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Technology, governmentality, and population control

Michelle Murphy*

Reproduction changed in the second half of the twentieth century. It was not only revolutionized by new techniques in molecular biology, but also transformed on a more quotidian level by the advent of cheap and effective mass-produced birth control technologies. From sex acts to conception to pregnancy to birth, technologies helped to make human reproduction thinkable and alterable in new ways. Technical possibilities revitalized political imaginaries in which reproduction was a changeable realm where not only personhood and family, but nation, decolonization, economics, freedom, and even world futures were at stake. The nexus of evolution, race, and heredity, which had so deeply shaped eugenics and nationalisms in the early twentieth century, was displaced by new modes of differentially valuing and governing human life through population control, family planning, and economic development.

Fatal Misconception offers a sweeping account of the emergence and transnational reach of US population control projects. Framed as a political history, Connelly's book does the tremendous service of synthesizing vast archives into a grand narrative accessible to a wide audience, while at the same time shifting his discipline's focus away from statecraft, wars, and great leaders, towards a set of mid-level male experts: policy makers, demographers, and bureaucrats. He convincingly demonstrates that their efforts to craft population control and family planning were a world-changing feature of the twentieth century. Moreover, his central argument is that population control was not only world-historic, but an often well-intentioned effort that went horribly wrong.

This central argument is made by gingerly stepping over the rigid and volatile polemics that shape discussions of birth control, abortion, and family planning in the USA. Yet at the same time, the book is perhaps not quite as aperspectival as it strategically presents itself to be. It is in effect a cautionary tale about a group of white men who set out to disarm the world's population bomb, written for those still tempted to a postcolonial relation of rescue in which the USA and UK are imagined to be charged with a global mission of salvation. Hence, the book is largely addressed to its protagonist's inheritors – among whom still lurks the question, how should *we* fix the world?

This kind of debate-provoking history is much needed. Both the current global economic crisis, and the election in the USA of Barack Obama, have served to reawaken the latent networks and enthusiasm for projects of family planning. Within the USA, moreover, it remains true that to write a work critical of international family planning is to find yourself primarily in the company of conspiracy theorists concerned with uncovering crimes against sacred life perpetrated by wrongheaded, even murderous, liberals. It is to risk giving fuel to the fire – still burning bright – against feminism and laws that grant individual rights to manage one's reproductive body. What might be disturbing about this history for many in

*Michelle Murphy is Associate Professor of History and Women and Gender Studies at the University of Toronto. Email: michelle.murphy@utoronto.ca

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the USA is the entanglement of a politics supporting the rights of women and men to manage their fertility with a cold war politics that strategically worried about reducing the poor, often racialized, masses who purportedly threatened planetary prosperity – entanglements that persisted in political positions that aligned themselves with the Democratic Party.

Fatal Misconception builds on decades of criticism of family planning and population control by academics and activists that can only be considered small relative to the gargantuan scale of transnational family planning itself. Feminisms, in particular, have long been part of this story, and not just a corrective politics that delivers ethics to the technical practices of family planning in the present. As the work of scholars such as Sanjam Ahluwalia, Jennifer Nelson, Saul Halfon, Amy Kaler and Laura Briggs shows, family planning and population control was shaped by a proliferation of disunified feminisms ranging from experts, to the staff of on-the-ground projects that regularly appropriated the enormous flow of family planning funds to their own ends, to the authors and activists who have critically ferreted out the abuses of family planning as they happened.[1] In other words, feminism is not the happy endpoint of an improved contemporary family planning that respects women's rights, but rather can be historicized as an important, varied, and implicated part of this complex period.

What makes these relationships so difficult for the historian to track is also what makes this history so potentially rich to research: family planning joins together histories of supranational organizations like the United Nations; transnational histories of colonialism, eugenics, development, foreign aid, pharmaceuticals, and feminism; and local histories where contraceptives, surgeries, and clinics shaped people's everyday lives. The technologies of family planning were variously politicized as liberational necessities, dangerous experiments, portals to modernity, compulsory state violence, and salves for planetary dangers. Thus, while an overview, *Fatal Misconception* can understandably only hope to address a fraction of the larger multi-sited history of population control, leaving much work for other scholars to do. Fortunately, there has been a recent flurry of work in this area.

The recent eruption of work examining the science and politics of population suggests that 'population' has become legible as a historicizable object of knowledge, and is not merely useable as a neutral term that superceded 'race' in biology, medicine, and the social sciences in the wake of the decline of eugenics. Perhaps, even, historians are late to this critical lens. Anthropology, a discipline that provides expertise to the project of development, has also been a discipline of reflexive soul-searching about the field's past complicities with colonialism. As a result, anthropologists, such as Susan Greenhalgh, have produced detailed critical accounts of specific contemporary family planning and population control projects.[2] What historians of technoscience bring to this conversation is their attention to the temporal shifts and circulations of epistemological concerns and technical practices that diversely produced population control in ways at once ubiquitous, varied, and contested. 'Population' is passing into historicity, no longer passable as a straightforward alternative to the more pernicious 'race,' but a baggage-laden concept with its own histories, aporias, disciplinary matrixes, and power relations.

I want to take this forum, then, as an opportunity to think about how the accomplishments of *Fatal Misconception* might further motivate research from technoscience studies, as well as extend such research farther forward in time past the 1970s. What contributions do the methods organizing the history of technology and science bring to these lively questions? Moreover, how might this multi-sided and multi-scaled knotting of governance, technology, and human life in our recent past benefit from more interdisciplinary engagements? What follows here is four related areas of inquiry that connect *Fatal Misconception* with the history of technoscience.

1. Techniques of governance

In the early 1970s, Michel Foucault began working on what he called 'governmentality,' defined as the techniques for directing human conduct, techniques found not only in the bureaucracies of the modern nation-state, but also in a wide range of institutions from schools to businesses. The question of governmentality, in turn, arose for Foucault out of his work on what he called 'biopolitics,' defined loosely as the politicization of life, both of the individual and the population.[3] While Foucault offered genealogies of governmentality and biopolitics that pointed to the importance of Europe in the late eighteenth century and nineteenth century, one can also historicize Foucault's work itself, and consider how his questions were symptomatic of events in the 1970s when he wrote them. Perhaps the paired projects on governmentality and biopolitics were legible for Foucault and his readers precisely because the 1970s was a moment when transnational population control dramatically expanded and when neo-liberal approaches to governance were controversially ascendant.

The new governmentalities of the 1970s – through which nation-states were rearranged and foreign aid organized – were oriented towards managing the 'economy' and 'population' as primary tasks.[4] The history of population control is replete with the experimental development of new practices to co-manage not only fertility but the economy as well, managing the individual for the sake of the aggregate and vice versa.

Just as colonial historians have documented how colonial settings became testing sites for the techniques and management practices that then shaped the 'modernization' of the European metropole, transnational family planning and population control were also formed by a traffic of techniques through which social science practices, such as social marketing, were developed. The anthropologist Vinh-Kim Nguyen calls this a history of 'experimentality,' in which the techniques used to govern health in postcolonial relations of rescue form a feed back loop of research and service provision, and thus are always experimental, generating data to revise practices that requires more data.[5] Moreover, the networks of clinics, surveillance sites, and experts created an infrastructure on top of which later global public health, HIV/AIDS projects, and the transnational clinical trial industry were built.[6]

It is hard to separate the history of population control and the history of 'economy' as a target of cold war and postcolonial governance. In the cold war period, population control was justified not only on strictly demographic grounds, but as a matter of economic growth. Reduction in fertility rates was seen as a quintessential ingredient for the recipe for a 'modern' capitalist economy, while population size had a very simple mathematical effect on the important cold war comparative measure of gross national product *per capita*. Not just demographers and public health experts, but economists made up the cadre of experts that developed the models and epistemologies by which economic planning was hitched to population targets. As Susan Greenhalgh has ably documented, states with planned economies such as China understood population to be a problem nested within economic modernization.[7]

While historians of technology interested in reproductive politics have tended to focus on biomedical realms, reproductive medicine, genetics, and even biotechnology, it is arguable that the history of economic planning and development has been just as, or even more, crucial to the changes in reproduction over of the twentieth century, effecting in some way nearly every life – and many deaths – on the planet. We yet know very little about the transition from eugenics in which human collectivities were governed on the basis of their evolutionary futures, to practices in which the health and reproduction of

human collectivities were governed for the sake of their economic futures. Moreover, race does not disappear, and the work of racializing practices in the images, arguments, and implementations demands detailed attention.

By tracing the techniques of management, demography, accounting and surveillance – what we could call a history of governmentality – the historian of technology's toolkit honed following colonial networks and state science projects has much to offer towards charting this complex terrain of transnational governmentality in the late twentieth century. Taking the whole twentieth century as a frame, as *Fatal Misconception* does, this involves the challenge of providing more accounts that can connect the excellent historical scholarship on early twentieth century colonial circuits of technology, transnational philanthropy, and international eugenic with the anthropological scholarship that has thickly described the current state of development, reproductive health, and philanthrocapitalism. While historians of technology tend to bite off small case studies, the history of population control and economic development as governmentality may help to stretch the field to these larger scales.

2. Environmental politics

The environmental and ecological sciences were also pivotal to the articulation of a menacing population bomb in the cold war period. Historians of technology and science, too, have been tracking this nexus. Historian Sabine Hohler has characterized this period as the 'Age of Capacity,' an era in which the finiteness of the planet came to be seen as a pressing concern in scientific and popular imaginaries. For example, Paul Erickson's historical work tracks the traffic of mathematic practices between game theory and population ecology, as well as data collection practices created by colonial trade in animal life. Dean Bavington uses the tragic case of cod to show the multiple ways 'population' was made into a problem in need of fishery management.[8]

The movement between agricultural practices, population control, and clinics has only begun to be fallowed.[9] Agricultural practices and technologies are also part of this larger knot with economic development. In fact, in the 1980s, feminist critics like Farida Akhter writing of Bangaldesh argued that rearrangments of both reproduction and agriculture were the two faces of the 'engineering and industrialization of the life processes' in the third world.[10] *Needless Hunger* (1979), a book jointly critical of population control and agricultural development projects by the authors Betsy Hartman and James Boyce, argued that the 'population problem' was a misguided understanding of effects of colonialism and development on local agricultural practice, and hence famine.[11] Yet this work only scratches the surface of the stories there are to tell about the co-articulation of agriculture and population control.

3. Clinics and devices

How to open and run a family planning clinic, how to calculate population control targets, how to run a media campaign to encourage, how to illicit 'informed consent' – each of these 'how-to' instructions were traveling protocols with multi-sited histories. Following physical technologies and less tangible techne as they move (and do not move) offers an exceptional and yet manageable research probe into the knots and scales of transnational histories. The pictures in *Fatal Misconception* are suggestive of this line of inquiry – hinting at shifting organizational and clinical strategies that were built into the enormous family planning complex.

Drawing on this strategy in my own research has proven to be useful not only for navigating the enormity of a transnational phenomenon, but also in leading to unexpected findings. For example, the manual abortion device that USAID's Office of Population briefly promoted in the early 1970s not only had another life embraced by feminists who used it as a way to circumvent professional medicine and the law, but also had origins in China, where it was experimentally developed in the 1950s when Mao began to turn health priorities toward rural medicine, and thus devices that could be used without electricity or highly trained personnel were in demand. Both US feminists and abortionists learned of this device through the circulation of instructional diagrams from China, and it only later made its way to USAID, and then around the world, as a mass produced plastic technology.[12] While the role of the US actors in this transnational history is striking, it also needs to be provincialized. There are other transnational histories of intra-Asian and Latin American circuits of technologies and reproductive politics that offer other stories.[13] In other words, following the technologies, instead of the projects, organizations, and policies, is a particularly fruitful methodology for gathering together the multiple scales, sites and actors that make up transnational phenomena.

4. Users, subjects, and affect

The feminist demographer Susan Cotts Watkins, turning a skeptical eye to the force of family planning enthusiasm in her field, posed the chastising question, 'If all we knew about women was what we read in demography, what would we know?'[14] Demography and population studies is astounding for the way – when taking the large aggregate view – the lives of individuals wink out of visibility. Yet the research of both fields were used to call for state programs that sought to alter some of the most intimate and emotion-laden aspect of human life and death. Historian Carole McCann describes the performance of this demographic gaze as 'Malthusian masculinity.'[15] Taking up and tweaking Watkins' dated but necessary question, we might ask 'If all we knew about women, men, subalterns, and children was through the history of population control, what would we know?'

As alternative approaches, then, there is the work of anthropologist Lawrence Cohen on 'operability' and 'bioavailability' that inquires about the affective relationships to family, nation and modernity by which one orients themselves as accessing 'modern' futures through engagements with biomedicine, population control, and public health, such as sterilization or kidney donation.[16] Relatedly Adriana Petryna, writing about life after the Chernobyl accident has cast questions about the emergence of what she calls 'biological citizenship' in which 'the very idea of citizenship is now charged with the superadded burden of survival … a large and largely impoverished segment of the population has learned to negotiate the terms of its economic and social inclusion using the very constituent matter of life.'[17] Partha Chatterjee has suggested studying what he calls the 'politics of the governed' in which communities find ethically charged ways to make themselves legible to government, development projects, and services.[18] While the work of Gita Patel explores how the ubiquity of insurance and debt in contemporary India have produced what she calls 'risky subjects,' for whom the speculative practices familiar in economics and population control come to shape everyday life, sexuality, and affect.[19] The questions these scholars ask are ripe for further historical excavation, offering routes to yet more complicated questions about the status of the subject in the history of population control, family planning and technoscience more broadly.

Writing histories of population control and family planning in the late twentieth century is profoundly challenging, not only because of its scale, but also because it is a history so

proximate to life today. In this moment, when life is celebrated as alterable, indeed as demanding management in the face of its changeability, the techniques by which 'choice' is staged, prompted, ethicized, and maximized also have histories in need of telling. Research on reproductive politics need not feel compelled to offer individual rights, feminism, and choice as the epilogue, but might historicize how 'rights' solutions, certain kinds of feminism, and 'choice' came to become the appropriate and legible answer to reproductive politics delivered by particular techniques of governmentality. *Fatal Misconception* and the many authors mentioned here are taking steps towards historicizing this recent past whose shadow we still live within, and still cannot imagine living without.

Notes

1. Briggs, *Reproducing Empire*; Ahluwalia, *Reproductive Restraints*; Halfon, *The Cairo Consensus*; Nelson, *Women of Color*; Kaler, *Running After Pills*.
2. Booth, *Local Women, Global Science*; Ali, *Planning the Family in Egypt*; Greenhalgh and Winckler, *Governing China's Population*; Gutmann, *Fixing Men*; FINRRAGE-UBINIG International Conference 1989, 'Declaration of Comilla'; Kanaaneh, *Birthing the Nation*; Kligman, *The Politics of Duplicity*; Maternowska, *Reproducing Inequalities*; Pigg, 'Globalizing the Facts of Life'; Thayer, 'Transnational Feminism'; Thomas, *Politics of the Womb*; Van Hollen, *Birth on the Threshold*.
3. See, for example, Foucault, *The Birth of Biopolitics*; Foucault, *Society Must Be Defended.*
4. Murphy, 'Economization of Life'; Bergeron, *Fragments of Development*; Mitchell, 'The Work of Economics'; Mitchell, 'Fixing the Economy.'
5. Nguyen, 'Government-By-Exception.'
6. Murphy, *Seizing the Means of Reproduction*.
7. Greenhalgh and Winckler, *Governing China's Population*.
8. Höhler, 'Carrying Capacity.' See Erickson, 'Markets and Models,' and Bavington, 'From Hunting Fish to Managing Populations,' in the forthcoming special issue of *Science as Culture* on 'Nature's Accountability,' Sabine Höhler and Rafael Ziegler.
9. Franklin, *Dolly Mixtures*; Clarke, *Disciplining Reproduction*; Wilmot, 'Between the Farm and the Clinic.'
10. FINRRAGE-UBINIG International Conference 1989, 'Declaration of Comilla.'
11. Hartmann and Boyce, *Needless Hunger*.
12. Murphy, *Seizing the Means of Reproduction*.
13. Current research by scholars such as Chikako Takeshita, *The Biopolitics of Contraceptive Research*, Yan-Chiou Wu, 'Uncertain Abortions,' and Jin-Kyung Park, 'Corporeal Colonialism,' will help to excavate this story. On the conversation around 'reproductive governance' in Latin America, see Morgan and Roberts, 'Reproductive Governance.'
14. Watkins, 'If All We Knew About Women.'
15. McCann, 'Malthusian Men.'
16. Cohen, 'Operability, Bioavailability, and Exception.'
17. Petryna, *Life Exposed*.
18. Chatterjee, *The Politics of the Governed*.
19. Patel, 'Risky Subjects.'

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