## Alternative sanitation histories: lessons from Chinese farmers

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ABSTRACT: The flush toilet masquerades as the pinnacle of sanitary civilization, but it supplies cleanliness at great expense to our planet and obscures better options that also have historical precedent. This paper explores the sanitation history that might have been, had the Earth Closet triumphed over the Water Closet in England, had London and Paris managed their Great Stinks without costly sewer systems, had miasma theory not combined with new medical discoveries to fuel frantic policing of odors, had the 'culture of flushing' that supports fantasies of resource wealth in the face of actual resource exhaustion not prevailed, had many colonised peoples not used 'humanure' (human excrement and urine) to nourish their fields and had colonizers not used this fact to shame them.

It traces a concatenation of historical forces that coalesced in water-based sanitation systems that treat farmer's gold as disgusting discards, leaving waterways depleted and soils exhausted. It takes Chinese history as a case study to re-think human relationships to land and our bodies' daily emanations. For over a millennium, Chinese farmers incorporated humanure into their fertiliser regimen to feed one of the world's largest populations. Their system, far from perfect, spread pathogens and relied on brutal exploitation of labourers, but today we can avoid those pitfalls. Pathogen-free, nutrient-rich fertiliser is readily at hand. Our bodies produce its raw material every single day, and the mesophilic and thermophilic bacteria that transform it into safe humanure have lived on this planet for nearly four billion years.

## CV:

Nicole Elizabeth Barnes is Associate Professor of History and Gender, Sexuality and Feminist Studies at Duke University in Durham, North Carolina, USA. Her book *Intimate Communities: Wartime Healthcare and the Birth of Modern China* (University of California Press, 2018) received the Joan Kelly Memorial Prize from the American Historical Association and the William H. Welch Medal from the American Association for the History of Medicine. She is currently writing a book about the history of nightsoil and toilets in modern China.

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