and complexities of communities serve as a significant barrier to the ability of governments to extract taxes, conscript soldiers, and maintain political control. Local residents understand the complexity of their community due to prolonged exposure. States, however, operate over a multitude of communities and attempt to eliminate diversity of cultural norms through standardiza-

tion. The result is a "static and schematic" form of society, much like the way in which digitizing land tenure records required conforming to a certain way of farm ownership.

Eliminating illegibility in this way reduces the public's political autonomy because it enables powerful entities to act on a greater scale. Scott argued, "A thoroughly legible society eliminates local monopolies of information and creates a kind of national transparency through the uniformity of codes, identities, statistics, regulations and measures. At the same time it is likely to create new positional advantages for those at the apex who have the knowledge and access to easily decipher the new state-created format." Although local communities do have elites, the position arises more from capacity than from knowledge, because the latter is relatively equally distributed. What changes through state simplification is that information becomes accessible on a larger scale, one where community ties are less influential.

Influential development thinkers have blamed the complexity of land tenure practices for the persistence of poverty, but viewing the Bhoomi experience in light of Scott's approach suggests that formalizing property is far more value-laden than typically considered.[8] This is because formalization necessarily involves standardization, thus altering the political autonomy of individuals and communities. As the case of Bhoomi shows, even though the intended *output* was accomplished (digitalization of land records), an uncritical examination of the context of transparency—especially local power dynamics—can result in *outcomes* that

are objectionable (marginalization of poor farmers). Though we should not romanticize customary systems of tenure that "are usually riven with inequalities," we should instead use these lessons to design ongoing solutions that address the shortcomings of both the old and the new.[9]

Deliberative Development and Countervailing Power.

Seeing Like a State is concerned specifically with development efforts that have resulted in disaster, such as Stalin's forced collectivization that resulted in millions of deaths. Relative to this, Bhoomi is hardly catastrophic. In Scott's reckoning, development disasters arise when simplification is combined with ideological blinders and an uncontested authoritarian government. India's democracy therefore creates space for a countervailing power that limits catastrophic simplification. A body of development and political theory emphasizes the importance of countervailing power in reaching desirable outcomes, but it is largely disconnected from the transparency movement. Uniting the two literatures presents a fruitful avenue for scholarship and practice.

Peter Evans's concept of "deliberative development" links the "institutional turn" in development studies with theories of politics that emphasize deliberation, or "the resolution of problems of collective choice through public reasoning."[10] Deliberative development avoids imposing "blueprints based on idealized versions of Anglo-American institutions, the applicability of which is presumed to transcend national circumstances and culture." It relies on the participation of ordinary people to take action to reach development goals. Engaging ordinary citizens serves to "elicit and aggregate local knowledge," thus avoiding the simplifications inherent in centralized decision-making.[11]

Attention to local power dynamics is key to the success of this approach. Because structural political changes can disrupt existing interests, they will often be resisted. Furthermore, as evidenced in the Bhoomi case, the elite will both seek to design changes in their interests and have a better capacity to adapt to any changes. Because of this, Fung suggests that approaches such as deliberative development, which create "spaces for change," will only succeed if countervailing powers exist to challenge dominant interests.[12] Stimulating countervailing power, unfortunately, is not straightforward; it remains "unclear just *how* groups, in particular, gain power in deliberative settings."[13]

Development as a "Wicked" Problem.

Emphasis on the indeterminacy of development processes is an important strength of deliberative approaches. It emphasizes multiplicity to avoid the tendency of the development industry to implement technical fixes, thus creating situations where "the solution is the problem."[14]

In some cases, technical fixes are appropriate, but misdiagnosing non-technical problems as such can be highly problematic. In contrast to Weinberg, who believed "profound and infinitely complicated social problems" could be reduced to "quick technological fixes," Rittel and Webber argued that there existed two fundamentally different types of problems in the world.[15] "Tame" problems, those gen-

erally found in the natural sciences, are clearly definable, and are separable from other problems. "Wicked" problems, in contrast, are difficult to define due to interconnections with higher-level problems. This leads to no end in solving them, especially because solutions are not objectively right or wrong, but rather judged by individuals as good or bad.

The problems that transparency initiatives seek to solve—such as corruption and accountability—are fundamentally wicked problems, so they require more than just information or data. Instead, they require the participation of a wide variety of individuals in processes that do not privilege the elite. Deliberative approaches to development emphasize that it is an unending process marked by "change and contestation."[16] They bring to the fore what might otherwise elude efforts where technology is instrumental, such as transparency. An interdisciplinary approach will retain the technical expertise necessary for implementing transparency while emphasizing the process-oriented, wicked nature of the problem being tackled.

The Making of a Success Story?
In *Full Disclosure*, Fung, Graham, and Weil note the emerging trend of "collaborative transparency," which "will allow citizens to initiate transparency systems and to use deeply textured and varied information that is responsive to their diverse needs."[17] As ICTs have become more affordable, transparency has become the purview of citizens, as opposed to just corporations and governments.

This trend is global, even affect-ing the poorest populations, such as the slum in Nairobi where the eponymous Map Kibera project was developed. This project, organized by the GroundTruth Initiative, was "initiated in response to the lack of available map data and other public, open, and shared information about one of the world's most-known slums: Kibera, in Nairobi, Kenya." Although Kibera "was not actually unmapped... none of the existing maps were shared with the public or used by Kibera's residents." While some questioned the need for such a project—after all, locals know their surroundings intimately—the organizers of the project believed that a lack of information "[left] the population disempowered and unable to use information to solve" their problems.[18] To create an open map of Kibera, local citizens were taught how to use technology such as GPS. Within a short period, they were able to relatively quickly produce both digital and paper maps of the informal settlement, including points of interest such as "clinics, toilets, water points, NGO offices, electric lights, and some businesses."

In time, the Map Kibera effort led to a more expansive project that supported citizen reporting and began to map other informal settlements in a similarly participatory and open manner. Though still young, Map Kibera provides a promising example of how transparency initiatives and deliberative development can be combined. Although it began as an example of misdiagnosing a wicked problem (Kibera's poverty and marginalization) as a tame one (insufficient information availability), Map Kibera has admirably grown beyond a reductionist approach.

Simply mapping the local knowledge of Kibera could have, in fact, led to the type of regressive outcomes that critics of Bhoomi emphasized. To use Scott's terminology, community mapping may serve to eliminate the illegibility that usually privileges local knowledge over outside knowledge. As argued above, when not accompanied by appropriate institutional adjustments, allowing more powerful entities to see like a slum could benefit those already in power.[19]

Instead of presuming the change will

wrote, "The question is whether we choose, for any given problem, a primarily social or a technical solution, or some combination. It is the *distribution* of solutions that is of concern."[21]

Despite this promising approach, Map Kibera found that turning information "into a community resource and tool was more difficult" than originally presumed. Part of this was due to continued marginalization of Kibera and the program. Although the mapping and community media efforts have been an effective way for Kiberans "to

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arise solely from the mapped information in addition to information provision, however, Map Kibera has pursued a broader agenda. It has created organizational structures that encourage local ownership of the project and meeting the needs of Kibera. One prominent example is the community reporting services, which arose as the mapping was culminating and the project began to consider Kibera's entire communications environment to create institutions that used information as a component of broader social change. In doing so, Map Kibera reflected the sentiment of Fung, et al., who said, "as transformative as they can be, communication and information technologies will not, however, allow transparency policies to escape the political, economic, and regulatory dynamics that govern" all such initiatives.[20] As Bowker, et al.,

express voice, contest dominant norms, and get recognized by different and more powerful groups," deliberative routines that create such a space must be introduced for "heightened associational contact between [disparate] groups in formalized settings."[22] These settings are places where individuals of different capacities and power can meet, contest, and collaborate—a process that is marked by "collaborative countervailing power."[23] Thus far, despite a partnership with UNICEF, Map Kibera has been able to institutionalize interaction with more powerful entities. Real progress in linking transparency to deliberative development will come when participation includes both ordinary and elite stakeholders. Map Kibera will serve as an excellent test case to measure this emerging form of development intervention.

Conclusion. The true promise of the movement for transparency in development will come not by merely making information available. Instead, transparency must be linked with deliberative development. Diverse strands of theory and empirics, from the philosophy of technology to the political sociology of development, converge on the importance of addressing the underlying dynamics of power when attempting to enact social change. The nascent but accelerating field of open development would do well to heed those lessons.

Transparency is at its most promising when the stimulus and sustenance for processes encourage diverse participants to come together to plan and enact desired projects. Information should convene participants, suffuse their decision-making, and assist in enacting policies. Unfortunately, there is not enough research on deliberative development and consequently a paucity of understanding on the operation or outcomes. Even less work has been done on how access to information can fuel deliberative development, and much more is needed on the emergent practice. Academics, researchers, and development practitioners have a unique opportunity to significantly improve the lives of the poor through an exploration of the best ways to link open information and deliberative development.

NOTES

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