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Geography Matters: The Importance of Land, Water and Space in Sanitation Studies

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Geography is an interdisciplinary social science that combines the study of socio-economic relationships, culture, and the environment, making it a singularly appropriate discipline for the study of sanitation (Jewitt 2011). There is a recognized need to study how social norms about human waste and latrines intersect with political and environmental constraints and opportunities, and to seek answers about why latrines go unused (see Gandy 2008; Jewitt 2011; Mcfarlane 2008; O’Reilly 2010). Geographers are well poised to examine the intersection of socio-economics, culture, and environment with existing practices, and to analyze the political changes wrought by sanitation interventions at village and household scales (Jewitt 2011; O’Reilly 2010). The essay below will use the tools of geography to illustrate how changes in sanitation projects are inherently about water accessibility, power, land security, and space.

Geographic research can address gaps in our knowledge of sanitation because a key concern of the discipline is human-environment interactions. Sanitation interventions directly depend on land and water resources, and decisions about their use. Accessibility and proximity of public water resources are significant factors in latrine usage for rural populations and in urban areas where household taps are uncommon. A geographical approach understands that toilet users are water users, as water is used for washing even if the toilet design is not a pour-flush model, therefore access to water is key. Geographers’ attention to changing relations of private property and landlessness indicate that land insecurity is also a crucial factor in decisions impacting latrine building and usage (Jewitt 2011). As Rydhagen (2002; also Manase et al. 2001) showed, land insecurity in South Africa formed the key reason for households’ failure to build latrines, despite an ample subsidy. Latrine adoption may increase if common lands historically used for defecation are enclosed. For urban dwellers accustomed to ample space, their decision to forego open defecation in favor of latrine adoption needs to be better understood (O’Reilly 2011). For urban dwellers, the conditions that will enable the maintenance, and therefore the use, of public toilets needs to be researched further (Bapat and Agarwal 2003).

Historically, water policies for poor communities center on women’s roles as household water providers, binding women and water together (Wallace and Coles 2005: 8). This connection, cemented by the Dublin principles in 1992, has been explored by feminist geographers, who are cautious of an uncritical application of the women-water connection and its gendered implications for sanitation interventions. For example, toilet design can add to women’s work burden in areas where individual household taps are uncommon because it is women’s work to haul water (O’Reilly 2006). Sanitation planners expect that soliciting women’s input in toilet design and site selection could empower women but as Pattanayak (2009) found, women are less likely to adopt latrines because latrines could increase their work burden. Not only will women’s daily labor increase if the design chosen is a pour-flush model, but if women do not do that work, toilets may not get used (O’Reilly 2006). For young children who cannot haul water for their own toilet use, the absence of water in the toilet cabin may make open defecation an appealing option. Women’s labor burden, gendered access to affordable water resources, and latrine design combine to influence latrine adoption.

Power and its exercise at multiple scales is also a concern of geographers, who have suggested that there is more at stake in sanitation interventions than toilet building and usage alone (O’Reilly 2006). For example, inter-household competition can play out in latrine design selection, when an expensive model that is cost-prohibitive for poor families is chosen for a village by a committee of elites. The status of a latrine is often tied to design and quality. They are desirable as an uncommon, luxury item and can be shown-off to neighbors and guests (O’Reilly 2010). Although latrine building is not intended to occur at women’s expense, in places where women’s exclusion denotes high social status, latrine building effectively curtails women’s mobility by removing the need for women to leave the house to defecate. A sanitation unit could thus increase the status of a poor or low caste family, but this might come at the expense of women’s mobility (O’Reilly 2010). The changes sanitation projects seek are inherently about power, movement, and space. Geographers have offered important insights into the production of space: space is not an empty container that humans fill with their practices (Lefebvre 1991); space is

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something that is created through social relations of unequal power. Through dialogue, decisions, occupation, and activity, spaces are created for certain people and uses, and not for others (e.g., Nagar 2000; O’Reilly 2007). Spaces reflect and reproduce social inequalities. Previous research indicates that sanitation projects that target women leave unchallenged gendered inequalities as they relate to access of public and private space. Women’s inability to access public spaces creates a need for toilets at home, but women’s inability to access latrines built in certain spaces of the household compound means that women cannot use them (O’Reilly 2006, 2010). The particular role one inhabits matters as well for one’s mobility in space. For example, during fieldwork in summer 2011, mothers specifically reported that a toilet afforded them time savings and stress reduction because they did not need to take their children to the village outskirts when either the children or they themselves needed to defecate (O’Reilly 2011). For caregivers with multiple work burdens, the convenience of a toilet might figure strongly in its use by small children and others needing care. Women in their roles as mothers may more easily move in public spaces due to the presence of children, but the work of childcare is eased by a toilet at home that precludes the need to leave housework undone to take children out for defecation. A household toilet is used because it is convenient, but provides an additional health benefit.

Toilet building and adoption is a multi-faceted decision for would-be adopters. Issues of access to land and water, movement and space, toilet design and the social meanings attached to them, gendered divisions of labor, and social relations of power all come into play when individuals, families, and communities make decisions about building and/or using a toilet. A geographic approach combines concerns with socio-economic relationships, multi-scalar politics, the establishment and maintenance of cultural meanings, and attention to environmental contexts and struggles. This rich framework sets the discipline of geography apart as the social science prepared to continue making contributions in the area of sanitation research.

**Works Cited**


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