Geoforum 69 (2016) 106–116

Contents lists available at ScienceDirect

Geoforum

journal homepage: www.elsevier.com/locate/geoforum

In pursuit of zero: Polio, global health security and the politics of eradication in Peshawar, Pakistan

Stephen Taylor

School of Geography, Queen Mary University of London, Mile End Road, London E1 4NS, United Kingdom

ARTICLE INFO

Article history:
Received 23 October 2015
Received in revised form 5 January 2016
Accepted 5 January 2016
Available online 11 January 2016

Keywords:
Eradication
Governmentality
Calculation
Counter-conduct
Global health
Pakistan

ABSTRACT

Whilst global health scholars have observed a resurgent interest in the idea of disease eradication, little has been said about the manner in which evidence of progress towards "zero" has been collected, compiled and circulated. I focus on two polio immunisation campaigns conducted in Peshawar, Pakistan, to illuminate the relationship between eradication, calculation and governmentality. Both of these campaigns relied on an epistemologically different set of governmental practices – one statistical, the other moral – to evidence progress towards zero polio cases and secure the compliance of reluctant individuals. I demonstrate how the calculative practices of national and global eradication initiatives encountered political limits whilst attempting to produce intelligible fields to guide interventions in the city. In response, a new set of governmental techniques, reliant upon legal decrees and operating through the inculcation of compliant behavioural norms, sought to re-establish a commitment to eradication over a series of unruly individuals and spaces. I argue that a central tenet of these polio campaigns, and eradication initiatives generally, is a recourse to the governance of conduct, as marginal yet politically significant populations contest the diagnoses and prescriptions of public health interventions. Approaching the epistemology of global health governance through this problematisation of individual behaviours reveals the contingencies and reversals that are the hallmarks of the politics of eradication – from manipulation of data to the suppression of individual behaviour – and the nascent forms of counter-conduct that they increasingly provoke.

> "The work is nearly completed, the goal is almost attained, everything seems to have been mastered and finalized, but the quality is not quite right [...] The rule of the last few inches amounts to just this: Do not give up work at this point! [...] And do not begrudge time spent on it, knowing that the goal is not speedy completion but the achievement of perfection!"
>
> [– Solzhenitsyn (2009, 183–184)]

1. The "new marching order

In 2007, Bill and Melinda Gates shocked the world by announcing that their Foundation was to fund an "audacious" attempt to eradicate malaria. Their strategy involved the financing of new vaccines, the development of efficacious insecticides, and even the genetic engineering of mosquitos. "We have a real chance to build the partnerships, generate the political will, and develop the scientific breakthroughs we need to end this disease," said Gates and Gates (2007), "we will not stop working until malaria is eradicated." In recent years, reducing the global incidence of disease to zero has become a hallmark of contemporary international health efforts (Whitty, 2015; Kim, 2014).[1] Alongside malaria, campaigns are also underway to eradicate yaws, dracunculiasis and polio (Asiedu et al., 2014; Moran-Thomas, 2013; Del Casino et al., 2014). Indeed, the target and language of zero has immense practical and political appeal at a time of growing health insecurity, particularly as prominent cases of emerging and re-emerging infectious diseases demand increasingly complex medical and technical interventions (Hinchliffe and Bingham, 2008; Budd et al., 2009).

However, many do not share the optimism and fervour of the Gates' vision. The head of an organisation partly financed by the Gates' once joked that disease eradication was now "the new marching order" for those preoccupied with the safeguarding of

[1] The definition of eradication is contested (WHO, 1998). I take the term to mean the "permanent reduction to zero of the worldwide incidence of infection caused by a specific agent as a result of deliberate efforts; intervention measures are no longer needed" (Dowdle, 1998, 23).

E-mail address: stephen.taylor@qmul.ac.uk

http://dx.doi.org/10.1016/j.geoforum.2016.01.004
0016-7185/

health security. "Go along with it if you want to get funded," he told a small audience, but accomplishment should be projected "to a date like 2050, or far enough in the future so that none of us can be held accountable" (McNeil, 2008; see Cooper, 2006; Lakoff, 2010). This frank statement reveals that the eradication of disease is conducted in a crowded political arena in which competition for international finance and attention is fierce.[2] This has led some to claim that the project of eradication itself is unabashedly utopian; the hope and hype of zero are utilised to capture diverse financial and affective investment streams that underwrite an entire global health industry (see McCoy et al., 2009; Buffett, 2013). Whilst bold and audacious claims are certainly central to the appeal of eradication, the rhetoric of zero also inscribes a very different politics into the landscape of global health that limits the long-term sustainability and inclusivity of these vertical disease interventions. During the 2014–15 Ebola outbreak in West Africa, for instance, the urgency of eradication efforts led to widespread curfews, police brutality and multiple claims of extrajudicial detention (Horton and Das, 2015).[3]

There are, then, a set of tensions at the heart of contemporary eradication efforts. For some, eradication constitutes a common humanitarian good perfected through sustained commitment to a broad spectrum of innovative and cost-effective public health interventions; and, for others, it is an undemocratic and quixotic project replete with ever-receding deadlines, impracticable goals and legion opportunities to undermine local trust in global health actors. Likewise, the allure of a disease-free, not-too-distant future is said to obfuscate the current deployment of neoliberal logics in global health decision-making, including the pervasive use of targeting and "return on investment" metrics in the governance of eradication campaigns. Between laudable intentions and their practical accomplishment, between promissory futures and precarious presents, falls the shadow of what I term the *politics of eradication*.

The impulse to eradicate is not "new" however. Agents of the Rockefeller Foundation were the earliest exponents of disease eradication, pioneering public health approaches to control and eradicate hookworm in the US South and Central America (Birn, 1998; Ettling, 1981; Stepan, 2011). These campaigns dovetailed with nascent international efforts to safeguard hygiene and create conditions propitious of broad-based socio-economic "uplift" (Farley, 2003; Nally and Taylor, 2015). Their efforts evidence a predilection for vertical programs fixated on the eradication of a single disease through technical interventions, rather than focusing on social, cultural and economic change as a means to inculcate modern, healthier habits (Packard and Gadelha, 1994; Jackson, 1998). Eradication advocates repeatedly framed political questions of health and uneven access to medicine as technical problems requiring technical solutions (see Ferguson, 1994; Immerwahr, 2015). Like other modernist projects, this model of intervention was later resoundingly criticised for its lack of attentiveness to local context, the valorisation of expert opinion, and the apparent disdain of local knowledge (Farley, 2003; see also Mitchell, 2002; Ekbladh, 2010). Yet the annals of international health have refashioned these failed efforts as unfortunate yet ultimately productive episodes in the "struggle to zero" (Brown, 1998). The shadow cast by failure, it seems, has no place on the well-illuminated path to eradication, and has instead been construed as further evidence of the need to extend and deepen technical interventions.

Drawing upon research into the emerging political geographies of global health (Sparke, 2009; Brown et al., 2012; Herrick, 2014), I suggest that it is important to acknowledge how the impulse to eradicate was, and indeed is, cast and recast by the vagaries of contemporary politics. At the height of the Cold War, the idea of eradication, regardless of its practical likelihood, was rehabilitated as a propaganda tool for the United States' overseas beneficence and acted as a strategic front for enrolling peripheral populations into broader public health endeavours that sought to instil pro-western values and perspectives (Birn, 2006; Cueto, 2007). The ultimately successful campaign to eradicate smallpox is indicative of this blurring of geopolitical and public health priorities, as both the United States and the Soviet Union sought to valorise eradication initiatives as the benevolent out-workings of their respective ideologies (Henderson, 1998). However, routine intimidation and coerced vaccination accompanied efforts to clear the final pockets of the disease in South Asia and East Africa (Greenough, 1995; Bhattacharya, 2006). Drawing inspiration from Alexsandr Solzhenitsyn, one might say that such compulsion is an imperative logic of eradication's "last few inches": as cases dwindle, costs per case rise, societal vigilance falls, individual interest and enthusiasm wanes, and the risk of re-emergence increases.

It is not, of course, novel to identify the creeping advance of governmental logics within the genealogy of global health (Brown and Bell, 2008; Ingram, 2010; Brown, 2011). Brown et al. (2012) note the propensity of international actors to deploy the moral valence of benevolence to legitimate the expansion of sophisticated surveillance measures to monitor, pre-empt and intervene upon emergent health threats. Indeed, most interventions in global health are now justified, compared and audited through measurement tools, often drawn from the financial sector, that facilitate "evidence-based" governance at a distance (Merry, 2011; World Bank, 1993). Proponents of eradication have deployed indicator-driven approaches to disease surveillance, most notably the case count, in order to emphasise both the practicability and salience of eradication projects (Gerrets, 2015). These efforts, however, frequently marginalise or bypass state actors who are framed problematically as inherently conservative, corrupt and inefficient. It is of paramount importance, then, that we remain attentive to the multiple ways in which technologies of measurement delimit new spatialities of intervention whilst simultaneously concealing longer histories of global encounter, financialisation, antistatism and highly contentious processes of subjectification.

Informed by these critiques, I seek to develop a clearer picture of how the practice and politics of eradication enters into the sphere of strategic calculation. To this end, I take seriously the efforts of immunisation officials within a polio eradication campaign in Pakistan; a country where transmission of the virus has yet to be halted. Building upon technical and institutional accounts of polio eradication in the country (Nishtar, 2009; Closser, 2010), I argue that the pursuit of zero generates novel rationalities of health governance. Whilst national and international health officials frame "zero" as a benevolent goal of policy, I demonstrate that the ultimate objective of this particular state-led eradication initiative is not the curtailment of the virus *per se*, but rather the control of visible dissent and the incorporation of marginal populations into broader projects of rule. I explore, in other words, how attempts to encourage compliance with eradication efforts become a proxy for reforming the governance of peripheral, yet geopolitically

[2] The language of eradication is also deployed in the campaigns against nuclear weapons and poverty, for instance, to attract donor attention. I do not equate the methods of disease eradication with those deployed in these campaigns. The quantification of the eradication of poverty is, in the case of the Millennium Development Goals, "irretrievably flawed" and alludes to multifarious targets and trends that are often immeasurable (Attaran, 2005). With the eradication of disease, even weak public health and surveillance systems permit a degree of coordination and accuracy that make progress towards eradicating a definite target (i.e. a virus) both measurable and practicable (as in the case of smallpox).

[3] Honigsbaum (2015) gives an excellent on-the-ground assessment of unfolding Ebola elimination campaigns and "the road to zero" in Sierra Leone. Although Honigsbaum and others on the ground use the word "eradicate" in discussing regional *elimination* of the disease, the continued absence of a proven vaccine and the ability of the virus to mutate across the species barrier suggest that eradication remains impracticable.