Biocapital: The Constitution of Postgenomic Life

Kaushik Sunder Rajan
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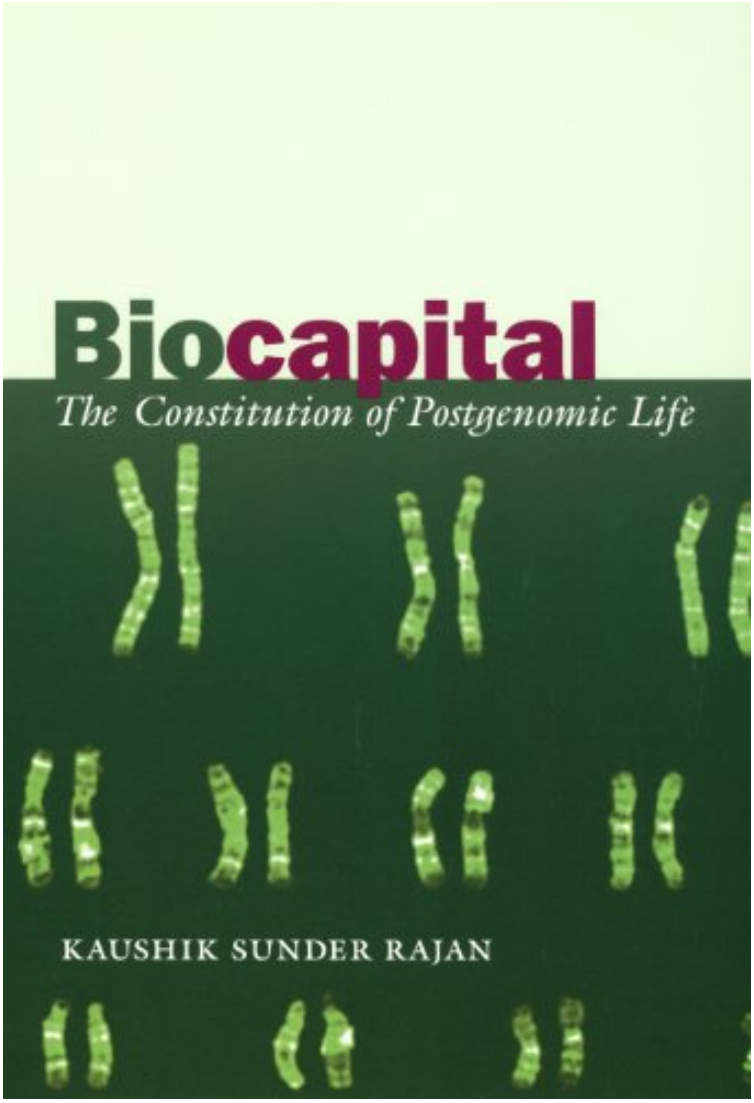

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Kaushik Sunder Rajan : Biocapital: The Constitution of Postgenomic Life before purchasing it in order to gage whether or not it would be worth my time, and all praised Biocapital: The Constitution of Postgenomic Life:

10 of 10 people found the following review helpful. Insight into our many possible futuresBy Malvin"Biocapital" by Kaushik Sunder Rajan is an impressive book that offers a sophisticated analysis of the biotech industry. Written as an MIT graduate student well-grounded in Marxian economics and Foucauldian social theories, Mr. Rajan's ethnographic study compares and contrasts biotech companies in the U.S. and India to illuminate how industrial practices are shaped by a myriad of economic and cultural forces. Among the many insights produced in this fascinating study, the author convincingly demonstrates how the so-called 'life sciences' are representative of a new phase of capitalism that is characterized by the temporality of our postmodern time.Mr. Rajan discusses how biotech is changing relationships

and practices between public and private entities. He explains that high tech capitalism is dependent upon information in order to innovate and produce; traditionally, this service was fulfilled by publicly-funded research institutions. But the speed at which the biotech industry competes has blurred these boundaries; the race to map and "own" the human genome that pitted the National Institute of Health against Celera Genomics is a case in point. The author explores struggles over privacy and ownership rights, finding that governments are responding to these pressures by behaving more like corporations. For example, the U.S. has seen an explosion in partnerships between universities and private corporations while the Indian state has sought to retain genetic property rights for its public hospitals. In this sense, Mr. Rajan's narrative positions the biotech industry squarely in the vanguard of contemporary global economic and institutional change.Mr. Rajan's extensive comparative analysis reveals how such dynamics play out in markedly different ways in local contexts. In the U.S., the author describes how messianic corporate leaders hype their miracle drugs as salvationary promise; venture capital sometimes finances ritualistic displays of excess that intends to inscribe corporate brands on the minds of investors and employees. The author explains that a reverence for free market capitalism and the fetish of personalized medicine compels investors to risk massive amounts of money on little more than the promise of scientific discovery. However, the process of calling the future into the present creates a tension between the promise and the reality, a problem that is addressed by corporate public relations departments -- including marketing campaigns that are aimed at introducing remedies for consumer patients-in-waiting at progressively earlier stages of intervention.In India, Mr. Rajan traces technocapitalism to the postcolonial drive to invest in science as a path to empowering the independent state. Consequently, he finds that Indian entrepreneurship is much more conservative than in the U.S. In fact, many Indian companies tend to engage in production or research work on a contractual basis for western businesses. The author discusses how the ideal of the American free market is often balanced against socialist values that stress the sharing of scientific discovery to the benefit of the community, suggesting how struggles over the future of the Indian economy might be waged.Interestingly, Mr. Rajan chose GeneEd as the major case study for the book in part because it highlights the experiences of Indian entrepreneurs working and living in the U.S. The fascinating narrative reveals how the hegemonic power of capitalism instills social meaning among workers who dedicate themselves to fulfilling the firm's mission. Yet the author finds age-old themes at play, such as the alienation of labor that resulted from the company's pursuit of a growth strategy that commodified some skill sets while valuing others. Despite the fact that GeneEd plays a peripheral industry role, the structural and cultural logics of biotech become visible to us thanks to Mr. Rajan's brilliantly perceptive and expert commentary. We learn how GeneEd might have evolved but was moved in a particular direction owing to a mix of external market forces and the specific decisions of its capable leadership team.I highly recommend this book to demanding readers interested in an interdisciplinary perspective on technoscientific capitalism and its connection to our past, the present, and our many possible futures.4 of 9 people found the following review helpful. Treasure Trove that Ends with USA-India Axis of GoodBy Robert David STEELE VivasI've been struggling with this book, published in 2006, for months. Today I realized I could combine my notes with a handful of key index entries to create a more useful synthesis. I end with ten other books I have reviewed that augment this one.My first impression of the book was soured by the absence of any mention of green chemistry, ecological economics, or ecology of commerce. I've known about citation analysis clusters since 1970, but I grow increasingly frustrated by the fragmentation of knowledge and the constantly growing barriers between schools of thought within political-legal, socio-economic, ideo-cultural, techno-demographic, and natural-geographic.An important early distinction is between industrial-cost for profit capitalism and commercial speculative capitalism. Toward the end of the book I finally encountered the author's emphasis on national priorities, and I for one condemn all seeds that do not reproduce naturally. In agriculture, economy, energy, health, my bottom line is that anything that retards the eradication of hunger, poverty, sustainment, or individual and social health gains, is inherent against the laws of God and man.Early notes include:+ Information science plays huge role in genomics. I am reminded of the convergence in the 1990's among cognitive and information science, nano-technology, bio-technology, and earth science. I have a later note, "life sciences becoming information sciences."+ Although E. O. Wilson is not cited, the author is on a clear convergence in taking about how valuation is a vital aspect of getting it right. I think of India as IT rich and farm poor--they are allowing the aquifers to drop a meter a year because farmers can sell a tanker-full of water for $4, which is insane, and 2,000 farmers a year commit suicide in the face of drought and debt. Valuation is a critical national function.+ This work falls within a new category of reading that I have been increasingly impressed by, "ethnographic," or the study of localities and particularities to map global system that is not generic, homogenized, or blurred..+ As the author does not cite Paul Hawken or Herman Daly, I draw the distinction between the author's focus on "natural capitalism" as of the privatization of biocapital and the patenting of gnomes, and the purer definition, of natural capitalism as one that understands the true costs over the lifetime of the materials being used including water (4000 liters of water Bangladesh cannot afford to export in a designer cotton shirt), and that makes the case for going green to create gold.+ The author views biocapital as a combination of circuits of land, labor, and value; and biopolitics.+ Life sciences are being "overdetermined" by speculative capitalism. I agree, and apart from India's symbiotic relationship with the US, I would like to see India develop a special relationship with Cuba and with the global academic community to take patents away from speculators and carpet bagging profiteers

with no morality.+ Technoscience changing laws (I am reminded that Google is now a suprnational entity that no government understands or regulates, something similar is happening in technoscience where Recombinant DNA technology is undermining the future of life.+ Political economy is an epistemology.+ Life, labor, language--biology, political economy, philology central to the knowledge of and management of humanity.+ VERY IMPORTANT: Game requires playing in FUTURE in order to stimulate and guide present. Visit Earth Intelligence Network to read about Medard Gabel's EarthGame that for $2M a year can offer this up across the ten threats, twelve policies, and eight challengers, with embedded budgets of all organizations (governments, corporations, international and non-governmental, and charitable foundations).+ Market valuation buries ethics, defines "allowable" ethics. Author touches, and I really respect this, on the moral value of information. Later on in the book the author cites Michael Fischer on "ethical plateaus."+ The author addresses the "social lives" of biological materials and biological information (note: I violently oppose Google's biomedical information initiative--we may as well become their zombies). In this vein, "ownership" of any of the bio-information constrains seamless sharing, enhancement, and I would add privacy. [Easy answer: CISCO AON on individual recyclable server-routers so individuals control all the information--medical, financial, etc. at their point of creation.] If CISCO will not do this, then India needs to.+ Useful detailed discussion of conflicts costs of privatized information versus information as a public good. The author makes case for blurring of lines and avoidance of either/or binary approach. I've already solved this: information in the aggregate should be public, while individual instances are private. Simple example: average spare parts costs can be derived from the aggregate while protecting the individual prices paid by any one of the contributors. AON, not Google, is the key.+ The author emphasizes that the genome data demands robust detailed medical history to be valued. He contrasts India bio-ethics versus US. Sidenote: computational ethics are just as crucial.+ I like, very much, the India public sector laboratories. I firmly believe that all health and education should be free, a public good similar to public safety.+ Biocapital is complicated by context, distance, culture, financial, and technical variances among the competing parties.+ I credit the author with this but I may have drawn it out: if we now see the value of collective intelligence, why are we having so much trouble seeing the value of collective intellectual property (the Creative Commons not-with-standing)?+ Biopolitics centers of life (citing Foucault), accounting for and taking care of the population at large are central.+ Political ecologies at all levels, gifting versus indebtedness, unions as a factor. UNIONS as a major factor. Vision fundamental. Direct links among ideology, capital, and locality.+ Excluded populations (e.g. HIV not eligible...) can cause them to be consumed populations.This is a deep complicated book hard for the lay reader (which I am), so to do it justice, I am resorting for the first time to a short list of key terms from the index that more represent the content:belief systemsbioethical issuesbiopoliticsbiotechnology industrycapitalism, biocapital as new phasediseases and illnessesdrug development marketplaceeconomic issues, multiple forms of currencyethnographic researchgenomics bioethics and industryglobal market terrainshype, capitalisminformation ownershipintellectual propertylife sciencesmarket value and non-market valuepatient-in-waitingpopulations, classification ofproduction issuespromissory biocapitalist futurespublic domain issuesresearch issuessocial issuesspeed issuestemporality issuestherapeutic developmentvalue access tovision, commercial valueThis is a pretty spectacular book, and someone did a great job across the board in presenting it.Other books I would recommend:Ecological Economics: Principles And ApplicationsThe Ecology of CommerceThe Future of LifePlan B 3.0: Mobilizing to Save Civilization, Third EditionThe leadership of civilization building: Administrative and civilization theory, symbolic dialogue, and citizen skills for the 21st centuryHow to Change the World: Social Entrepreneurs and the Power of New Ideas, Updated EditionThe Wealth of Networks: How Social Production Transforms Markets and FreedomSociety's Breakthrough!: Releasing Essential Wisdom and Virtue in All the PeopleCollective Intelligence: Creating a Prosperous World at Peace0 of 3 people found the following review helpful. Wow. Indeed.By ThePenAndTheSwordThank you for writing the book. As someone who is engaged in a similar process, it gives me hope and serves as an inspiration.

Biocapital is a major theoretical contribution to science studies and political economy. Grounding his analysis in a multi-sited ethnography of genomic research and drug development marketplaces in the United States and India, Kaushik Sunder Rajan argues that contemporary biotechnologies such as genomics can only be understood in relation to the economic markets within which they emerge. Sunder Rajan conducted fieldwork in biotechnology labs and in small start-up companies in the United States (mostly in the San Francisco Bay area) and India (mainly in New Delhi, Hyderabad, and Bombay) over a five-year period spanning 1999 to 2004. He draws on his research with scientists, entrepreneurs, venture capitalists, and policymakers to compare drug development in the two countries, examining the practices and goals of research, the financing mechanisms, the relevant government regulations, and the hype and marketing surrounding promising new technologies. In the process, he illuminates the global flow of ideas, information, capital, and people connected to biotech initiatives.Sunder Rajanrsquo;s ethnography informs his theoretically sophisticated inquiry into how the contemporary world is shaped by the marriage of biotechnology and market forces, by what he calls technoscientific capitalism. Bringing Marxian theories of value into conversation with Foucaultian notions of biopolitics, he traces how the life sciences came to be significant producers of both economic

and epistemic value in the late twentieth century and early twenty-first.

ldquo;Biocapital is an ambitious book; its conceptual scope has the potential to remake conversation in the human sciences. There is really nothing like the argument and synthesis Kaushik Sunder Rajan provides, which is surprising given how important his topic is.rdquo;mdash;Lawrence Cohen, author of No Aging in India: Alzheimerrsquo;s, the Bad Family, and Other Modern Things