

UC Berkeley
UC Berkeley Previously Published Works

Title

Rorotoko, Cover Interview Aihwa Ong

Permalink

<https://escholarship.org/uc/item/9vs5w63g>

Author

Ong, A

Publication Date

2017-01-18

Peer reviewed

COVER INTERVIEW OF January 18, 2017



Aihwa Ong

On her book *Fungible Life: Experiment in the Asian City of Life*

Most Read

Lauren Berlant
On her book *Cruel Optimism*

Sharon Zukin
On her book *Naked City: The Death and Life of Authentic Urban Places*

Timothy Morton
On his book *The Ecological Thought*

Stephen J. Shoemaker
On his book *The Death of a Prophet: The End of Muhammad's Life and the Beginnings of Islam*

David S. Powers
On his book *Muhammad is Not the Father of any of Your Men: The Making of the Last Prophet*

Dagmar Herzog
On her book *Sexuality in Europe: A Twentieth-Century History*

Samuel Moyn
On his book *The Last Utopia: Human Rights in History*

Monica L. Miller
On her book *Slaves to Fashion: Black Dandyism and the Styling of Black Diasporic Identity*

Brad S. Gregory
On his book *The Unintended Reformation: How a Religious Revolution Secularized Society*

Timothy Brennan
On his book *Secular Devotion: Afro-Latin Music and Imperial Jazz*

Most Recent

Miles A. Powell
On his book *Vanishing America: Species Extinction, Racial Peril, and the Origins of Conservation*

Jinting Wu
On her book *Fabricating an Educational Miracle: Compulsory Schooling Meets Ethnic Rural Development in Southwest China*

Jennifer Gabrys
On her book *Program Earth: Environmental Sensing Technology and the Making of a Computational Planet*

Elsbeth Probyn
On her book *Eating the Ocean*

Andrew Scull
On his book *Madness in Civilization: A Cultural History of Insanity, from the Bible to Freud, from the Madhouse to Modern Medicine*

Frank L. Cioffi
On his book *One Day in the Life of the English Language: A Microcosmic Usage Handbook*

Jesse LeCavalier
On his book *The Rule of Logistics: Walmart and the Architecture of Fulfillment*

Peter H. Wilson
On his book *Heart of Europe: A History of the Holy Roman Empire*

Ethan B. Katz
On his book *The Burdens of Brotherhood: Jews and Muslims from North Africa to France*

Michael A. Haedicke
On his book *Organizing Organic: Conflict and Compromise in an Emerging Market*

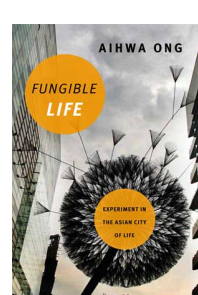
the sovereignty tag

[M]odern art still commonly refers to a rather narrow range of meaning and scope. It basically focuses on developments in Paris (Impressionism etc.) in the nineteenth century, and to selected Euro-American movements in the twentieth century (Cubism, Abstract Expressionism etc). But if we understand modernity as a socially transformative condition that was in force across much of the world from the nineteenth century on, how are we to understand artistic practices that were associated with these momentous changes?

Iftikhar Dadi,
Interview of March 26, 2012

The two world wars of the twentieth century were a product of the dislocations brought about of modernization in an environment where great power competition and the drive for hegemony were conducted primarily by violent means. Now that this era has passed in Europe and is receding in much of the Pacific rim, and hegemony achieved by force is no longer considered a legitimate ambition, the security requirements and fears of great powers should decline.

Richard Ned Lebow,
Interview of October 4, 2010

Aihwa Ong**On her book *Fungible Life: Experiment in the Asian City of Life****Cover Interview of January 18, 2017****In a nutshell***

Fungible Life looks at the entanglement of the life sciences, capitalism, politics, and ethics from the perspective of Biopolis, a new biomedical hub in Singapore.

The book asks: What would an Asian style of scientific entrepreneurialism look like? How is it related to and yet different from an American approach? What are the economic, social, political and ethical implications of genomic science expertise emerging in Asia?

Briefly, one can look at two aspects of the Singapore initiative. The external view is that Biopolis provides scientific access to "Asian" bodies, DNA, and diseases. A global city-state that upholds international "best practices" in education, research and business, Singapore is an ideal place to customize medicine for the burgeoning Asian drug markets. From the internal view, the post SARS initiative is, in a world dominated by big pharma, to orient genomic science toward the needs and interests of peoples in Asia.

How do scientists integrate particularities of human and non-human life forms in the Asian tropics into their experiments? In a field mainly focused on "Caucasian" bodies, researchers at Biopolis complete by mining genetic variations in "Asian" bodies. In multiracial Singapore, researchers quickly applied the ethnic heuristic (approved by NIH) to track health differences among Chinese, Indian, and Malay populations. By thus correlating data points on ethnic, genetic, and disease risks, scientists at Biopolis produced a code of Asian post-genomics that can be applicable to majority populations in the region.

Life is thus rendered *fungible*, I argue, because the alignment of ethnicity, mutation, and disease makes these elements interchangeable values across different regimes. By holding the genomic database to the continent, this tiny island draws drug companies eager to test novel drugs. At the same time, the science generates biopolitical value in that it advances the modern governance of the biological well-being of citizens. Furthermore, Asia-oriented biomedicine engenders an affective form of self-knowledge that enhances the social value of peoples in an emerging region. Making life fungible also makes it flourish.

But like all experiments, this biomedical enterprise operates in dynamic global context. Scientists grapple with different kinds of contingencies emerging from the lab, the state, the market and the unknowable future. Part I examines how scientists track prevalent health risks, map serious diseases, and create biomarkers as a foundation for an Asian-oriented genomics. Part II considers uncertainties that cannot be easily calculated. Researchers at their bench and computers also worry about the precarious funding, the place of virtue in their work, the value of their innovations and the promise of Biopolis. Part III identifies the 'known unknowns' that scientists can only partially prepare for, from emerging epidemics to the tsunami of aging populations and the effects of climate change. A glance at BGI Genomics in China shows a different configuration of genomic science in Asia.

< **1** 2 3 4 >*Share your thoughts // See the comments (0)*

health / ethics / asia / singapore / ethnicity / science studies / pharmaceutical industry / life sciences / disease / genomics /

the sovereignty tag

[M]odern art still commonly refers to a rather narrow range of meaning and scope. It basically focuses on developments in Paris (Impressionism etc.) in the nineteenth century, and to selected Euro-American movements in the twentieth century (Cubism, Abstract Expressionism etc). But if we understand modernity as a socially transformative condition that was in force across much of the world from the nineteenth century on, how are we to understand artistic practices that were associated with these momentous changes?

Iftikhar Dadi,
Interview of March 26, 2012

The two world wars of the twentieth century were a product of the dislocations brought about of modernization in an environment where great power competition and the drive for hegemony were conducted primarily by violent means. Now that this era has passed in Europe and is receding in much of the Pacific rim, and hegemony achieved by force is no longer considered a legitimate ambition, the security requirements and fears of great powers should decline.

Richard Ned Lebow,
Interview of October 4, 2010

Aihwa Ong**On her book *Fungible Life: Experiment in the Asian City of Life****Cover Interview of January 18, 2017***The wide angle**

We tend to view cosmopolitan science as a universal form that is practiced in many places. But, does modern knowledge itself become transformed in the midst of its peregrinations? Relatedly, when we talk about "globalization," are we talking about interconnectivity, or about how through interconnectivity we become modern, albeit in distinctive ways?

This is the first book to study genomic science as it is practiced outside the North Atlantic universe. My approach is influenced by the writings of Max Weber, Michel Foucault, and Giles Deleuze and Felix Guattari. While others search for universal theories, I focus on concept-work and ethnographic observation to understand the modern polis and its variability in a globalized world.

I use the concept "global assemblage" to frame my inquiry into the particular conditions of possibility crystallized by the situated interaction of global rational forms and politics and ethics. Global forms such as biotechnologies encounter enigmatic variations in life forms, ecosystems, and life ways. Through assemblage concepts, we can investigate the ongoing (re)combination of cosmopolitan science, politics, and ethics in shaping a specific milieu. Such a space of inquiry allows us to account for global connectivity and also the heterogeneity of different contexts of emergence.

Second, anthropology is about how the micro-practices people engage in configure their worlds. Claude Levi Strauss invokes the bricoleur, the artisan/artist/scientist who uses things *at hand* to solve problems she encounters in her environment. Like biologists, we tend to investigate how the situated interplay of disparate things—from the interaction of microbes and genes to the interweaving of science and ethics—help us define problems. *Fungible Life* asks: how do researchers in their experiments combine existing techniques and beliefs, as well as elements of the past, present, and future? How do science ideas, objects, and practices leave the lab and come to shape the governing of life and living in Asia?

Any scientific endeavor operates at multiple scales and through many networks. Biopolis registers Singapore's shift from being the recipient of overseas science to being a co-producer. There is a transition from British to American styles of medical training. Biopolis enrolls networks that link overseas research institutes such as the Duke University Medical School and the Swiss drug company Novartis. My book shows that anthropology can tell the larger story of how cosmopolitan science becomes *universal*.

As someone born in Malaysia, I always understood that contemporary milieus are not simply the outcome of history, but shaped by particular combinations of the global and the situated, the rational and the cultural. I have studied the impact of American high tech factories in Malaysia and the influence of neoliberal reasoning on graduated sovereignty and governing practices in Southeast and East Asia. In these different encounters with global forms, "Asia" is a shape-shifter, constantly invoked as malleable space, imaginary, referent, intervention, *difference*. The rise of bioscience in Singapore and China is only the latest way of being global yet distinctly "Asian."

< 1 **2** 3 4 >*Share your thoughts // See the comments (0)**health / ethics / asia / singapore / ethnicity / science studies / pharmaceutical industry / life sciences / genomics / disease /*

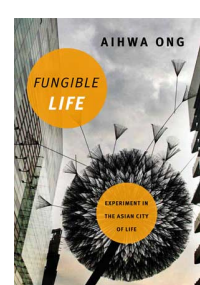
the sovereignty tag

[M]odern art still commonly refers to a rather narrow range of meaning and scope. It basically focuses on developments in Paris (Impressionism etc.) in the nineteenth century, and to selected Euro-American movements in the twentieth century (Cubism, Abstract Expressionism etc). But if we understand modernity as a socially transformative condition that was in force across much of the world from the nineteenth century on, how are we to understand artistic practices that were associated with these momentous changes?

Iftikhar Dadi,
Interview of March 26, 2012

The two world wars of the twentieth century were a product of the dislocations brought about of modernization in an environment where great power competition and the drive for hegemony were conducted primarily by violent means. Now that this era has passed in Europe and is receding in much of the Pacific rim, and hegemony achieved by force is no longer considered a legitimate ambition, the security requirements and fears of great powers should decline.

Richard Ned Lebow,
Interview of October 4, 2010

Aihwa Ong**On her book *Fungible Life: Experiment in the Asian City of Life****Cover Interview of January 18, 2017***A close-up**

The book gives a manifold view of emerging Asian post-genomic science. Each chapter features scientists at work in an adjacent field, constantly challenged by the contingencies of making scientific wagers and fortunes.

Americans learn what *personalized medicine* looks like from Angela Jolie's cancer story reported in *The New York Times*. But a different notion of personalized medicine prevails in Asian biomedicine, one that customizes therapies at the ethnic/group level. At stake is not the art of optimizing health, but managing risks and uncertainties that threaten collective life. In emerging Asian contexts, national agendas are scripted into research programs. Medicine is customized less to the person than the group as an affordable way to serve millions menaced by deadly diseases in the developing world. The immediate goal is not to "cure" diseases, but to widen access to therapies that can defer death.

Chapter 3, *Smoldering Fire*, illuminates the efforts by oncologists to match Asian mutations to specific forms of cancer prevalent in the region. We each have our own internal Galapagos of mutations, but by creating ethnic biomarkers, specialists can test drugs that are effective for Asian patients. Like their patients, doctors are caught up in contrary affects of vulnerability and hope. Because therapies can only douse the flames of tumors, the aim is to change cancer from a fatal to a chronic disease.

It is said that bioethical norms are inadequate in the developing world. In Chapter 4, *The Productive Uncertainty of Bioethics*, Asian researchers draw attention to the inadequacies of bioethical regimes themselves. They argue that "informed consent" makes little sense when tribal chiefs mediate blood sampling in the field. The "ethical" denial of material compensation to "voluntary" but poor donors seems unjustifiable. Another caution is that ethical "best practices" alone do not ensure good science. Reputable researchers, rigorous regulations, and cross-cultural skills, all elements of a biomedical platform, are necessary. Chapter 5, *Virtue and the Expatriate Scientists*, probes the tensions between science virtue, careerist moves, and civic virtue.

People interested in stem cell research can read Chapter 6. At Biopolis, there are star PIs such as Alan Coleman of "Dolly-the-Sheep" fame. But Asian scientists have been at the forefront of developing induced pluripotent stem (iPS) cell technology. This is a high stakes field that fuels an intra-Asian race for new discoveries and national prestige.

Chapter 9 brings in BGI Genomics, China, the world's largest sequencing agency, for a comparative look. The two science centers deploy ethnic-inflected DNA somewhat differently. At Biopolis researchers seek to globally circulate the English ethnic category "Chinese" as a placeless biomarker, but their counterparts at BGI Genomics study genetic variations within the national matrix of Han versus minorities. Groups such as Tibetans are considered gene pools from which therapies can be developed for the Han majority as they anticipate adjusting to a precarious environmental future. The *Epilogue* dubs the two Asian approaches "DNA bridge" and "Octopus's garden," and compares how they contribute to the transformation of the new life sciences.

< 1 2 **3** 4 >*Share your thoughts // See the comments (0)*

health / ethics / asia / singapore / ethnicity / science studies / pharmaceutical industry / life sciences / genomics / disease /

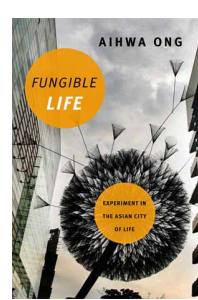
the sovereignty tag

[M]odern art still commonly refers to a rather narrow range of meaning and scope. It basically focuses on developments in Paris (Impressionism etc.) in the nineteenth century, and to selected Euro-American movements in the twentieth century (Cubism, Abstract Expressionism etc). But if we understand modernity as a socially transformative condition that was in force across much of the world from the nineteenth century on, how are we to understand artistic practices that were associated with these momentous changes?

Iftikhar Dadi,
Interview of March 26, 2012

The two world wars of the twentieth century were a product of the dislocations brought about of modernization in an environment where great power competition and the drive for hegemony were conducted primarily by violent means. Now that this era has passed in Europe and is receding in much of the Pacific rim, and hegemony achieved by force is no longer considered a legitimate ambition, the security requirements and fears of great powers should decline.

Richard Ned Lebow,
Interview of October 4, 2010

Aihwa Ong**On her book *Fungible Life: Experiment in the Asian City of Life****Cover Interview of January 18, 2017***Lastly**

The constellation of life scientists is now diverse, and they are busy pushing the frontiers of life. New milieus are emerging at the intersection of science, markets, politics and ethics. How life is discovered, tweaked, decanted, owned, traded, and valued is being decided in Asia as well as in the West.

We need to adjust our lens for understanding life and science in contemporary times. The Western-centric view of Global Health implies that global ills can only be (sporadically) managed by Western agencies such as the WHO, the Gates Foundation, or humanitarian NGOs. This view blinds us to the reality that the life sciences are being transformed by many other institutions.

In newly affluent Asia, most health interventions are managed by the state. Biopolis is a state-initiative, but it is also weaving a new science ecosystem through public-private partnerships with overseas institutes. Post-SARS, the focus is on mobilizing collaborations, samples, and resources in a fractious region for combating emerging epidemics. Some assistance from the WHO and the U.S. military medical research units arrive during an emergency, but the state supervises the work of virus surveillance, field tests, vaccine development and quarantine in anticipation of biosecurity threats.

Life scientists in Asia consider themselves, unlike say in the classic fields of chemistry or physics, at the same starting point as their counterparts in the West. They quickly adopt, refine methods such as IPS cell technique or gene-editing. They are quite capable of scientific innovations. As in the West, the science is speeding ahead of ethical caution and guidelines, and of the public's understanding.

I hope *Fungible Life* engenders public discussions about life sciences in Asia. Citizens are barely aware of what experts, ensconced in their gleaming aeries, are doing to life itself. Often, a controlled media and limited interest in science have kept the public complaisant and happy to leave life science decisions in expert hands. At Biopolis, researchers tinker with IPS cells and genetically modify mosquitoes, all for good public ends. In China's diverse and poorly regulated science world, some scientists may seek to design novel life forms for strictly commercial ends. Of course, in the United States, maverick scientists have created synthetic life forms, purportedly to help us adjust to an environmentally damaged world. As the blurring of life and science accelerates, the public anywhere needs to be more informed and consulted.

The life sciences involve, in different degrees, our lives and those of our children. An international consortium of life scientists and individual governments can play a more rigorous role in regulating the conduct of the life science and its myriad goals. Public forums, universities and the media can promote discussions of troubling experiments, the ethical limits therein, and visions of life that are sustainable and spiritual. We need to expand debates about novel life forms that can take on a life of their own.

< 1 2 3 **4** >*Share your thoughts // See the comments (0)**health / ethics / asia / singapore / ethnicity / science studies / pharmaceutical industry / life sciences / genomics / disease /*

[M]odern art still commonly refers to a rather narrow range of meaning and scope. It basically focuses on developments in Paris (Impressionism etc.) in the nineteenth century, and to selected Euro-American movements in the twentieth century (Cubism, Abstract Expressionism etc). But if we understand modernity as a socially transformative condition that was in force across much of the world from the nineteenth century on, how are we to understand artistic practices that were associated with these momentous changes?

Iftikhar Dadi,
Interview of March 26, 2012

The two world wars of the twentieth century were a product of the dislocations brought about of modernization in an environment where great power competition and the drive for hegemony were conducted primarily by violent means. Now that this era has passed in Europe and is receding in much of the Pacific rim, and hegemony achieved by force is no longer considered a legitimate ambition, the security requirements and fears of great powers should decline.

Richard Ned Lebow,
Interview of October 4, 2010