"Investigating Emerging Biomedical Practices": A Special Journal Issue

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By Aaron Seaman

The September 2011 issue of the journal *Science, Technology, & Human Values*, is a special issue entitled "Investigating Emerging Biomedical Practices." Situating the articles that compose the issue "within [an] intellectual tradition rooted in the borderlands of anthropology, science studies, and the history of science–altogether heavily influenced by feminism," Kontopodis, Niewöhner, and Beck write in their introduction that the

> "articles in this issue illustrate that the life sciences and biomedicine in many areas begin to work across different levels of analysis and on different scales. They challenge established fields that have not so far been dominated by technoscientific rationality—and that will not readily yield to some hegemonic attempt at reordering. The result are zones of awkward engagement (Tsing 2004), where different rationalities rub against each other, compete, and become entangled in different ways. Science here cannot be investigated as a readymade object of inquiry. It is instead woven into the fabric of everyday life struggling for authority against competing interests. These zones of awkward engagement are difficult to access. They are not always the powerful, self-confident sites of scientific knowledge production

> that will not be disturbed by STS researchers. Zones of awkward engagement are often more fragile in many ways, slow-moving, often seemingly trivial, extending into everyday lives. This requires attentve, careful research; research that has the time to hangout and forge relationships. Ethnography may once again prove a fruitful mode of involvement with these zones—just as it did in the first movement into the laboratories forty years ago but for very different reasons." (602, 609)

The articles are as follows:

Emerging Infectious Disease/Emerging forms of Biological Sovereignty
Niamh Stephenson

> Public health responses to emerging infectious disease (EID) rarely try to interrupt the mobility of goods and information. Rather, designed under the rubric of ''public health security,'' they extend the rationale of free circulation through efforts to intensify movement and communication between international agencies, national health (and defence) departments, and the pharmaceutical industry. In this way, public health security extends postliberal modes of transnational regulation. This article examines an unfolding scenario which is testing public health's fidelity to the ethos of international trade agreements: Indonesia has withdrawn from the World Health Organization's (WHO) ''virus-sharing'' scheme because WHO has facilitated the use of Indonesian samples of H5N1 for the commercial development of potentially profitable vaccines without consultation with the Indonesian labs in which they originated. It has been argued that the Indonesian move is one that contests the current securitization of global health. However, I argue that what we are witnessing is the process of emergence of a distinct form of biological sovereignty in the form of rival global health security aggregates, each working to inject a new form of postliberal sovereignty into the field of global public health.

Self, Brain, Microbe, and the Vanishing Commissar
Allan Young

> In his Treatise of Human Nature (1739-1740), David Hume asked how people succeed in constructing edifices of belief from their limited store of sensory impressions and derived ideas. Hume

could adduce no evidence to support the existence of an inner self that intelligently manipulates impressions and ideas. At the same time, he recognized in himself the conviction that there is inner self. Today, there is a growing conviction among cognitive neuro-scientists, behavioral scientists, science journalists, and their publics that neuroscience is on the verge of providing us with the ultimate (reductionist) solution to ‘‘Hume’s problem.’’ This article describes two approaches to this solution.

Chasing Science: Children’s Brains, Scientific Inquiries, and Family Labors
Rayna Rapp

Over the last three decades, an escalating portion of U.S. school children has been classified for special education; those with diagnoses entitled to services now number 15 percent of all public school pupils. At the same time, American scientists have focused increasingly on juvenile brains, studying what one psychiatric epidemiologist labeled ‘‘social incapacities.’’ This article reports on the laboratory labors of two scientific groups: neuroscientists who scan children’s brains in search of resting state differences according to diagnosis and psychiatric epidemiologists who look to epigenetics to distinguish differential diagnostic populations. The article focuses on the medicalization of childhood differences and the harmonies and discordances between what researchers and parents understand to be at the root of children’s learning and social capacities.

Dementia Entanglements in a Postgenomic Era
Margaret Lock

As genetic tests become cheaper and more readily available, pressure is increasing to routinely test individuals for susceptibility genes for complex common disorders. Using Alzheimer’s disease (AD) as an illustrative example, it is shown how population databases of AD cases on which individual risk estimates are based are faulty due to confusion about the AD phenotype. Furthermore, the APOEe4 genotype associated with increased risk of AD is neither necessary nor sufficient to cause AD. The article concludes with ethnographic findings that result from interviews

with individuals who have been tested for their APOE status.

Dementia and the Limits to Life: Anthropological Sensibilities, STS Interferences, and Possibilities for Action in Care
Ingunn Moser

It is often assumed that it was the alliance between patient associations and neuroscience, which originally made dementia a matter for intervention. In parallel ways, science and technology studies (STS) often attributes the power to define and act upon matters of life to biomedicine and science. The concern here is that the science centrism of STS contributes to the dominance of science and biomedicine by granting these analytical privileges. As a result, alternative modes of acting, for instance in care, are disarticulated and made absent. This article mobilizes the sensibilities of anthropology to difference and draws upon excerpts of data from fieldwork in dementia care to show this and argue that there are different practices that act upon life and its limits; that these enact different versions of life and dementia; and that they matter because they shape how people are cared for and live and die with dementia.

Cardiovascular Disease and Obesity Prevention in Germany: An Investigation into a Heterogeneous Engineering Project
Jörg Niewöhner, Martin Döring, Michalis Kontopodis, Jeannette Madarász, and Christoph Heintze

Cardiovascular diseases present the leading cause of death worldwide. Over the last decade, their preventio has become not only a central medical and public health issue but also a matter of political concern as well as a major market for pharma, nutrition, and exercise. A preventive assemblage has formed that integrates diverse kinds of knowledges, technologies, and actors, from molecular biology to social work, to foster a specific healthy lifestyle. In this article, the authors analyze this preventive assemblage as a heterogeneous engineer, that is, as an attempt to order complex everyday life into an architecture of modernism. This article draws on research conducted as part of the interdisciplinary research cluster ‘‘preventive self’’ (2006-2009) bringing together analyses from social anthropology, history,

linguistics, sociology of knowledge, and medicine. The authors report here primarily from ethnographic investigations into biomedical research, primary care, and educational practices in kindergartens. The authors conclude that the preventive assemblage largely fails to install any kind of singular order. Instead, it is translated into existing orderings producing heterogeneity of a different nuance.