

Eds. Wallace, Robert G. and Wallace, Rodrick (2016). *Neoliberal Ebola: Modeling Disease Emergence from Finance to Forest and Farm*. New York: Springer. ISBN 9783319409399

Reviewed by Stephen Wallace, PhD

The husband and wife team of Rodrick and Deborah Wallace have developed an impressive and much-deserved reputation for far-sighted work in public health, which has included critical studies on such varied topics as the New York Fire Department, tuberculosis, and the fire risks of plastics. Indeed, the residents/inquirers of the recent Grenfell tragedy in London would profit enormously from a close reading of their work. The couple's son Robert has more recently brought much-needed scholarship to the study of modern disease, and his book *Neoliberal Ebola: Modeling Disease Emergence from Finance to Forest and Farm* focuses on the most recent Ebola outbreaks reported from 2013.

While the title of this text promises a delicious and fresh perspective into a major public crisis which seemed to evade most interventions, it is fair to say that the Wallaces' work is largely aimed at highly credentialed epidemiologists rather than garden variety social policy makers. As one with admittedly very little mastery of the algebraic analysis of such problems, I found myself strangely disappointed by this narrowing of audience, especially in light of the wonderful title; this is not a book for the quantitatively challenged. On the other hand, their claims and assertions are provocative, interesting, and clearly contribute to the debates about the spreads, prevalences and required interventions into such disease proliferations. Indeed, the Preface clearly reveals the depth and breadth of their scholarship, much of which will be unavailable to the non-specialist reader; surely a shame in times when political decision-makers espouse so often the value of evidence-based interventions.

But a special disappointment is their failure to introduce any of the so-far undiscussed non-zoonotic and human-to-human vectors and reservoirs of EBV transmission in Western

Africa. By this I mean the smoking gun of biological weaponry being developed in Freetown Sierra Leone by the United States Army Medical Research Institute of Infectious Diseases as early as 2006. This is especially curious coming from the pens of such reputed phylogeographers as the authors, who seem to show little interest in the geo-spatial nodes which indicate at least some primary trajectories and geodesics emanating from Kenema District Hospital. Of course, evidence of this ‘spillover’ is still very preliminary (cf. Wallace 2016).

Given their professed disdain for the kinds of structural violence institutionalized by the corporate virus lobby (as personified by core set of the United States Army Medical Research Institute of Infectious Diseases, Corgenix Corp., the CDC, and Tulane University), it is indeed surprising that the staff deaths and strikes at the Kenema District Hospital in Sierra Leone warranted no discussion in their text.

Any casual student of biological warfare strategy would be immediately alerted to the emergence of a fearsome virus which seemed now to require revision of the triage strategy of battlefield rescue. While the 2002 outbreak in the Democratic Republic of the Congo showed a case fatality rate of 90%, the strategic implications of a 2013 virus which could produce a CFR as low as 30% confounded conventional triage operations on the battlefield.

Any text which provides solutions to equations of “hierarchical diffusion” (71) alongside instances of “cognitive symmetry breaking” (76), “neo-liberalising horticulture” (23) and cladogenesis, as well as critiques of ideological commitments and contemporary epizootology, deserves wide and close attention.

This book is full of thoughtful and innovative analyses and critiques which invite the investigative scholar to reconsider or reimagine “cutting edge science of the twenty first century” (vii), even if their formulation of Structural One Health only hints at rather than explores the significance of structural violence upon disease outbreak and transmission.

Regardless, the ambit and virtues of this text make it *de rigeur* for readers of the *Health Tomorrow Journal*.

Another major, if surprising, criticism of this text is its insistence upon already identified bio-genotypes of Ebola as causative agents. While the authors assert in the Preface that the recent EBV outbreak is “little different from its forest predecessors”, their explicit recognition of the *Makona* variant belies this unexceptional claim. While this received view accords with the now-stabilized knowledge of the recent EBV outbreak in Western Africa, careful scrutiny of prevalence and typical case fatality rates across at least three of the Western African sites (Sierra Leone, Guinea, Liberia) suggest at least anomalous data in Sierra Leone that is perhaps indicative of an altogether different pathogen which was identified as a new variant of *Makona Ebolavirus* in 2015, a fact only mentioned in passing in Chapter 3 of the text. This problem is not at all helped by their conflation of ZEBOV (the well-recognised *Zaire* strain) and *Reston Ebolavirus* (in Chapter 2) as metonyms of EBV, especially in light of the above distinction. But again, the Wallaces show their scholarly *elan* by titling their text after this variant.

In fact, Chapter 3, which discusses the role of neoliberalizing Western Africa’s forests provides the outstanding, and perhaps standalone, strength of this text. Despite their mandatory nod to vaccination, one of the authors warns elsewhere that even successful vaccines can act as a “proverbial inoculation against discussing the problems of neoliberalism’s impacts upon deadly pathogens” (Wallace, R., 2016, 335). They go further in suggesting that *Makona* is the exemplar case of neoliberal potentiation of disease. They starkly claim that “nearly every Ebola outbreak to date appears connected to capital-driven shifts in land use” (60), which lead to “disease emergence in the first place” (61). Yet they persist in the chestnuts of fruit bat and bush meat zoonosis, despite offering the tantalizing idea that aerosol transmission may be the critical vector. This outstanding chapter justifies

that whole publication and more than exculpates the authors from other peccadilloes of publication.

Some may recoil from the Wallaces' implied hylozoism (foreshadowed by Bruno Latour and Simon Schaffer some three decades ago), but this amodernist turn may be of less concern to the pro-modern technocratic cheerleaders than their insistences on examining "causes beyond the biomedical."

Another enduring strength of this text is its capacity and success in drawing from resources and instantiations far from West Africa in the early twenty-first century. What other learned text could possibly juxtapose the NRA and RNA in the same paragraph as they do at the end of the final chapter?

In sum, *Neoliberal Ebola* is an uneven and quite disparate contribution to this field, marred by a few stylistic inelegances. If it offers data and discussion beyond the reach of most readers, it offers valuable insights throughout to the careful and interested reader. While it might read like a handbook for disassembling the masters' house – the "global corporate 'virus lobby'" (91) – the sinuous and delicate structure of the scholarship immunizes the establishment reader to feel reassured that the Wallaces are indeed urinating inside the tent.

Despite its difficulty at many junctures, it is probably the most worthwhile and inspiring text I have read for some time, regardless of subject matter. It is praiseworthy that such scholars survive and prevail within such institutions as, for example, the CDC. While I remain critical of their unwillingness to explore *ad extremis* onward to the frontiers of their own thesis, I could never argue with their encyclopedic evidence base. This book is weakest in its epistemological analysis of Ebola, but it is nonetheless magnificent in its methodological scope and ambition. They curiously seem to avoid any sustained or intensive regard for the Sierra Leone EBV outbreak, focusing like most others on Guinea and Liberia.

Their ‘spillover’ is of the natural kind, seeing EBV as almost an innocent “unchanged object” (vii) clumsily wielded by the reactionary social structure.

The neophyte reader entering this world of Ebola virions and subcultures may find the density of the text overwhelming, and the problematizing of the usual suspects of public health *nostra* of concern. But I welcome this contribution to the opening of Ebola analysis, as much as to most modern public health crises. While I disagree with much of the nosological history contained in the book, I commend their seasoned use of conventional databases and explanations.

While it is easy to resist the temptation to use a review to tell the authors how to write the book I would have preferred they had written, it is a shame they omit any critical references to the CDC and their patenting of the *Bundibugyo* strain in 2007. They also fail to mention a 2016 post-mortem assay of 13 species of 169 Guinea bats which, by showing no evidence of EBV, suggested the zoonotic hypothesis of the purported case-zero in Meliandou lacked empirical support, despite widespread proliferations and publication from the most credible of sources.

Any research team whose work has attracted the wrath and scorn of the research community of the Rand Corporation deserves our attention and respect. May they continue to prosper and publish.

References

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