Trust in science, trust in nature Martha Kaplan February 2023

Introduction

The introduction opens the comparison: In Singapore, since 2002, public drinking water (tap water) includes NEWater (recycled sewer water). Certified by science and the state, trust in tap water and the postcolonial state's successes in urban water provision makes perfect sense in Singapore for planners and for drinkers. But in the US since the 1990s American consumers of corporately marketed bottled water do not long for scientific water. They embrace tropes of healthful, untouched nature. In the US, bottled water has challenged trust in public water systems, systems which embody some of the key moral struggles of the US as a nation. This paper's juxtaposition does not rank the two water situations, nor locate them on any timeline of capitalisms, or modernities. Instead, comparison is intended to throw into sharp relief some "variety in human understanding, imagination and practice in relation to the hydrologic cycle" (Duara 2021 Concept Note). In both histories, drinking water links bodies and their bodypolitic, sometimes foreclosing, sometimes enabling the public good.

Why trust in science in Singapore? Why trust in nature in the US? Thinking with water, from policymaking, everyday experiences and from counter-practices, in Singapore and the US intensifies the question (faced by political leaders, scientists, water practitioners, marketers, and activists) of how conscious policies and often implicit habits are, can, and should be related. There are good reasons to refine our understanding of conscious and unconscious dimensions of embodied water and to better situate them. Are the most important dimensions of water experience conscious or unconscious? Do counter practices come from necessity or ideology, or always both? Clearly the American connection to nature and the Singaporean connection to science have conscious ideological dimensions and unconscious ones. When we study meaning seriously, we don't need to choose between conscious and unconscious dimensions, we should study both.

Section I Singapore

Vignette: On National Day in 2002 prime minister, parliamentarians and the crowd toast with NEWater (recycled sewer water).

Independent Singapore's Water Story: This section reads Singapore's socialist-capitalist postcolonial history as a history of state water management in the face of water scarcity and the cultivation of the relation of people and the state through water solutions. Initial dependence on Malaysia as a source of water and initial themes of sacrifice on the part of citizens for the new nation-state. By the 2000s a shift to the explicit system of "the four taps' which emphasizes internal water solutions (conservation, recycling, desalination) and a concomitant shift in the Public Utilities Board's concerted messaging to confident themes of "conserve, protect, enjoy." The move from tropes of sacrifice to enjoyment continues through water Singapore's intense

independence cultivation of a national citizenry, distributed across HDB housing estates, enlisted into national service, and joined together in common water care. Writ large, Singapore has made the water cycle its dominant trope. Writ domestically, water moves from home flush, to a NEWater facility, then is added to reservoirs and is mixed with rain, run off etc, treated again, then on to tap. Occasionally lifted into explicit notice, e.g. via the mascot of the Public Utilities Board who voicds the PUBs slogan "conserve, protect, enjoy."

Vignette: Counter-practice. In the face of safe public water, general trust in science, why do some Singaporeans still boil their water in home kettles?

Section II The United States

Vignette: Fiji Water's "gift from nature" and "untouched by man" marketing strategy, as explained by the company's owner and marketing strategist (Resnick 2009).

US Drinking Water This section reads twentieth and twenty-first century US drinking water history twice through, both times as a dialogue over nature, science and the public good. First the history of public trust in science and the state embodied in public drinking fountains (Clean Water Act, Environmental Protection Act) and desegregated by civil rights activists (Civil Rights Act, ADA). Chapelle, Second, the 1990s rise of bottled water in the US, and US longing for Edenic nature. How has bottled water, often sourced from public taps, supplanted public water? Here the goals of multinational beverage corporations enlist and shape US water drinking, recognizing and mobilizing sentiments sometimes clumsily, sometimes accutely (Clairmonte & Cavanagh 1988, Resnick 2009, Kaplan 2007. This marketing deliberately occludes peoples, history, and impurities. Deliberately emphasizes impurities of public systems. Consequences.

Vignette: Ethnographic observation of everyday bottled and otherwise commoditized water practices suggests that commoditized water sometimes expresses care and love for others in US households, workplaces and "charitable" activities (Kaplan 2011 And see Manning 130-1).

Vignette: Sustainability as trust in nature. Recycled water plans in San Diego. Singapore's NEWater (recycled sewer water) drew upon Orange County, CA's implementation of indirect potable re-use. San Diego, citing Orange County, now plans PUREwater, a sewage recycling sourced water. Several major urban water systems in the US are considering recycled water. Watching tropes emerging, especially sustainability, evoking nature.

Reflections and Conclusions

Thinking with water, through water histories in Singapore and the US, from policymaking, everyday experiences and from counter-practices, has intensified the question (faced by political leaders, scientists, water practitioners, marketers, and activists) of how conscious policies and often implicit habits are, can, and should be related. Thinking with water refines the claims of powerful theories of water scope and trajectories, and enables us to resituate our knowledge of human embodiment of water and its consequences. Singapore's reliance on science seems obvious, until you look elsewhere. US confidence in the healthy

properties of nature's water is equally obvious—to Americans. We might think of state planners and marketers as examples of voices for and about water, Singapore's to constitute water for the nation through trust in science, US marketers to profit spectacularly by insisting on nature as the guarantor of water's goodness. Along the way, they encounter and indeed depend on existing meanings and purposes, conscious and unconscious. More often than not, effective planning or profitable marketing tailors its interventions through close readings of such existing meanings. Outcomes are never inevitable. US public water focused civil rights and access, only to be overtaken by bottles. But the focus on nature may be transformable into tropes of sustainability. Counter-narratives may sometimes oppose or sometimes mirror the water arguments and tropes of the planners. How the relation of conscious and unconscious water meanings will align is not always predictable. It is a good thing when public interventions in water policy learn from embedded and embodied visions of the good. But even if great strides have been made by Orange County and Singapore to model and export the science of recycled public water, that does not mean it will have the same salience for others in the world.

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