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Making Valuable Health: Pharmaceuticals, Global Capital and Alternative Political Economies.

A special issue of *Biosocieties*

Jean-Paul Gaudilliere & Kaushik Sunder Rajan (guest editors)

Historical and anthropological analyses of biomedicine have in recent years pointed to trajectories of the capitalization of health through the latter half of the twentieth century and into the twenty-first. A major empirical focus of these analyses has been on the critical role that pharmaceuticals have acquired in the dynamics of health care and global health (Bächi 2009; Biehl 2009; Cooper & Waldby 2014; Dumit 2012; Gaudilliere & Hess 2013; Gaudilliere & Thoms 2015; Greene 2007 and 2014; Haller 2012; Hayden 2007; Peterson 2014; Petryna & Kleinmann 2006; Petryna 2009; Rajan 2017). The three signifiers – “pharmaceuticals”, “care” and “global”, alongside “capital” – are crucial here, as they have consequences for the very definition of what constitutes health.

Capitalization abstracts health, rendering it less a state of embodied, subjective health and more a form of value that can be grown. Pharmaceuticalization reduces health and illness to something that can be addressed through access and consumption of drugs, even as such consumption is itself enabled and constrained by professional norms, public policies and capital flows that constitute markets differentially. And globalization defines priority diseases, spreads standard practices and enlarges the circulation of medical products and services through differential constructions of experimental and therapeutic markets. Together, these processes of capitalization, pharmaceuticalization and globalization have reconstituted definitions of health; contributed to the emergence of regimes of government through which individuals and populations are cared for by the state and market, unleashed and realized new forms of value; and thus have created new political economies. Even as capitalization, pharmaceuticalization and globalization reconfigure health, the contours of these processes and what constitutes their “insides” and “outsides” are at stake.

This is the point of departure of this collection of essays. It considers the capitalization of health as something more than a process of invention, production and commercialization of drugs, more than a change of actors and targets in international health initiatives. The collection examines the multiple entanglements of labor, circulation and governance that bring together drugs, pharmaceuticalized care and global health, in order to instantiate regimes of value and new political economies.

The papers, in different ways, trace these entanglements of pharmaceutical innovation, forms of care and global health across different sites and situations in order to open up the making of valuable health and its diverse political economies as historical and anthropological problems (Ong and Collier 2005). We are purposely not restricting ourselves to particular locations, institutions or historical periods, and instead develop a comparative and scalar perspective. Hence, the papers traverse categories of biomedicine and traditional medicine; metropolitan and “global Southern” locales; corporate and public health contexts;

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4 nation-state and transnational regimes/institutions of governance. The papers in the
5 collection thus perform examples of what Jean and John Comaroff have called a “theory
6 from the South” (Comaroff and Comaroff 2006).
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9 Equally, we are not after a singular definition of value. On the contrary: our animating
10 assumption precisely is that value is a polyvalent concept, speaking both to regimes of
11 market value (which entails use and exchange but, when legible to capital, becomes self-
12 valorizing entering the relentless generation of surplus) and to regimes of epistemic and
13 normative choices. Similarly, the political economies that materialize are not singular, nor are
14 they simply instituted “from above”, even as particular regimes of state or corporate
15 governance might come to be hegemonic in particular places and times. They are constantly
16 contested, not least because capitalized, pharmaceuticalized and globalized regimes of value
17 can’t exist without regulatory processes, without the state and other institutions of
18 governance (Aglietta 1979). Such regimes thus emerge as responses to tensions that
19 inevitably have cognitive, material and political dimensions and – in turn - encounter limits
20 and resistances. And so, even as capital appropriates health and expands its domains, it
21 encounters politics and government.
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25 **Making valuable health: a framework.**

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27 All the papers attend to moments at which value (in its multiple meanings and registers) gets
28 made, through the consolidation, contestation or imagination of certain kinds of markets.
29 Beyond this shared way of interrogating capitalization, pharmaceuticalization and
30 globalization, the collection builds on four theoretical entry points:
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34 **First, we take seriously Marx’s lessons on the logics of capital**, as grounded constantly
35 in the generation of surplus - for capital to be capital, it must constantly valorize itself [Marx,
36 Capital Vol 1]. Valorization is at the heart of the value regimes of capital; but further, this is a
37 valorization that left to itself cannot set itself limits; therefore, there is a constant tendency
38 for capital to accumulate, and to appropriate domains that are outside itself.
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41 Marx insisted that any proper understanding of capital has to begin with an analysis of the
42 question of value.¹ And for capital, value has no meaning unless it is surplus value. For
43 money to be capital, it must have the potential for generating surplus as it circulates in
44 processes of commodity exchange. In relation to the situation of European (especially
45 English) industrial capitalism that Marx was writing about, this potential comes from what
46 he called labor power – the potential for the worker to generate more labor than that
47 compensated by wage. More generally, Marx provides a methodological insight into how
48 capital generates value *through an exploitation of bodily potential*, even as the generation of value
49 becomes an end in itself. Further, *value is that which allows the commodity, which is always the product*
50 *of specific and concrete human labor, to figure as abstract labor*. At the core of Marx’s critique of
51 political economy is his insistence that *value is an abstraction device*.
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57 ¹ He says as much in *The Grundrisse*: “To develop the concept of capital it is necessary to begin not with labour
58 but with value, and precisely, with exchange value in an already developed movement of circulation” (Marx
59 1993 [1857]: 259). This does not mean that labor is unimportant; just that one can only understand how it
60 comes to be at stake, alienated and exploited if one begins one’s analysis from the question of value.
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Therefore on the one hand, value is simply an *attribute* (something that a commodity has: its utility, its beauty, its ability to be worn or eaten; something that money has: its ability to circulate itself, to mediate and measure other kinds of circulations, to quantitatively express circulation itself). But on the other hand, within processes of exchange and circulation of capital, *value itself performs the various materializations and abstractions of those things that it is simply supposed to represent*. In other words, the question of value is one that develops its fullest treatment when analyzed in relation to processes of economic exchange, which – and this at the core of their paradoxical status - thereby renders questions of utility secondary.

Second, we consider that this only renders one dimension of value as it operates in the worlds of pharmacy and global health, speaking to “capital” in biocapital and hence primarily to dimensions of exchange.

Value is however a fundamentally polyvalent concept, speaking to market/surplus value on the one hand, and to the epistemic and the normative on the other (Rajan 2017, Introduction). This latter dimension is always potentially appropriable by capital, but it is not reduced to it and can also counter hegemonic logics of capital by providing alternative modalities of evaluation. As a consequence, the problem of medical utility does not disappear, and the diverse drug economies that emerge when one considers that specific arrangements of production, circulation and consumption also speak to “bio” in biocapital. One should therefore refuse the elision of questions of use that are at the heart of logics of capital accumulation even in its most abstracted embodiment, namely that of the financial and speculative economy.

This is especially important when the question of actually existing critiques of “big pharma” is considered whether it materializes in patterns of local non-industrial production, generic manufacturing, illegal circulation or mass-production of traditional herbal remedies. Taken together, these critiques, and the alternatives they propose – even as they are usually not alternatives *to* capital – make explicit the different pressure points in pharmaceutical value, having to do with epistemic choices, medical utility and commodity exchange.

Third, we recognize that health markets are historically, economically and socially peculiar beasts. Health, just like other forms of bodily potential such as labor, is appropriable by capital (see the long history of pharmacy or health private insurance). However the health of a population must be maintained and sustained, not only to ensure for the continuity of the social and political order of things (Foucault 2004a) but also in order to ensure that this population remains useful to capital, hence the necessity of reproducing labor power, as classical political economy and Marx himself pointed out. As health has historically been perceived as an essential attribute of labor, it has become the focus of intense battles for public intervention and protection.

As a consequence, health expenditures and/or provision of care have been - in the industrial “North” and in uneven ways - socialized through workers’ cooperative schemes, taxation, employers-based insurance, state-based programs; thus providing for one of the strongest and largest component of “welfare” regimes (Esping Andersen 1990; Castel 2002) on the one hand and for a seemingly irrepressible logic of generalized access to biomedical goods, eventually of contested therapeutic value (Dumit 2012; Kaufmann 2015). Health markets

thus negotiate in acute ways the tension between logics of biocapital (self-valorizing value through an appropriation of health and life to generate surplus) and biopolitical rationalities (care of the population through rationalities of governance and management). This essential tension is powerfully reflected in the recurrent discussions economists have had on the limits of individuals' payments, the role of public goods or market failures.

How that tension takes particular forms and logics under contemporary forms of global capitalism is a critical question underlying the current status of pharmaceuticals. For two decades, as a consequence of the debt crisis, structural adjustment policies implemented by the IMF and the World Bank, financing reforms of welfare systems, or the rise of venture capital in research much emphasis has been placed on the logic of "privatization" and the decreasing role of nation-states. Specific to the health sector is however the fact that this displaced boundary between "public" and "private" coexists with another trend, namely the rise of new forms of management associated with the audit culture and the optimization of public investments.. As Foucault pointed out in his acute reading of neo-liberalism, for its promoters the issue was never to marginalize the state but to change its logic of action in favor of market construction (Foucault 2004b). The theory of human capital [Gary Becker] and its translations into policies promoting both public investments in - and valorization of - health or education stands at the crossroad of such neo-liberal government (Chorev 2012 ; Gaudilliere 2014 ; Murphy 2017).

Fourth, we explore how this dialectic of capital and biopolitic produces alternative political economies of health in ways that are fractioned and fraught, both politically and economically. Valorization is not self-sustaining. In spite of the much discussed autonomy of finance, the making of value is predicted on the materialization and realization of anticipated value, and therefore on the government of goods and services, on the ability to complete the cycles of investments and sales, exchange and use. Materialization and realization depend upon the regimes of governance and their rationalities within which capitalization-pharmaceuticalization-globalization operate; with the consequence that the generation of value is instantiated within particular historical and political trajectories that constitutes diverse and partly overlapping – in time and space - regimes of accumulation (Boyer 2015).

Health valorization therefore:

- (i) Disaggregate the capitalization of health into elements that speak to its commodification and its financialization but reveal heterogeneous (and competing) types of products, enterprises, systems of property;
- (ii) Diversify the processes and meanings of pharmaceuticalization (Biehl 2007) beyond the problem of access and more generally beyond the processes of biomedicalization (Clarke 2010), for instance when so-called traditional practices become resources for the making of therapeutic products
- (iii) Elaborate globalization in different ways – both as a question of a *scale* of healthcare intervention (from local to national to regional to global), and also as a historical *transition* from the international/ist system of health government that prevailed in the 1970s, when a sentiment of "Third Worldism" and postcolonial international solidarity was widespread, to today's "global health" that is far more than a simple reflection of neo-liberal power structures seeking for hegemony.

Health markets are thus constituted across site (metropolis and periphery, global “North” and “South”, “First” world and “Third” world) and scale (local, national, regional, global), lending further empirical particularity and analytic complexity. Elucidating alternative political economies is therefore a comparative task, but one in which the parameters of comparison are not necessarily symmetrical or commensurable. Logics of capital and biopolitical rationalities are not simply metropolitan logics that “touch down” in global peripheries; these logics and rationalities have multiple sites and scales of emergence and instantiation. Situating these in relation to value-logics of capital that are in themselves abstract and placeless is part of the task of this collection.

The dialectic between capital and biopolitic has accordingly opened spaces for processes of innovation and market construction that are located outside what was for decades the “center” of the drug world: Europe and North America. Focusing on generics, herbal preparations, informal products and copies, the “Southern” political economies of drugs stand at odd with the hegemonic regime of post-World War II pharmacy, i.e. with the domination of patents and their logic of monopolistic appropriation and/or with the domination of molecular and chemical knowledge in the definition of valuable therapeutic intervention. “Southern” political economies of health materialize original and differentiated links between alternative modes of capitalization and alternative modes of care, even as they are constrained by hegemonic formations of capital and governance that are not of their own making. Investigating these configurations is therefore an entry point into projects that both resonate with the post-war “development” agendas and challenge them, providing for alternative forms of modernity with their singular dialectics of the metropolis and the periphery, the scientific and the cultural, or of what Partha Chatterjee singled out as the “outer” and the “inner” (Chatterjee 1993).

Comparing the processes through which the anti-hepatitis C drug sofosbuvir and the artemisinin-combinations against malaria ASAQ have been priced and sold, **Maurice Cassier’s** article provides a powerful analysis of the conflicting political economies at stake. The drugs chosen exemplify two conflicting conjunction of value, use and global, two regimes of pharmaceutical capitalism.

Sofosbuvir stands at the apex of the hegemonic rent-based global economy of drugs. Its prices – in the range of \$5-80000 per treatment pertain no relations to its production costs – in the range of \$2-500 per treatment. The discrepancy is a typical outcome of the financial economy of biotech indexed on valuation processes rooted in Nasdaq capitalization, merge and acquisition of firms, patent-based exclusive property. Gilead pricing thus sought to maximize profits by pushing the public and private payers propensity to pay to its limits, using its monopoly to appropriate a significant share of socialized payments, stressing the drug use value in reducing and improving treatments to adjust its own demands at a level slightly below that of the overall existing treatments thus capturing what were previously public and clinical (rather than drug-related) expenditures. This move was not without resistance in the North but mainly faced critique in the South where it radically limited access. Gilead then engaged in a policy of differentiated prices in order to circumvent the threat of patent cancellation and generic production. Its system of voluntary licenses for low-income countries thus created a new geography of production, uses and profits.

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4 In contrast to this economy of rent, the trajectory of ASAQ reveals an alternative industrial
5 and capitalism centered on philanthropic markets in the South and the role of an
6 international consortium dominated by NGOs and public institutions. The combinations
7 emerged on the basis of low R&D investments as all molecules had been developed in China
8 or India and were not patented. Firms were involved but kept prices at the level of
9 production costs in order to maximize access either by agreement with the consortium
10 (Sanofi) or because they played the card of a volume-oriented competition (the Chinese
11 generic makers).
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15 Prolonging this reflection on the alternative political economy philanthropic and the generic
16 industry embody, **Jean-Paul Gaudilliere's** article centers on the epistemic dimensions of
17 the dialectics of bio and capital. Arguing that the status of hegemonic pharmaceutical
18 capitalism is not only challenged by the crisis of access but also by a widely discuss crisis of
19 innovation and productivity, he uses the vast historiography of post-WWII pharmacy to
20 propose a critical understanding of the crisis that focuses on its epistemic nature with the
21 exhaustion of the screening model that provided for a strong articulation between use and
22 exchange values (for instance through the industrial organization of both scientific marketing
23 and clinical trials).
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27 This leads to a new reading of the present simultaneous turn toward a speculative (financial)
28 and knowledge economy of pharmacy in terms of on-going and problematic
29 molecularization. On that basis, the paper insists on the importance of an another alternative
30 to biocapital than the political economy of access, namely the political economy of
31 industrialized traditional medicines, taking the case of the Indian reformulation regime of
32 Ayurveda as configuration challenging both the patent-based system of exclusive rights and
33 the molecular paradigm seeking to integrate herbal remedies through the logic of
34 identification, purification, synthesis and RCTs.
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38 In his contribution **Laurent Pordié** explores a barely visible political economy: that located
39 at the intersection of licit and illicit drug circulation. Following drug smugglers, private
40 suppliers and the circulation of pharmaceuticals – originating in both biomedicine and
41 ayurveda - between India and Cambodia, he renders the multiple ways in which the mere
42 process of circulation creates and changes value. Illegality entails a political economy of its
43 own as it rearranges the set of anticipations, material commitments and regulatory norms
44 that contribute to drugs' valuation and pricing. Corrupted officers, drugs importers and
45 sellers elaborate their own criteria and norms when playing national as well as local
46 constraints against each other to construct markets.
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50 This gives the dialectic of use and exchange value a peculiar flavor as it posits usually rarely
51 discussed material features of the drug center-stage, i.e. whether or not it has been kept in
52 temperature-controlled storage, whether it looks and tastes "normal", whether it is
53 transported or not by bribed officials. Of peculiar interest is in this respect the work done by
54 Cambodia local retailers, usually self-trained pharmacists, who unpack the drugs and
55 assemble them in front of patients in order to craft therapeutic combinations – informal
56 prescriptions – that fit the latter's symptoms and are sold accordingly. In that case locally
57 attributed properties and uses determine the value of a package more than production costs
58 or institutionally negotiated prices, thus "deglobalizing" the manufactured pills.
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4 With the trajectory of *ayahuasca* **Emilia Sanabria** brings the question one step back along
5 the commodification path. *Ayahuasca* is an increasingly commoditized brew of two plants
6 originating in pre-colonial Amazonian shamanic healing rituals. *Ayahuasca* may be compared
7 to Gaudilliere neo-traditional herbal formulations: it is a poly-herbal granted with therapeutic
8 properties, it is linked to non-Western healing knowledge, it becomes available in ready-
9 made forms, it circulates widely geographically - from Amazonia to Europe – and socially –
10 from indigenous communities, to Christian congregations in Latin American cities to the
11 psychiatric treatment centers engaged in the Psychedelic Renaissance. But for the time being,
12 *ayahuasca* has no clear capitalistic value and its market value is emergent and a source of
13 contestation. Its value lies primarily in its potential to address intractable mental health
14 problems such as addiction or depression, a future horizon of value that is being constructed
15 and consolidated. It is therefore less a drug and a commodity than an intractable and highly
16 valorized mangle between the local brew, the participant's individual subjectivity and the
17 collective life of *ayahuasqueros*.
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22 Does this imply that *ayahuasca* must be considered as a drug outside the world of drugs, a
23 non-thing exemplifying the radical limits of capitalistic and biopolitical valorization?
24 Sanabria's response is a clear no. *Ayahuasca* is a boundary object, a promise of value whose
25 future rests on an emerging epistemic reformulation. Its scientific and medical supporters
26 envisage the emergence of an alternative to mental health's biomedical failures. The case of
27 *ayahuasca*'s synergetic efficacy offers an alternative, yet one that is entering the value-making
28 machinery of clinical trials. What kind of market value may be consolidated out of this
29 promise is unknown but it might not be without resonances with the radical disjunction
30 between global and local values that characterize all known bio-prospecting scenario (even in
31 the most favorable instances of benefit sharing), thus materializing the constant tendency for
32 capital to appropriate domains that are outside itself.
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36 Echoing Pordié's local retailers and their symptomatic logic of prescription as well as
37 Cassier's centrality of access in the philanthropic logic of copying, **Andy McDowell's** article
38 explores the bottom end of the valorization chain: GP's practices. Based on fieldwork
39 among Mumbai's slums practitioners, his contribution does not interrogate the value of a
40 drug but the value of a practice. Often indicted as profit-seeking bad practitioners
41 contributing to the rise of antibiotic-resistant TB infections as a consequence of out-of-norm
42 prescription patterns, Mc Dowell's private practitioners reveal another dialectic of market
43 and health.
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47 Closely following the uses of pharmaceuticals and the relations between the conduct of
48 clinical examination and prescriptions, he shows how the emphasis economists and critics
49 alike place on the impact of financial incentives, i.e. the monetary contributions received
50 from drug companies, testing services or fellow specialists, is circumvented by the combined
51 logic of "managing health and marketing service" underlying the construction of a clinic's
52 repute. Operating in what is paradoxically a competitive and dense medical environment,
53 Mumbai slums' doctors use pharmaceuticals in order to treat symptoms and consolidate
54 their clientele taking into account the constant flux of patients between practices and forms
55 of care. In so doing they rely on strategies building up differentiated reputes opposing for
56 instance the use of "strong" and "light" medicines, thus creating valuable but segmented
57 conjunctions between modes of care and most valued drugs.
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The essays gathered in this collection originate in a workshop organized in Paris in June 2016 (The Making of Pharmaceutical Value: Drugs, Diseases and the Political Economies of Global Health) within the framework of the ERC project GLOBHEALTH – From international to global: Knowledge, disease and the postwar government of health (<http://globhealth.vjf.cnrs.fr>).

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