

Toward an anthropology of health care value: Including the voice of lifeworld in healthcare policies¹

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Abstract

The implementation of value-based healthcare (VBHC) model promises to bring efficiency and sustainability to the national health systems. The model redraws the whole logic of the systems' operability and proposes that budgets positively discriminate those institutions that most produce value for patients. For this purpose, the authors of the model understand 'value' as the relationship between the quality of care received by the patient and the money spent by him to benefit from healthcare services.

In this article, I critically analyse the problem of value standardization throughout the processes of implementation of the VBHC model starting from the argument that the model implementers usually conceptualise 'value' in a way that is more easily acceptable by formal stakeholders than by patients. I further argue that such conceptualisation reflects an epistemological cleavage which may be mitigated through the exploration and the application of anthropological modes of knowing and doing.

Keywords: Value-based healthcare; coproduction; ethnography; critical capacities.

Introduction

Over the last few decades, we are witnessing the implementation of a political economy of biotechnological promise (Sturdy, 2017) that promotes disciplinary knowledges to engage collaboratively in order to foster the emergence of new sociotechnical arrangements through experimentation, particularly in the context of biomedicine and healthcare. A key feature of this political economy is the understanding that “publics, imagination, and technoscience [are] intrinsically linked” (Rommetveit & Wynne, 2017: 134) in producing material-semiotic structures – that is, structures that are effected by and supported on social relationships and are relative to the physical things engendered in these relationships (Law, 2019). Rommetveit and Wynne (2017) argue that the production of such structures contrasts with the rhetoric of the discursive purification of science, which Bruno Latour (1993) had indicated as the main feature of modern scientific rationality.

In this paper, I stress that, despite the interdisciplinary effort, the discursiveness proposed by the VBHC continues propagating the myth of pure ontologies by adopting a neoliberal discursiveness that understands health value as the representation of a cost-benefit ratio (Birch,

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2006; Hilgartner, 2007; Birch & Tyfield, 2012). Focusing on the implications of this argument, I propose to approach the VBHC model coproduction³ and implementation processes based on an ethnography on and through stakeholders' critical capacities, as inspired by Luc Boltanski's sociology of emancipation (Boltanski, 1990, 2011; Boltanski & Thévenot, 1999, 2006)⁴. I argue that such an ethnography may provide a close reading of stakeholders' inclinations and disinclinations and, thus, it may promote the adjustment of the model to local and national cultural realities therefore having the potential to contribute to the realization of a realistic democratic biopolitics (Ezrahi, 2008; Hilgartner et al., 2015).

A close reading of stakeholders' critical capacities implies the realization of an active anthropology along the processes of reconfiguration of biopolitical management models, such as public health systems. The realization of a pure critique does not contribute to the achievements of humanity nor does justice to the lively nature of the anthropological endeavour, which reflects the lively ways of cultural expression (Agar, 2013). Cultural intermediary par excellence, the anthropologist can bridge confronting cultures along the processes of design and implementation of public policies, thus becoming an element that actively promotes consensus between alternative visions in the context of his collaboration within epistemic communities included as parts of a specific policy-related political subsystem (cf. McCool, 1998; Béland et al., 2018; Simon & Voss, 2018)⁵.

³ Elinor Ostrom (1996: 1073) defines coproduction as "the process through which inputs used to produce a good or service are contributed by individuals who are not *in* the same organization. The 'regular' producer of education, health, or infrastructure services is most frequently a government agency. Whether the regular producer is the only producer of these goods and services depends both on the nature of the good or service itself and on the incentives that encourage the active participation of others. All public goods and services are potentially produced by the regular producer and by those who are frequently referred to as the client. The term 'client' is a passive term. Clients are acted upon. Coproduction implies that citizens can play an active role in producing public goods and services of consequence to them".

⁴ A sociology of critical capacities moves the focus from the denunciation criticism to the consideration that societies are critical. As Boltanski states, "les acteurs disposent tous de capacités critiques, [ils] ont tous accès quoique sans doute à des degrés inégaux des ressources critiques et les mettent en oeuvre de façon quasi-permanente dans le cours ordinaire de la vie sociale" (1990: 130). Ultimately, the attention to the fact that all societies are critical removes from social scientists their supposedly exclusive right to make critical analyses.

⁵ A 'political subsystem' is a "mostly undifferentiated group of actors originating in widely different areas of state and society who are united by a mutual concern for, and knowledge of, a specific policy area. They are not necessarily self-interested but share some ideas and knowledge about the policy area in question, which sets them apart from other policy actors" (Béland et al., 2018: 1-2). The subsystem is made up of three functional groups of actors: the advocacy coalitions, the epistemic communities, and the instrumental constituencies. The main actors in the first group are the politicians, in the second are the experts and the technicians, and in the latter are the users or the general population. The instrumental constituency is the most recent group of actors in political subsystems and is primarily concerned with the fact that "any knowledge about specific modes of governing is made and actualized by specific actors in concrete practices" (Simons & Voss, 2018: 14). In the case of the caregiver – care 'consumer' relationship, the latter is an eligible agent to be part of the instrumental constituency, while the former belongs to the epistemic community. The concept of the instrumental constituency "fills a gap in our understanding of policy dynamics in pointing out social dynamics of instrumental knowledge making and instrument design" (Simons & Voss, 2018: 15). The operative value of this configuration of the political-building process for anthropology is obvious, and it helps the anthropologist to find himself in the face of the issues at hand and the factions and groups concerned and / or targeted by policies. While having his place of privilege in the group of epistemic communities, the anthropologist can observe by taking part in the interactions of 'his' group and the group of advocacy coalitions with the instrumental constituencies,

As Gary Lee Downey and Joseph Dumit recall, the commitment to cross boundaries between epistemic cultures and power practices with ethnography “can be both an important step in mapping them and a potential source of intervention that troubles and remaps them” (Downey & Dumit, 1997: 12). Mapping, troubling and remapping the boundaries drawn in the processes of producing public health policies is a major challenge for anthropology, and requires an inquiry “into the 'ramified surface extensions' [which] would be as likely to trace connections between propensities or disinclinations in the 'public' and what is thought as desirable project in science, [and] to trace connections in the another direction” (Martin, 1998: 34). This work of retracing connections in another direction is only possible if, after locating himself among the epistemological and/or ideological plateaus, the anthropologist intervenes in the production of public policies by keeping his attention on the expression (and on the *dispositifs* that limit it) of critical capacities of the agents involved in this production⁶. This brings us to the heart of the problem I intend to analyse.

In the context of the research on the design and implementation of the VBHC model, retracing connections and remaking boundaries between epistemic cultures and between power practices means paying attention to the systems of ideas and interests that support the notion of value expressed through the critical capacities of the actors intervening in the process. As we will see, what people value in healthcare differs from what VBHC mentors understand as value in healthcare. However, in my view, this divergence is not treated as seriously as it deserves. An approach informed by anthropology’s theorizations on value may determine not only the model’s success, but also, and above all, may help to understand the extent to which the democratic ideal that underpins the definition of policies supported by the centrality of the role of political subsystems, characterized by coproduction and discursive plurality, is indeed fulfilled.

My intention in this paper is to support the idea that, by locating within political subsystems, the anthropologists will be able to describe the internal topographies of power which define health’s value and, in the end, shape the VBHC model implementation tools and thereafter the health systems’ final sociotechnical imaginary⁷. Developing from there, they can forecast the effects of the diverse and unequal distribution of stakeholders’ critical resources and eventually intervene in order to make these latter converge before the model is fully implemented.

I propose to address this problem in two moments. The first locates the construction of the VBHC model in its context, highlighting and characterizing the main structures of contingency in

thus being able to take a close reading of the critical capacities of policies’ makers. The overall view of the achievements of the three groups of the political subsystem also enables him to observe the flow of the three discursive streams (cf. Mukherjee & Howlett, 2015) involved in the final production of particular policies.

⁶ Here, I explicitly adopt the Foucault’s notion of *dispositif* as an “heterogeneous ensemble [that includes] discourses, institutions, architectural arrangements, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral, philanthropic proposals [which] can sometimes appear as a program of an institution, sometimes, on the contrary, as an element that justifies and masks a practice that, in fact, remains silent, or functions as a second reinterpretation of this practice, to give access to a new field of rationality. In short, among these elements, discursive or not, there are games, changes of position, changes of functions, which can also be very different. [The *dispositif*] has as its primary function to respond to an urgency at a given historical moment. The *dispositif* therefore has a dominant strategic function.” (Foucault, 1994:299).

⁷ A sociotechnical imaginary is “a collectively held, institutionally stabilized, and publicly performed vision of desirable futures, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advances in science and technology” (Jasanoff, 2015: 4).

which the model acquires its meaning and functionality both in the social imaginary and in the management of public health systems. The second moment points to the centrality of the concept of value in the model and to the implications of the limitation of the meaning that its builders intended to establish. Here, anthropologists' position is *located* in value theorization and a way is proposed for the anthropologists, after mapping the boundaries between the epistemic cultures and power practices involved in the coproduction of the model's implementation modalities, to *intervene* by troubling and eventually remapping them.

1. Locating value-based healthcare

As mentioned, at this first moment I address the context of the emergence of the VBHC model. This context describes what I call the iron triangle of the new biopolitics, articulating its three vertexes: precision medicine, digital health, and value-based healthcare.

1.1. The new biopolitics' iron triangle: the three main discursivities

The leading apparatuses of the political economy of promise in the context of healthcare are precision medicine or personalised medicine, digital health, and VBHC. Precision or personalised medicine is driven by biotechnology and biomedical knowledge; digital health is fed by information and communication technologies (ICT); VBHC model is promoted by economy and its know-how, and it is streamlined through political formalizations.

The three vertexes of the iron triangle of the new biopolitics are interdependent, but the supremacy of its operations is shared by the axis precision/personalised medicine – digital health. The former pole of this axis needs the technologies produced by the latter, such as digitization, quantification and imaging technologies to fine-tune its accuracy; the latter pole needs the former to address the real (bio)technological needs as these are diagnosed by technoscience researchers. In turn, the VBHC model, which can be applied without either of the other two areas of knowledge, will be more efficient if the efficacy of diagnostic methods and associated therapies is high, which is the main goal of the precision/personalised medicine – digital health axis. Efficiency and efficacy are therefore at the confluence of the three types of knowledges. The following paragraphs briefly present the characteristics of each of these apparatuses.

Precision Medicine and Digital Health

Precision medicine is a set of practices that seek to adjust medical treatments according to “the genetic variability of individuals and the socio-environmental context in which they live” (Costa, 2018: 2). Due to this genetic-environmental interference, everyone has different organic characteristics that require different clinical and preventive approaches. The goal of precision medicine is therefore “to classify individuals into subpopulations that differ in their susceptibility to a particular disease or their response to a specific treatment.” (The National Research Council, 2011, cited by Ginsburg & Phillips, 2018: 2). This classification will help to better manage resources, focusing prevention measures and treatments “on those who will benefit, sparing expense and side effects for those who will not”. (The National Research Council, 2011, quoted by Ginsburg & Phillips, 2018: 2). Accuracy is not only observable at the level of population-wide

channelling of resources. At the individual scale, precision consists of directing the treatments (which are specific to each individual case) to the affected location in the patient's body, preventing the whole organism, its healthy systems and organs, to be affected by the therapies, additionally helping the health system sparing the resources it usually spends to treat diseases caused by the treatment focused on the initial disease. Targeted therapies are an important tool for achieving the accuracy of medical treatments, and eventually constitute the greatest focus of hope for precision medicine in the near future (Abrahams & Eck, 2016; Bombardieri et al., 2018).

Although associated, precision medicine and personalised medicine are slightly different biomedical approaches. Precision medicine is a model of biomedical intervention that requires the development of nano and biotechnologies based on molecular engineering knowledge and techniques that direct treatments for a specific effect to a specific individual and to a specific place in his body, apart from the intention of categorizing subpopulations based on their genetic-environmental specificity. Personalised medicine, on the other hand, is an approach in which therapies adjusted to individuals' genetic-environmental specificity are supplemented with adjustments according to their "preferences, beliefs, attitudes, knowledge and social context" (Ginsburg & Phillips, 2018: 2). This second type of adjustment requires the support of ICT, which contribute to the monitoring, digitization and production of high-resolution imaging outputs.

Digital health is supported by the application of biosensors of biometric signals which circulate along informatic infrastructures where they are crossed with other clinical data previously recorded in analogue media in order to connect patients and healthcare and/or health education professionals (doctors, personal trainers, physiotherapists, etc.).

In the biomedical sense, the confluence between precision medicine, personalised medicine, and digital health results in the production of large amounts of data (the big data) that will inform clinical practice. The remote aim is to complete a *panoromic*, or a panorama of all the omics that influence the health of individuals and populations (exposome, epigenome, microbiome, metabolome, proteome, transcriptome, genome, image, biosensors, graphs), as if it were a human geographic information system (Topol, 2014). The ultimate outcome will be a graphic where the data of all these omics are assembled so that each individual has his own integrative personal omics profile, or iPOP (cf. Li-Pook-Than & Snyder, 2012). The iPOP, also known as Snyderome (since the first example was built by Michael Snyder with data of his own), is the symbol of power-knowledge imbrications in a unique object that represents a true achievement of quantification and of the ideal of STEM (Science, Technology, Engineering and Mathematics) interdisciplinarity. In addition to the implicit knowledge of physics, chemistry and engineering, it contains the explicit knowledge of digitization and information technologies and biotechnology, the reunion of which is induced by some given political narratives and imaginations. To portray the "medical essence of a human being" (Topol, 2014: 23) is the utopia that assists this complex technoscientific and biopolitical construction.

The defining moment of the emergence of precision/personalised medicine and digital health on the political agenda was the speech delivered by Barak Obama on January 30, 2015, which sparked the elaboration of the policies that formed the American Recovery and Reinvestment Act of 2009, particularly, the encouragement of the HITECH (Health Information Technology for Economic and Clinical Health) financial package. To a lesser extent, in the European context, a first impulse of a similar intention had been given by the publication in 2004 of the European Commission Communication (COM (2004) 356 final), entitled *e-Health – making healthcare*

better for European citizens: An action plan for a European e-Health Area (European Commission, 2004). As the title states, this Communication had established a Digital Health Action Plan for the European Union Area, which is currently being guided by the Communication COM (2012) 736 final, *Action Plan for Digital Health 2012-2020 – Innovative healthcare for the 21st century* (European Commission, 2012). This Communication defines the central idea of digital health as follows:

“eHealth is the use of ICT in health products, services and processes combined with organisational change in healthcare systems and new skills, in order to improve health of citizens, efficiency and productivity in healthcare delivery, and the economic and social value of health. eHealth covers the interaction between patients and health-service providers, institution-to-institution transmission of data, or peer-to-peer communication between patients and/or health professionals” (European Commission, 2012: 3).

There are some certainties, but also some doubts, about this new socio-technical imaginary (Khoury & Galea, 2016). The first certainty is that this imagination is here to stay. The future of healthcare will surely be realized by exploring the immense potential of the confluence between new biotechnologies and ICT. Modification of risk behaviours is ongoing largely due to the development and dissemination of biometric signal monitoring technologies, for whose purpose some technology giants, such as Apple, Google and Amazon, are involved. In the context of public health, which is our field of interest here, the promise is to improve...

“the ability to prevent disease, promote health and reduce health disparities in populations by (1) applying emerging methods and technologies for measuring disease, pathogens, exposures, behaviours and susceptibility in populations; and (2) developing policies and targeted implementation programs to improve health” (Khoury & Galea, 2016: E2).

However, not everything is positive. Khoury and Galea show a somewhat optimistic view when they assume that precision and digitization reduce population health disparities. It is known that the cost of developing precision therapies tends to be high, which will naturally be reflected in healthcare and treatment prices and consequently in populations' access to care⁸. In addition, health care involving complex technologies and knowledge will hardly promote increased adherence by populations, as the information needed for informed consent is more difficult for lay people to process (Parens, 2015).

One way of enhancing citizens' access to precision medicine has been to offer them an alternative route to the doctor's office through digital portals and electronic health records platforms. These channels are seen as the most effective way to articulate precision/personalised medicine, digital health and VBHC, working as the thread that binds the precision medicine ecosystem, that is, that...

“optimally connect[s] patients, clinicians, researchers and clinical laboratories to one another. Patients and clinicians access information through portals or EHRs [electronic health records]. The ecosystem can include displays or CDS augmented by curated

⁸ Take as example the recent case of Portuguese baby Matilde, who suffers from Type 1 spinal muscular atrophy (Werdnig-Hoffman disease) and the most effective treatment, Zolgensma, produced by AveXis of the pharmaceutical giant Novartis, which attacks the genetic root of the disease by “replacing gene 1 (SMN1) responsible for the survival of missing or defective motor neurons with a functioning copy of the human SMN gene that helps motor cells to function properly” (in <https://www.zolgensma.com/>) costs 1.9 million euros (Henriques, 2019). The high price of treatment led the baby's parents to resort to crowdfunding and the Portuguese Government to negotiate with the pharmaceutical industry.

knowledge that is supplied and shared by multiple stakeholders. Case-level databases and biobanks receive case data and samples from clinical and research workflows. Researchers benefit from all these information sources and also contribute to knowledge sources. Clinical laboratories leverage data and inform the clinical community as they assess genomic variation and its impact on human health.” (Aronson & Rehm, 2015: 337).

One of the cornerstones of this ecosystem’s functioning is that “all stakeholders... are involved in shaping [the] system” (Ginsburg & Phillips, 2018: 3), which makes the health system itself an intelligent, dynamic and continuous learning system (Ginsburg & Phillips, 2018). Notwithstanding, the ecosystem presented by Aronson and Rehm (2015) does not show all the agents involved in the design of the new biomedicine and corresponding new health systems, who can make its functioning more complicated. What is beyond the technical core of the system reveals the forces involved in the attempt to establish the hegemonic contingencies that shape the sociotechnical systems’ practices and outcomes. In this sense, the ramifications of the precision medicine ecosystem are precious indicators for us to analyse its political economy as they uncover the *deep play* of the new biopolitics (cf. Fischer, 2004). These ramifications include...

“... governments as sponsors of precision medicine research and regulators of precision medicine products, industry as partners in development and commercialization of precision medicine products, professional associations as enablers of the training... of researchers, providers, and policy analysts, and payers who evaluate the appropriateness of precision medicine interventions and the financing that support their use in health care” (Ginsburg & Phillips, 2018: 3).

Here some important aspects arise about value formation in the bioeconomics of precision medicine, which deserve some attention. I propose to open a brief parenthesis now to look at the mechanisms of this formation. Their presentation will help to better understand the critical reading of the healthcare value as this is formed in the context of the *deep play* of the biosciences and biotechnologies that underpin the development of the new biopolitics within which the processes of implementation of the VBHC model lie.

Inter alia, the development of technologies that assist the political economy of the biotechnological promise is carried out in firms, which are financial entities (Birch, 2017). In the logic of finance, the value of technologies is a political-economic attribution, not an attribute of technology. The construction of sociotechnical imaginaries, then, greatly depends on the acceptance of the visions of technoscientific vanguards by the financial markets. As a result, the development of emerging biomedical technologies depends on realizing their ability to be turned into capital, that is, the possibility of them to produce profit in the future. It is this possibility that attracts financial investment. Kean Birch (2017) points out that most biotechnology firms do not produce any products, but merely develop parts of the process of developing technologies that are then turned into assets and thus transferred to other firms.

Detecting a contradiction between the accelerated growth of the financial value of life sciences in recent years and their failure in providing new products and services, Birch (2017) argues that bioeconomy is fuelled by the management of value through social practices and evaluation processes that are active, progressive and performative along which an effort of assigning potentially productive qualities to knowledge is developed. This effort seeks to transform knowledge into assets, which is substantially different from the value being ascribed through the exchange of products in the marketplace. For the agents involved in these practices, the important thing is not the effect of the technological products (so the important thing is not the

product itself), but the possibility of turning the knowledge that gave rise to them into assets. Thus, knowledge of technoscientific vanguards is capitalized not based on their output on products that work, but on the criteria used in the evaluation procedures. So, the value of biotechnologies is more a speculative abstraction than an attribution ascribed to commodities: “value is constituted primarily by the social practices of political-economic actors who configure the financial value and valuation of firms.” (Birch, 2017: 462).

Consequently, in order to be funded, research centres need to work in accordance with the criteria of the valuations that financial agents use. Then, “life sciences managers are more attuned to the expectations of financial market actors (e.g., venture capitalists, investors, etc.) than to technoscientific actors (e.g., scientists)” (Birch, 2017: 479). Even indirectly, the visionary vanguards end up working for markets rather than to the ultimate recipients of technology applications – patients. In this way, “[b]iotechnologies and bio-knowledges represent assets held by firms, which are themselves valued through financial investment practices” (Birch, 2017: 462), making biotechnical companies “financial artefacts”, actually (Mirowski, 2012: 296 , quoted by Birch, 2017: 464), whose survival is maintained through financial channels rather than through trading products. We can therefore conclude that the political economy managed by financial investment shapes research and innovation, and, more importantly, that “understanding value in bioeconomy [from where emanates the very notion of value-based healthcare] necessitates looking at the political-economic actors who have a say in the creation of assets, such as venture capitalists, hedge fund managers, asset managers, and so on.” (Birch, 2017: 483). Hence, in shaping the technoscientific imaginary, which is formed by “structures of contingency [by which one addresses] future possibilities through technoscientific innovation” (Marcus, 1995: 4), the financialization of bioeconomy ends up configuring both the broader socio-technical imaginary and, indirectly, the social imaginary at large (both spatially and temporally).

Considering that the imagination “has become an organized field of social practices, ...and a form of negotiation between sites of agency (individuals) and globally defined fields of possibility” (Appadurai, 1996: 31), by configuring the social imaginary through the attribution of value to certain technoscientific vanguards’ knowledges and practices, the financialization of bioeconomy ends up causing changes in the practical life of societies, since it conditions biopolitics’ modes of material expression and its related sociotechnical potentialities – this is perhaps even the main way by which sociotechnical lock-in happens (see Callon & Rabeharisoa, 2008). Furthermore, it is by being able to define reality that value becomes power (Poon, 2012), and, then, it is by means of determining the criteria of evaluation that power is exerted. So, those who define such criteria are the same who exert the power to design the structures of contingency which will drive and set the limits of a given sociotechnical imaginary. Thus, within this political economy of the bioeconomic way of doing, social orders are produced and possible futures are determined.

There is something simultaneously shocking and surprising in this: on the one hand, we find that the monetization of knowledge, especially in the form of intellectual property, makes the bioeconomy an aspect of the knowledge economy (in bioeconomy, the most important intangible asset is knowledge); on the other hand, the construction of value through action and performative acts conforms to the anthropological view of value formation, as we will see.

Financialization, assetization (transforming something into financial assets) and capitalization of knowledge are fundamental features of bioeconomy (Birch, 2017). The practice of transforming knowledge into financial assets affirms a tendency for the “normative-interpretive privatization

of contingency” (Rommetveit & Wynne, 2017: 144) in current biopolitics, which shrinks society’s and politics’ roles for leading history.

As precision medicine gets closer to the cost-benefit models of public health systems’ resources management, a strong indicator emerges which reflects the need for politically controlling the public costs of personalised therapies – and this is where the adoption of the VBHC model (which at the time of Obama’s speech was at least a decade old, see Porter & Teisberg, 2004; Porter, 2005a, 2005b) appears as a political measure for costs management (Dubois, 2018) within the new biomedicine’s political economy. It is by this means that politics comes to claim its authority over technoscience’s tendency to become an instrument to privatize contingencies – and thereafter an instrument to privatize hope (cf. Thompson & Žižek, 2013). In the Portuguese case, for instance, the implementation of the VBHC model has been even considered as a political-economic imperative, given the context of the need to reform the structure of the national health system at the time of international financial rescue following subprime crisis (Chipman, 2015). In short, the adoption of VBHC model is not only an imperative to manage public resources but also a strategy to make bioeconomy (with its *dispositifs*) politically manageable and controllable. This is how the management of the relationships between the *dispositifs* of precision/personalised medicine, digital health and VBHC model configure a same political-economic logic that seeks to reclaim the political control over the forces that produce social history (which, in our technoscientifically driven neoliberal times, are almost entirely detained by the market agents and processes that define the criteria to value health and other services or commodities).

Value-based health care

Notwithstanding the above, it is interesting to notice that the idea behind the VBHC model is to unify the different and often conflicting objectives of different stakeholders into one: “[to] achiev[e] high value for patients” (Porter, 2010: 2477). Michael Porter states that value “is neither an abstract ideal nor a code word for cost reduction” (2010: 2477), but instead the measure of the relationship between care outcomes and money spent for the patient to benefit from them (Porter & Teisberg, 2006).

Since it is necessary to continually deliver high value to the patients, who are the ultimate beneficiaries (consumers) of healthcare, the focus seems to shift from the particular interests of stakeholders to the overall interests of the system. The logic is simple: “[i]f value improves, patients, payers, providers, and suppliers can all benefit while the economic sustainability of the health care system increases” (Porter, 2010: 2477). This focus on the health system brings the VBHC model closer to the precision medicine action plan, which also requires the confluence of the political, the clinical and the scientific agendas to produce value (Ginsburg & Phillips, 2018).

Actors involved in health care providing, technology and drug delivery, and system financing, rather than competing with their direct competitors for competitive advantage in the marketplace, compete now with the other agents of the system, whose core businesses are different from theirs in order to provide value to the system. Thus, the value inside the health system is no longer evaluated based on what it produces (number of consultations, number of hospitalizations, number and type of medical procedures, number of surgeries, etc.) but rather on the results obtained by the patient from the different means of diagnosis and treatment he benefited from. In this context, “competing for value [consists in] aligning competition with value for patients” (Porter & Teisberg, 2006: 4). The idea is that if system participants compete

for value, this one will necessarily increase. The problem with the production-based model is that its focus has been in “minimizing short-term costs and battling over who pays what. The result is that many of the strategies, organizational structures, and practices of the various actors in the system are badly misaligned with value for the patient” (Porter & Teisberg, 2006: 4).

Given that the VBHC model shifts the focus from measuring production to measuring outcomes, value competition revolves around healthcare results (Porter & Teisberg, 2006: 4). This aspect is central to the analysis of the characteristics of the VBHC model, and it should be grasped by the words of its creators:

“Competition over results means that... health plans, and providers that achieve excellence are rewarded with more business, while those that fail to demonstrate good results decline or cease to provide that service. Competition to shift cost and limit services is a zero-sum competition — one actor’s gain is a loss for others. [On the contrary,] competing on patient results is a positive-sum competition from which all system participants can benefit. When providers succeed in delivering superior value, patients win, employers win, and health plans also win through better outcomes achieved at lower costs. When health plans succeed in better informing patients, better coordinating care, and rewarding good care, excellent providers benefit, as do patients.” (Porter & Teisberg, 2006: 6).

For such a model to have applicability it is necessary to implement a 'value agenda' (Porter & Lee, 2013). The value agenda is focused on “maximizing value for patients: that is, achieving the best outcomes at the lowest cost” (Porter & Lee, 2013:1). This requires defragmenting health systems, “in which each provider offers a full range of services, [and making them] a system in which services for particular medical conditions are concentrated in health-delivery organizations and in the right locations to deliver high-value care” (Porter & Lee, 2013: 1).

The value agenda includes six interrelated components, and the system is effective only if the functions of all of them contribute to provide value to the patient. These components are: (1) organizing the care system into integrated practice units, (2) measuring outcomes and costs for every patient, (3) moving to bundled payments for care cycles, (4) integrating care delivery across separate facilities, (5) expanding excellent services across geography, and (6) build and enabling an information technology platform. This latter component is directly linked to digital health’s primary aim.

1.2. The problem of healthcare value perception

Despite the value agenda refers the need to measure outcomes and costs for every patient (the second component of the agenda), it was detected that the model’s value definition/measurement criteria suffer the same disease as Procrustes – they forcibly adjust the diversity of value perspectives to a same measure for all (even considering that these 'all' are the elements of a group of patients of a particular health condition, the so-called homogeneous diagnostic groups). “To measure outcomes and costs for every patient” turned into “to measure outcomes and costs calculating the average cost-benefit ratios perceived by specific patient samples” (definition that governs the methodology for the elaboration of the International Consortium for Health Outcomes Measurement (ICHOM) Standards Sets)⁹. Such

⁹ Until 2017, the ICHOM had produced standard sets (scripts that translate results into value) for 21 health conditions and was committed by that year to produce 9 additional scripts, which in the total would

standardization is not consensual and has mobilized most criticism about VBHC model's implementation processes (e.g., Riva & Pravettoni, 2016; Nilsson et al., 2017; Bright & Franklin, 2018; Dubois, 2018 Pendleton, 2018; Bright & Linthicum, 2018, 2019).

As mentioned at the beginning, the problematic aspect of value definition in the VBHC model has led me to the argument that the narrative proposed by the VBHC model propagates the myth of pure ontologies by adopting a neoliberal discursiveness that treats value as representing a cost-benefit ratio, neglecting the fact that the value attributed to healthcare outcomes achieved over periods of affliction and infirmity is not limited to such a simple relationship.

The value of healthcare varies with patients' perceptions, which don't only vary across different health conditions, but are moulded by patients' cultures, personalities, and socioeconomic conditionalities, which constrain the relationship between experience and hope, not only in healthcare, but in relation to life in general. In other words, value is shaped by substance, not by formalism; it implies the individuals and their groups of significant others into a consideration (rather than an assessment) of their anthropological, that is, substantive and existential experiences and dreams which are simultaneously particular and global modes of coping with the contingencies that determine the terms by which the organic and the imaginary should coexist in a unique way of living. The attempt to separate perceptions about the value of healthcare from perceptions about the value, for example, of building a house or obtaining a residence visa, is artificial and abstract. The value depends more on who evaluates than on what is evaluated (Pendleton, 2018), as it always guides (and is guided by) psychosocial and socio-political factors, which are specific to the context in which each patient lives.

Differences in perception of the value of healthcare outcomes are observed among all stakeholders involved in health care (Nilsson et al., 2017; Pendleton, 2018). Even between doctor and patient the differences are significant. For example, when treating data from a questionnaire conducted in the state of Utah, U.S., Robert Pendleton and his colleagues found that 45% of the patients considered treatment price as the first measure of value, and only 32% considered it as the improvement of their health condition. The same results also showed that when patients were asked to choose a group of the five most important characteristics of value in healthcare, in 90% of the cases the response combinations differed from those selected by the doctors. Pendleton concludes that, "in general, cost and service were far more important in determining value for patients than for physicians" (2018: 2). This result may lead us to speculate about the difference in living standards and/or income between doctors and patients, but the explanation will certainly not be so simple. From this data, Pendleton (2018: 2) realized that stakeholders "have not communicated with each other effectively, at the macro and micro levels, on what value means to them". Once again, this is what the problem of healthcare value is about: value is more an attribution of the subject than an attribute of the object. The principle we saw earlier when referred to the constitution of value of biotechnologies in bioeconomy is the same that we see here when referring to the constitution of healthcare value.

correspond to 59% of total health care costs (Porter, 2017). These standard measures measure value in three layers – the first being the health status achieved after care, the second being the recovery process, and the third being health sustainability. Each of these layers is divided into two sublayers, all of which are interrelated with the hierarchy of the upper layers in order of interaction. The first tier includes the results "survival" and "health / recovery"; the second includes results on "recovery time and return to normal activities" and "uselessness of the care or treatment process"; Finally, the third layer includes "health / recovery sustainability and the nature of recurrences" and "long-term treatment consequences – treatment-related illnesses / disorders".

Similar results were found by Nilsson and his colleagues across their two-year interviews with representatives of the VBHC model pilot implementation projects at a Swedish university hospital. Informants split their opinions between “we as professionals think we know what value is for the patients but that competence we really don’t always have” (Nilsson et al., 2017: 5) and “[patient representatives gave] concrete views on patient education and on how to measure what happens to patients, how patients are doing and so on. Then of course we couldn’t use all their ideas, but they have certainly had an impact on [our] work” (Nilsson et al., 2017: 5).

Jennifer Bright and Mark Linthicum (2018: 2) clearly identify what is at stake here:

“Patient characteristics and factors that affect their care choices are highly relevant to the outcomes following a prescribed treatment, and yet such information is often missing from value assessment models because such data are not always recorded in clinical trials. Thus, the neat ‘answer’ regarding the value of a treatment often overlooks vital information about sub-populations (e.g., ethnicities, age, gender, or disease sub-type). Further, the benefits of expanded patient choice are not considered when high-level models... only measure clinical benefits, risks, and costs for the average patient. ...One step in the right direction is to better incorporate the patient voice into measures of value.”

This conclusion is shared by Nilsson and colleagues when they point out that “paying attention to the patient’s voice is a most important concern and is also a key towards increased engagement from physicians and care providers for improvement work” (Nilsson et al. al., 2017: 1). Based on Elliot Mishler’s distinction between ‘the voice of the lifeworld’ (patients’ voice) and ‘the voice of medicine’ (physicians’ voice), these authors support the idea according to which “the ‘voice of the lifeworld’ needs to be listened to not just in each encounter between physician and patient but also when managing healthcare” (Nilsson et al. al., 2017: 9).

The difficulty is that there has been little understanding of how to develop processes that measure what patients truly value in healthcare (Bright & Franklin, 2018). To mitigate this problem...

“it’s important to have scientific methods and begin to move towards a more inclusive and transparent approach to measuring value – one that acknowledges diversity among patients’ characteristics, preferences, and related treatment effects. While it may be convenient to promote a one-size-fits-all answer, it’s not good enough for every patient, every time. That fact should cause all stakeholders to pause and to come together to seek and find a better approach.” (Bright & Franklin, 2018: 2).

If they address the problem of healthcare value solely based on its standardized definition, healthcare systems’ managers do exclude the imminently phenomenological nature of affliction’s experiences from health plans, imposing the normative order of biomedicine, and, more significantly, of its political economy, on patients’ problems in day-to-day living, as Elliot Mishler concluded (West, 1986).

If we add to these conclusions the fact that patients involvement is crucial for establishing a trust-based relationship with healthcare providers, and that this involvement is somewhat diminished due to the complexification increasingly settling into health care decision-making in the context of precision/personalised medicine and digital health, we can also conclude that the process of implementing the VBHC model needs to include an anthropological perspective as a way to promote such involvement by crossing the boundaries between epistemic cultures and power practices.

2. The anthropology of healthcare value: representations and practices

By adopting the average as a measure of healthcare value for patients, the first consequence of the VBHC model is to hinder personalised medicine's very purpose: care and therapeutic adequation to the person (Khoury, 2014). In fact, the standardization of value as stated by the VBHC model reveals the existence of an important dilemma. On the one hand, the political economy of new biopolitics keeps following the principle of care personalisation but fails to break free from the spectrum of *Homme Moyen* norm and the consequent Quetelet's-like moral statistics, which impacts on science and society were enormous (see, for example, Halbwachs, 1912). On the other hand, and in view of the still little more than incipient capacity to treat, analyse and reduce the immense volume of data produced by the disseminating biometric monitoring practices and the description and interpretation of the functions and effects of biochemical signalling genomes that explain their activity (the epigenome), the extreme complexity of the ideal interpenetration of precision/personalised medicine and digital health compels the imposition of standard-reducing measures that overlap with the people-centred approach which purportedly constitute their ultimate objective.

We see, therefore, that there is a two-way conflict within the biomedical ecosystem that challenges the VBHC model idealizations. In one sense, the model can prevent the full realization of the potentialities of precision/personalised medicine by, for instance, imposing limits on the number and the variety of therapies by bottlenecking the access to them in order to restrict healthcare due to budget constraints; in another sense, it can annihilate the ideal contained in the expression 'patient outcomes' by tilting the patient's dispositions towards the other stakeholders', notably those producing the standard measures.

Facing these contradictions, carrying out an anthropologically informed ethnography along the processes of implementation of the VBHC model can indeed be decisive for the success of these same processes. Anthropologists' ways of knowing and doing can be very helpful to moderate the essential tension between technoscientific and social imaginaries in order to inspire the formulation of a balanced sociotechnical system that will be both technoscientifically and socioculturally responsible and satisfactory.

2.1. Modes of knowing: healthcare value as a lively quality

As it's been said, the tendency for the VBHC model to impose a standard on what value for patient means is eventually the way the model creators and its succeeding implementers find to reduce the extreme complexity of how people evaluate their organic and mental conditions. It is a strategy to manage diversity. A closer reading of Michael Porter's answer to the question 'what is value in health care?' gives rise to the idea that the introducer of the model wants to evade from any discussion on what healthcare value is, when he says that value in health is "...neither an abstract ideal nor a code word for cost reduction" (2010: 2477), to then refer to the cost-benefit ratio – i.e., an abstract construction focused on cost – as the measure of value.

Porter's answer does not make us convinced whether, and under which conditions, value can be kept away from being a concept open to the inclusion of both the formal and the substantive aspects of economy. It is not reasonable to erase the in-the-bone nature of health conditions, as well as it isn't to deny the principle of payment requirement (Testart, 2013) of healthcare acts

through which outcomes are eventually reached. So, trying to avoid controversy, Michael Porter ends up erasing the very logic of association between help-seeking behaviours (which are triggered by a previous evaluation made by the patient about how his daily life and his self are being changed due to the eventual alteration of their organic or mental condition – see, for example, McKinlay, 1981) and formal healthcare providing (which, as an institutionalised way of social organization, is regulated by the principle of payment requirement). Apparently, Porter neglects the fact that healthcare value for patients results from an induction of the quality of a certain material-semiotic relationship that in health caring formal contexts always implies to consider both cost-benefit ratios and sociocultural expressions about human condition.

There is something ideological about the denial of the multidimensionality of the concept of value and the subsequent imposition of a standard meaning. Indeed, the opposition between the forces of homogenization of value in the model and the heterogeneity of individual expressions of the meaning of value is not disconnected, in my view, from the imposition of theory over practice and epistemology over ontology, which is a characteristic of neoliberal ideologies, which seek to normalise and stabilise idiosyncrasies. This imposition expresses the essential tension between biopolitical imaginary with its hegemonic contingency-producing power and sociocultural imaginary that tries to resist to such power.

Michel Foucault already had constated that the birth of clinic happened when a new “style of totalisation” (Foucault, 2007:28) was created that emptied the sense of healthcare value of any cultural, collective connotation:

“What defines the act of medical knowledge in its concrete form is not the meeting of the doctor and the patient, nor the confrontation of knowledge with perception; it is the systemic cross-over of several sets of information that are homogeneous one with the other, but foreign to each other – several series that envelop an infinite set of separate events, but whose overlapping brings out, in its isolable dependence, the *individual fact*” (Foucault, 2007: 29-30, italics in the original).

The shift in the meaning of the value from cultural ontologies to the epistemologically constructed fact exemplifies how the focus of attention of biopolitics’ leading designers was directed towards the control of fluidity and volatility of social interactions, ignoring what is of utmost importance – the occurrence of stability, as Radcliffe-Brown recalled (Dumont, 2013). This shift also indicates that our contemporary modes of disease management are not so much different from classical ones. As we have seen from the empirical examples presented above, although Michael Porter tried to disconnect the value of healthcare from its cultural broth, the reality of implementing the VBHC model shows that it is not possible to separate the abstract value (whether measuring the production or the outcomes) from the meaning of the practices of the agents involved in healthcare delivery and its beneficiaries’ daily life constraints.

So, the centrality of the concept of healthcare value in the VBHC model requires the overcoming of the basic opposition constructed between value as universal anthropological phenomenon and value as modern economic calculation. As Louis Dumont states, that distinction is founded on the fact that modern science “refus[es] all qualities to which physical measurement is not applicable” (1992: 234). However, the separation of these two interpretations on value does not displace monetary value (the cost) from the meaning of social relations and institutions, since, as mentioned before, value translates into power, which is evidently exercised by, and over, social actors and institutional apparatuses. The challenge to economists is to look at value as an all-encompassing anthropological phenomenon. And this requires understanding value attribution as an ever-present human (as well as non-human, as we will see) *practice*. In what

follows, I highlight some issues on the anthropology of value which, I believe, will bring a new impetus to this discussion.

Theorizations on the anthropology of value are developed along three main lines (Otto & Willerslev, 2013a, 2013b): the one that understands value as a reference for cultural comparability, mainly represented by Louis Dumont's (1992 [1986]) and Clyde Kluckhohn's and Florence Kluckhohn's works (these latter summed up and systematized in Kluckhohn & Strodtbeck, 1961), the one that studies value as a referent of exchange, which the fundamental work is Marshal Sahlins' (1972), and the one that understands value as being produced within action, mainly represented by the work of Michael Lambek (2008).

All these lines contain elements that help us to interpret the contradiction between the standardization of value in the VBHC model and the diversity of patient values denoted in the aforementioned empirical studies. The intention of this reflection is not to make an exhaustive analysis of the ideas defended by each theoretical line, but, instead, to present some pertinent questions that may help us to better understand what that contradiction means.

Louis Dumont stresses that value is embedded "in the conception of the world [and] in the very configuration of ideas" (Dumont, 1992: 245,259), and that's why the healthcare value for patients does not match healthcare value for healthcare providers and eventually for the rest of the formal stakeholders. This means that healthcare providers, as the other formal stakeholders, will have serious difficulties to define what healthcare value means for patients. Through Dumont's theory perspective, patients would not necessarily affiliate their understanding on value to the fact judgment / value judgment distinction in their valuations of healthcare outcomes. That is a modern distinction, Dumont (1992) says, that lies beneath the "ethical trick of rational action" (Graeber, 2005: 443). Patients act as common people who, although critical, judge more reflexively than analytically, carrying the criteria to judge value across different regions of practice along their daily activities as a measure of what they accept as being *the desirable* on a wide-ranging plane of judgement devoid of internal epistemological boundaries, as Kluckhohn reminded (quoted by Graeber, 2005: 444).

Significantly, David Graeber mentions Ferdinand de Saussure's structural linguistics which demonstrates that "the meaning of a term can only be understood in the context of a total system" (2005: 447). To our analysis, this important aspect means two apparently opposite things. First, it means that the meaning of the value of healthcare outcomes attributed by the patients or by the other stakeholders is only comparable by having the semantic background that underlies them as a term of comparison, that is, they can only be compared on a plan that dilutes the differences between the several epistemic cultures. Secondly, it means that, in order to understand the meaning of value for each of the agents, it is necessary to place it within each agents' vocabulary technology and its applicable semantics with and through which each of the agents expresses his specific discursiveness, his own idiom. The opposition between these two considerations is only apparent, since we observe the same principle applied at different scales. For Dumont, the comparability background is universal; it is not limited to a particular system of ideas – the separations between systems of ideas are products of Enlightenment, which had promoted both the disciplinary division of reality and the 'discursive purification' of science evoked by Latour (1993). And, what is especially important, for Dumont (1992), who adopted Saussure's theory on oppositional linguistic pairs in his theory on value, this semantic background is structured in and by a hierarchy.

Saussure's structuralism has shown that language (which is both the product and the raw material of ideas) is organized into oppositional pairs, like 'yes/no', 'good/bad', 'hot/cold', 'high/low', etc. Dumont realized that within each of such linguistic structures one of the terms is always more *culturally* valued than the other, and this therefore means that "ideas are always also 'values'" (Graeber, 2005: 448). So, both ideas and values are hierarchized. Moreover, this hierarchy presupposes the existence of a comprehensive term, as, for example, the entire body comprehends the opposition 'left hand / right hand', and, even within this opposition, the most valued pole, 'the right hand', encompasses the least valued, the 'left hand', and so it is the case of all the other ideas (see, for instance, the fact that we usually mention oppositional pairs locating the most valued term in the first place, as, in the example referred above: 'yes/no' instead of 'no/yes', 'good/bad' instead of 'bad/good', 'hot/cold' instead of 'cold/hot', and 'high/low' instead of 'low/high' – and we do this unconsciously, as if it is an habit, which means that this bias has been culturally inculcated). The way how each of us hierarchizes linguistic oppositions reflects the way our cultures hierarchize value.

As we know, professional instruction inculcates a special idiom on us, which is articulated by a new, specific, hierarchical structure of value that, within a given professional context, determines or conditions our practical options. Professions constitute cultures too, which are commonly designated as epistemic cultures (e.g., Knorr Cetina, 1991)¹⁰. So, when I refer to 'the way our cultures hierarchize value', I'm considering both the actors' different basic cultural background and their different epistemic cultures. Specially within a formal/professional context of practices, hierarchizations of value are rooted in both cultural realms. This means that even if the different stakeholders involved in a VBHC model process of implementation belong to a same national or broad culture, they potentially will value healthcare outcomes differently due to their differentiated epistemic cultural backgrounds.

Healthcare providers and patients are the most qualified agents to value healthcare interactions' outcomes. Considering what has been observed from the empirical examples presented above, the phenomenon of value hierarchization implies that between the value of 'health recovery' and 'treatment costs' an opposition emerges in which each agent overvalues one of the poles. The provider tends to encompass treatment costs in the most *biomedically* important value of health recovery, whereas the patient encompasses the value of health recovery in the most *socioeconomically* important value of treatment costs. Considering that each of the agents is focusing on different references of value, the only way to understand the rationality of each position is to contextualize the opposition on a broader plane – that of the total system of values. And this system far exceeds the usefulness of specific goods, projecting itself to what the environment contains and to how humans access its content.

The way how to access to the environment content is an important aspect we need to address to understand how value is created. Although classical economists, like Adam Smith and David Ricardo, had already referred to the importance of rarity and utility as factors that form goods' value, it is through James Gibson's affordances theory that, I think, agreeing with Thomas Widlok (2017), we can find some fundamental elements that may help us to think about value creation

¹⁰ Karin Knorr Cetina (2007:4) defines epistemic culture as a notion "to capture interiorised processes of knowledge creation. It refers to those sets of practices, arrangements and mechanisms bound together by necessity, affinity and historical coincidence which, in a given area of professional expertise, make up how we know what we know."

and sharing practices (within which we may situate the archaic sense of care and one of its special forms: health-related care).

The affordances “are what [environment] offers..., what it provides or furnishes, either for good or ill”, Gibson (2015: 119) says. The affordances are the resources that environment provides as life supports, such as water, land type, shelter, raw materials, etc., as they also are the things that may threaten life. But, to be used by animals, for example, these ones must perceive resources as affordances. This, Gibson adds, refers to “a radical hypothesis, for it implies that the 'values' and 'meanings' of things in the environment can be directly perceived [and, this may suggest that] values and meanings are external to the perceiver” (2015: 119). Moreover, what each interlinked pair of agencies perceive as affordance is reciprocal, that is, *ego* affords *alter* by using the same 'measure' that *alter* uses to afford *ego*:

“what the male affords the female is reciprocal to what the female affords the male; what the infant affords the mother is reciprocal to what the mother affords the infant; what the prey affords the predator goes along with what the predator affords the prey; what the buyer affords the seller cannot be separated from what the seller affords the buyer, and so on” (Gibson, 2015: 127).

From this perspective, what the patient affords the carer is reciprocal to what the carer affords the patient, or, yet, what health services and institutions afford the patients is reciprocal to what the patients afford the services and institutions, or, even, what national health systems afford the patients through healthcare institutions is reciprocal to what patients afford the national health systems through healthcare institutions¹¹. However, affordances in human worlds are not as straightforward or naïve as this logic may make us to believe. As I have stressed earlier, if we want to understand an interaction, we can't exclude from it any of its two main dimensions. We must look at it as a material-semiotic composite form. In this regard, Gibson informs, that “the other person, the generalized other, the alter as opposed to the ego, is an ecological object with a skin, even if clothed. It is an object, although it is not merely an object, and we do right to speak of he or she instead of it” (2015: 127). This material-semiotic compositional work means that agents recognize each other by managing reciprocity through subject-object shifts (Wagner, 2018). That is, agents are co-constituted as both subject-as-object and object-as-subject forms through entangled intra-actions, as Karen Barad (2007) would say. So, subject-as-object and object-as-subject reciprocally become and evolve. We must mind, then, that the reciprocal nature of how agents afford each other depends both on their material qualities (including their clothes, which, in the case of healthcare interactions provoke a special set of expectations, since clothes providers' wear refer to a given socio-professional status and a peculiar epistemic culture that specialize the type of affordance perceived by patients) and their capacities to intertwiningly construct new affordances.

¹¹ As T.R. Reid puts it, each national health care system “is a reflection of its history, politics, economy, and national values” (2009b:25). Additionally, there are managerial cultures in each country and/or healthcare institution that shape the way how healthcare systems models are interpreted and implemented (Reid, 2009a), which, ultimately, mould the way how systems' stakeholders interpret healthcare value for patients (Chipman, 2015). Significantly, the central difference between patients' and providers' healthcare outcomes valuation – health recovering vs. healthcare costs – questions United States healthcare system (Pendleton, 2018), which chronically lacks social equity – about 45 million people have not health insurance, only accessing to healthcare if they “pay the bill out of pocket at the time of treatment” (Reid, 2009b:30-1). In this particular context, it is understandable then that patients primarily value their capability to afford healthcare treatments.

We must mind, then, that how agents afford each other depends greatly on their competency to construct, to play the game in an always politically constrained sociocultural milieu, to which Pierre Bourdieu referred as the *field* (Bourdieu, 1991). Notably, interacting actors express their competency to play the game through their mastery of using social reality structuring structures like language (Bourdieu, 1991). This means that their reciprocal affordances are greatly shaped by their capacities to operationalize systems of ideas, that is, to interpret, to produce, to share and even to manipulate value. Relating this to our empirical examples, I would add to Gibson's two last citations that healthcare providers and patients reciprocally afford each other by recognizing that each of them elaborates some complementary – that is, unbalanced and not necessarily conforming – representations about the interaction they are involved in. And this results from the complexification of the perceived affordances by agents' culture-bound worldviews and related social statuses and roles they assume and perform, which constrain each's practices and expectations, by contextualizing them into broader upstream levels of social organization.

This fact brings into the affordance reciprocity another tier of complexity: values and meanings are not exclusively external to the perceiver, as James Gibson stressed about pure ecological affordances. Within healthcare social interactions, in particular, we are dealing with a formalization of an intersection of personal material-semiotic stages (that of professionals and that of patients), which constitutes a second-level, supra-personal or interactional material-semiotic stage, from where the first-level personal material-semiotic stages extrapolate their individuality and get their signification in the context of healthcare interaction (which is institutionally mediated and, thus, politically framed). And, by its side, this supra-personal material-semiotic stage acquires its meaning in a wider field of sociocultural and political-economic references of signification (the social organization system), which assumes itself as an encompassing third-level meta-institutional material-semiotic stage. Evolutionary economists use to refer to these levels as micro, meso, and macro systems of rules (e.g., Dopfer et al., 2004) which intersection complexifies the economic system behaviour – this latter constituting the meso level, according to these authors – similarly to how environment change modifies biological systems (Arthur, 2015). Figure 1 shows a simplified representation of the complex superpositions of material-semiotic stages that ultimately influence value in healthcare.

As Gibson stresses, neither ego nor alter are merely objects. However, when looking at the supra-personal material-semiotic stage (which constitutes our object of analysis, that is, the interactive system inside biomedical ecosystem), the non-trained external observer has the tendency to erase its internal differentiation, therefore assuming that healthcare interaction is an aim-conforming one. Though, we can't bypass the fact that both agents are culturally shaped entities that were (inevitably differently) disciplined and trained to manage the way how they make their attributions about social facts and relationships along their lives. During such management, agents selectively black-box and express their dispositions, personalizing cultural training outcomes (see Allport, 1927). Thus, we cannot omit that any social interaction is established through intersubjectivity as it is performatively expressed through bodily personalities' reciprocally perceived affordances in a given material-semiotic context (the cultural field). We cannot omit either that in healthcare interactions, the focus of intersubjectivity is not necessarily subordinated to patient's body, to his materiality.

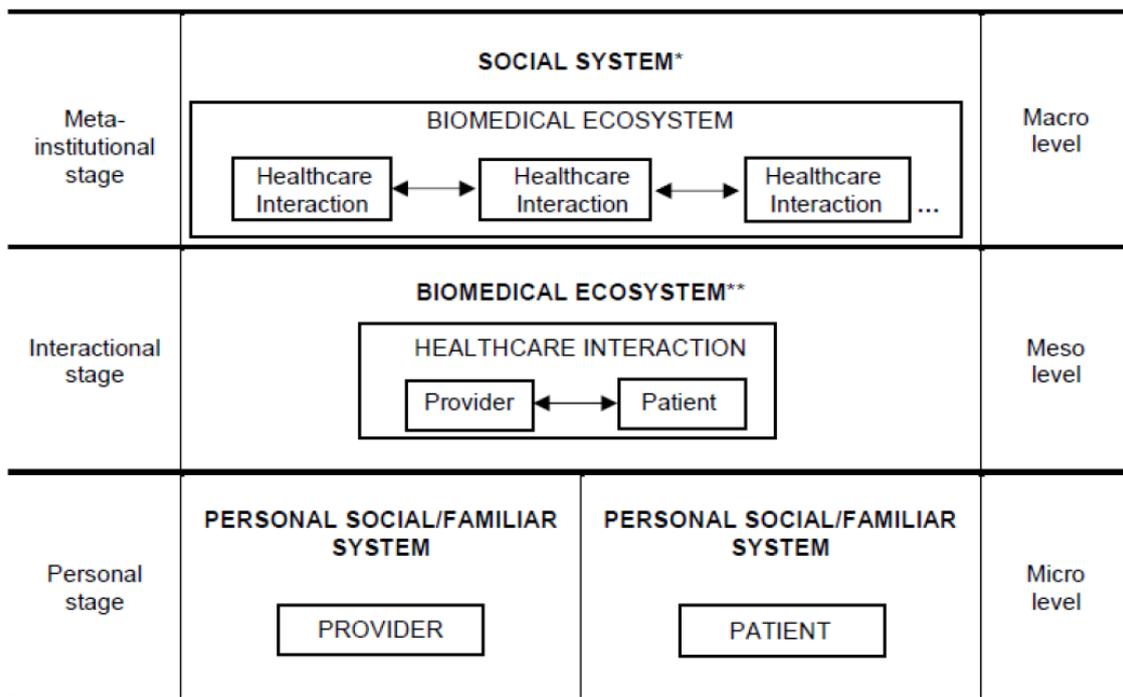


Figure 1 – Material-semiotic stages involved in valuations of healthcare in a given social system of ideas (*includes other socially organized ecosystems; **includes other institutionally organized healthcare-related interactions)

In other words, healthcare, as something that is provided by *human* environment, has an intrinsic value that is both external and internal to the different agents. External, because none of the involved agents can deny the value of healthcare – and here lies the common ground where all particular perceptions on healthcare value find their similarity, making healthcare practices equivalent insofar they share the same quality as human labour, which is an important characteristic of classical economics’ interpretation of value¹². Internal, because the truth of judgments on healthcare is conditioned by each agent’s lives, social function’s constraints and cultural competency to play the game. Thus, agents’ general (human) condition and specific (sociocultural) conditionalities are both interrelated in the production of healthcare value. We can’t ignore the fact, for instance, that both healthcare professionals and patients perform social roles. The VBHC model reference to healthcare value as ‘the value *for* the patient’ means exactly that there is a value to each of the agents involved in healthcare. Moreover, it situates the patient in a social position that is inherently relative to the positions of the non-patients. That is, potentially all agents are patients, since a patient is an attribute that physicians confer to a person (McKinlay, 1981), which is then expected to comply a social role – the sick role, in Talcott Parsons’ (1951) words. So, the model itself considers the meaning of value as a social

¹² As Karl Marx theorized, it “is only the expression of equivalence between different sorts of commodities which brings to view the specific character of value-creating labour, by actually reducing the different kinds of labour embedded in the different kinds of commodity to their common quality of being human labour in general” (1992: 142). This means that, mutatis mutandis, specific value-creating labours are comparable because of “their common quality of being human labour in general”, which makes different products interchangeable.

construction. Thus, once more, value is more a *pour soi* than an *en soi*, to use Sartrean basic distinction (cf. Sartre, 1943).

Given what has been said, I think that, despite its conceptual strength, Gibson's theory of affordances is not totally satisfying to understand the *human way* to perceive values and meanings of things and actions *in a human environment* (which is always politicized – I'll return to this point). The case is that, additionally to the social construction of patient's persona, humans are eminently reflexive agents, i.e., they cumulatively learn from their own and others' experiences, which are transduced across generations (for which purpose exemplary folktales and stories are of paramount importance). This continual learning is a way to them algebraically – that is, remotely, without occasions being spatially or temporally necessarily present – prepare to detect the danger, as, for example, by resisting to be deceived and bite the bait. Algebraic reasoning is acquired from long-lasting observation and is fostered by necessity.

In this context, material hunger is the primal urge; it is the whip (Bloch, 1995b) that compels humans (and the other animals) to take observation seriously. As Ernst Bloch refers:

“every implement presupposes exact needs and has the precise aim of satisfying them; otherwise it would not be there. Hunger started everything off at this very point, the earliest implements are those for hunting and fishing ... Hunger forces us to work, but this work wears us out in its own way exactly like hunger.” (1995b: 658, 886).

Treachery is a common tactic used by animals to deceive other animals, whether to fight or to flight¹³. It demands training, intelligence, not infrequently cooperation, and is exerted around a sole purpose: to respond to hunger. As we know, animals are repeatedly trapped, fished and hunted due to their difficulty for detecting the danger of human misleading objects, actions or strategies. Perhaps these ones are not afforded as *biologically* or *ecologically* significant, as it is, for example, the colour of a poisonous fish to his predator. Or, perchance, human predatory techniques change too rapidly, preventing the evolution from including them into the ensemble of dangerous things that a given biological form must avoid. Or, maybe, such techniques are too recent comparing to the ample span of biological life duration, so they weren't yet showing them to be significant to mobilize adaptation strategies. Or, even, preys simply can't avoid being captured by humans because natural training to avoid human-made delusions is inexistent, and this inexistence obstructs animals' capacities to distinguish value between reality and illusion relatively to these concrete situations. Or, none of these hypotheses apply, and humans' techniques are simply unbeatable, and human disguises are indecipherable.

All these hypotheses don't exclude the fact that humans have collective memories of individual and social experiences that are potentially exemplary in survival terms. Such memories are commonly enregistered and are archived as default forms of behaviour furthering knowledges, constituting ethical value (e.g. exemplary tales). Such technology turns *ecological affordances* into *technical affordances* (cf. Norman, 1988), transforming them into potentially performative acts (I'll return to this subject), thus helping humans to distinguish the value of things and practices with a high level of accuracy. Then, although statements and practices misleading expressions are a common strategy for humans to detect danger, even if they are used to deceive one another, they likely will be detected based on those experiences and memories, or, if not, they will be socially and juridically sanctioned and incorporated within anecdotal and

¹³ For a brief presentation of the anthropology of traps and of these ones' value as bridges between meaning and materiality as well and products of intelligence and prolonged observation, see Corsín Jiménez & Nahum-Claudiel (2019).

jurisprudential formulae as potentially harmful utterances or behaviours. So, Gibson's radical hypothesis according to which values and meanings are external to the perceiver explains only a part – perhaps a small one – of human evaluative behaviours in a humanized context like healthcare interactions.

Affordance theory helps us to understand that, although all the agents (the stakeholders of the health ecosystems) perceive the resources of the environment as affordances, that is, perceive environment's value, each of them realize them differently. And this has nothing to do with rationality or irrationality (see, for instance, Godelier, 1972), but with the fact that human beings cannot escape from their biological condition, which recalls the oldest and most profound principles of valuation: those directly related to the satisfaction of the material hunger. The whip of material hunger imposes its principles of valuation over any others, including the ones national health systems and related healthcare institutions project through its affordances. Since it is a universal driving force, material hunger pervades human societies across the globe – no national form of healthcare system can replace its primacy. In fact, the normativity enacted by material hunger emerges from a deeper level of valuation that cannot be replaced by another which is organized around transcendent discursive abstractions. So, instead of replacing material hunger as the primal will, upper levels of social organization gradually turned material hunger satisfaction into a socio-political end, overlapping it with other levels of valuation.

An interesting way to think about this *politization* of fundamental biological affordances is through Hannah Arendt's philosophy of human condition (Arendt, 1998). Among other issues, Arendt referred 'labour' as the kind of human activity that attacks material hunger. 'Labour' confronts biological needs, and, as these don't have an end, 'labour' never ends. This means that the maintenance of life is a (potentially) never-ending activity. The case is that modernity *socialized* this activity. By integrating 'labour' within political normativity, modern state biopoliticized the human activity that attacks material hunger, concatenating 'labour' and 'work' (this latter being an activity with a beginning and an end that transforms material forms for a given circumscribed purpose) into a 'social action' form, invading thus both private and public realms as a way to manage the strategies to fulfil biological needs. Attacking material hunger became a political premise. In this way, 'social action' blurred the frontier between the private (*oikos*) nature of 'labour' and the public (*polis*) nature of 'work' constituting life as an embracing biopolitical resource (Arendt's *vita activa*).

Approaching this rationale to our discussion, this means that 'labour' (say material hunger) and 'work' (say health care) may seem indistinct to the several healthcare systems' stakeholders from a 'social action' (say healthcare systems management) standpoint. Along with the fact that economy (the regulation of *oikos*) and politics (the regulation of *polis*) are blended into 'social action', we may observe a tendency to interpret material hunger and healthcare quality as two facets of the same 'social action', i.e., as two expressions of a same value. We may understand, then, that 'social action' requires a common meaning of 'value', one that hovers over the value of 'labour' (life needs) and the value of 'work' (the circumscribed work of healthcare). Significantly, we find here, once again, the pertinence of Dumont's theory of value hierarchies. Modernist bio-politicization of human activities encompassed the values of 'labour' and 'work' into the wider value of 'social action', which, as Hannah Arendt stresses, became the prime value of modern *vita activa*. And this wider value of 'social action' substituted the wider value of 'material hunger' for the purpose of political regulation.

This encompassing social dimension of value is, in fact, the value economists reclaim as *the* economic value. Paradoxically, while economists like Michael Porter struggle to run from the

concept of value as social expression, they end up using this very expression of value to construct their whole disciplinary knowledge. After all, economy is a *social* science.

Again, ecological affordances become socio-political affordances, that is, become things' perceived properties that suggest how they should be socially and politically handled (Norman, 1988). The case is that this 'should be' is not an external property of the artefacts; it is a socio-political construction that enacts the way how two different though *co-respondent* (cf. Ingold, 2016) realms (nature and society) are treated as a same unique one. Here, again, an extreme *work* of discursive purification becomes resulting in a mixture of two ontologically very different levels of reality.

Although “wishful images of combatting disease must be the oldest along with those of combatting hunger” (Bloch, 1995b: 457), when we think about modern formal healthcare practices, we can't isolate them from market-like transactions. Payment requirement (cf. Testart, 2013) isolated formal healthcare practices from the wishful image of *human care*. The same happens regarding combatting hunger (which is an epiphenomenon of sensing hungry). Payment requirement is a pervasive means to people both benefit from healthcare and provide sustenance, and the access to these goods may even possibly be obstructed because of that. Payment requirement subverts the affordances natural logic by putting abstractions (payment – a representation) before concreteness (goods – the matter). After all, it is payment requirement that explains the difference between national healthcare systems models (see Reid, 2009b:25-39).

The focus on the value 'treatment costs', which patients elect as their main concern in the Utah survey, recalls precisely that subversion. Based on the payment requirement primary social action principle (which, as mentioned above, blends politics and economics), the value of goods become measured by their financial affordability rather than by their inherent affordances. In other words, affordances became to be perceived through the agent's capability to *afford* them. And this perception implies that agents make calculations, that is, that they critically analyse their capability to negotiate. Agents understand that reaching a measure of optimal negotiation is a complex process that mediates agents' dispositions between collaboration and conflict involving decision-making (Friedman, 2004; Chibnik, 2011).

As stated, this aspect refers to the phenomenon of the hierarchization of value, which Louis Dumont (2013) understands as the enveloping norm of the entire social organization. Dumont's theory of value hierarchy is especially useful for analysing the difference between the capacities actors have to critically perform negotiations when involved in the technological dramas that potentially arise along the process of implementation of the VBHC model (cf. Pfaffenberger, 1992)¹⁴. From the empirical examples given, such difference is tested between the whole and

¹⁴ Technological dramas are confrontations of discourses between technology designers and the people or populations who suffer their impacts. In Pfaffenberger's words (1992: 284), a technological drama is “a discourse of statements and contradictions in which three processes can be recognized: technological regularization [the process by which a circle of designers modifies a technological process or an artefact], technological adjustment [process in which people who suffer the impacts of the regulatory process engage in strategies that try to compensate for these impacts] and technological reconstitution [process

the part: the whole, that is, the material hunger, is the primal leitmotif for organisms and species to maintain vital balance. Such 'will to power', as Friedrich Nietzsche called it, is a condition of immanence, which overlaps transcendence and historical actualizations (Siebers, 2013), or, rather, encompasses it, by driving the dialectical relationship between potentiality and actualization, which, in the end, resolves the "abstract dualisms, [opening] up a comprehensive viewpoint from which fixed duality disappears" (Bloch, 1983: 304). Articulating this immanence-transcendence dialectical movement to the two main 'wishful images' of the living referred by Bloch – combatting hunger and combatting disease –, we may identify the former with immanence and the latter with transcendence. Indeed, hunger is constantly problematized, since it is inherent to the living, while disease is problematized only when health turns problematic. Everybody feels hunger from womb to tomb, but not everybody experiences sickness his life all along. Or, still, if one does not fulfil food needs, one may become ill, while if one feels ill, one does not necessarily get hungry.

Material hunger is then the most concrete aspect of being alive. All living beings submit to its will. So, material hunger is the paramount encompassing value of the living, and it becomes the core of the problematizations about life in situations where it is under scrutiny, as when disease arises. It is therefore natural that in a situation of vulnerability due to an illness, which, by itself, may not endanger survival, the person who experiences suffering invokes the greatest value of maintaining the balance that allows hunger to be attacked in a durable manner, i.e., sustenance. Referring to service costs and quality of care as core values may mean precisely that addressing the biopolitical constraints that the acceptance of a given health problem mitigation process entails is an exercise that must be performed before proceeding to such an acceptance. The maintenance of equilibrium that makes possible to sustain life (in its diverse anthropological scales, such as the personal, the familiar, and the social) by controlling socioeconomic contingencies helps to prevent hopelessness – which is the most anti-vital sensation (Bloch, 1995a).

Louis Dumont believed that the hierarchization of values is the way how societies organize their systems of ideas in a matrix that is used, even unintentionally, to express ideas in the form of desires. In this way, value and hierarchy are the same, since this latter values ideas in a logic that inspires dreams and drives action (Dumont, 1992: 269) – which probably explains the optimism we express when we invoke ideas, even if unrealistically (see Weinstein, 1980), as we have seen through the example of linguistic oppositional pairs. Here emerges another key element to think about value that can provide important references for understanding why there are different interpretations about what 'health value for patient' means in the context of the VBHC model: the performative concretization of value.

Classical economists stressed that economic value was constituted through work. But the way how societies reason the worth of things and acts requires another kind of value: the 'ethical value' (Lambek, 2013). Ethical value is constituted through ordinary acts.

When patients invoked the quality of care as the second option to measure healthcare value, they were referring to this performative dimension of value. This means that, while formal stakeholders may understand healthcare value through the logic of the accomplishment – to recover health –, patients, additionally to the payment requirement principle, may understand

in which people who suffer the impacts of the regulatory process] attempt to reverse their effects with contradictions and / or alternative artefacts] ”.

it through the performative quality of alters' acts, that is, through the capability for these acts to conform with ordinary expressive forms of ethical value.

As Michael Lambek understands them, ordinary acts “are not reducible to economics, but to the contrary, constitutive of ethics, [and] are culturally or semiotically shaped or mediated.” (2013: 145). Loaded with meaning, ...

“...acts generate their own forms of value. To the degree that this value becomes objectified, that is, becomes detached from the doing (just as an end – or product – of work becomes detached from the means, that is, from the activity of making it; or as the end and even the very means are alienated from the producer), such objectified values might have their own proprieties, distinct from use value and exchange value of the products of labor or from labor itself considered as an object” (Lambek, 2013: 147).

Even acts in the sphere of material production and exchange achieve ethical value. Yet, acts that perform ethical value (action) are distinguished from acts that produce material value (production). Due to their different nature and results, these two types of acts refer to different forms of value attribution. While material value is commensurable, ethical value is incommensurable, and this “leads to two different kinds of valuation, namely choice in the case of market value, and judgment in the case of ethics, where a balance between incommensurable values has to be established” (Otto & Willerslev, 2013b: 5). Such balance is established through performance in each cultural context. Thus, ordinary acts potentially become performative acts.

Performative acts have the property of objectifying value and of defining how ethical value circulates in society. Moreover, similarly to material value, ethical value can be stored, but, instead of in safe boxes or properties, “in sacred postulates or verbal formulas, which, in turn, assume authority through their narrative iteration” (Otto & Willerslev, 2013b: 6).

An aspect of this theory on action and valuation that is important to the current discussion consists in the fact that the ethical value needs to circulate through human activities, by which it is objectified, otherwise it will lose its performative and normative value. Through sociocultural activities, the ethical value is objectified. For example, the gift objectifies acts such as giving and receiving, constituting a performative act par excellence. Gift objectifies those acts as commodities objectify work (Otto & Willerslev, 2013b: 6).

As ordinary as they may be, acts are valuable; they constitute the places where, and the means by which, *ethos* is realized, the *locus* where the value of behaviours is judged by society against their cultural meaning background, which, in turn, is constituted as a hierarchical system of ideas. As mentioned, due to its incommensurability, ethical value cannot be evaluated by choice; it can be evaluated only by objectifying itself through interpersonal performative practices, that is, practices whose social meaning has been augmented through symbolic treatment, as Dan Sperber (1978) would say. Such symbolic treatment confers to ordinary acts the legitimacy to properly express potential fundamental cultural sense, that is, to structure social interactions' fluidity and volatility into stable forms of discourse and practice, integrating them within the ensemble of cultural norms. This symbolic treatment also discourages or even forbid rational argumentation or replay (Bloch, 1974, cited by Pfaffenberger, 1992:284).

As I see it, healthcare is a social relationship, a normally unbalanced interaction based on asymmetrical communication, where different epistemologies and sometimes different systems of ideas are confronted and confused. As such, its assessment depends on what can be translated by the very verb 'to care', which has as its main synonyms 'to oversee', 'to maintain',

'to assist', 'to heed'. All these synonyms can be grouped into two categories of verbs: 'to supervise' and 'to look after'. Patients, being in a vulnerable situation, need help from a trusted person to supervise their (biologically unruly) rhythms and to pay heed to their needs. These actions are fundamental, in a naturally gregarious species in which reunion and mutual help have contextualized and shaped health/care-based interactions since humans were dwelling in caves.

The keyword here is 'trust'. The trust that wounded or ill persons got from their clans' relatives was primarily founded on the recognition of their personalities as being friendly, since they were familiar or akin to them. Gradually, care acts confounded with healing acts, being progressively symbolically enhanced and ending up becoming performative, even ritualized, acts. The carer became a healer, a shaman, now recognized by his/her clothes and insignias. Personality gave place to material façade. And recognition became stigmatized. Healthcare practices became a form, a type. And trust became to be produced by associating presentation and function. Healthcare agents' clothes became an affordance of a special set of social practices, stimulating, thus, a special kind of expectation: trusted care.

In a context of formal healthcare delivery, care practices perform ethical value; they perform well-defined protocols and procedures, accumulated in codes of professional ethics and deontology in which the limits of practice are defined and assume the status of norms of social interest. Trust is now founded on a combination between healthcare professional presentation (his/her gown) and these black-boxed codes. Formal healthcare practices become sets of performative acts that objectify ordinary acts as 'to oversee', 'to maintain', 'to assist', or 'to heed'. Those sets of performative acts aim for a value that both caregivers and patients know and recognize, that is, both make judgments about caregiving extrapolating from this association between material presentation and formal, scriptural sanctions and agreements, in the same manner as a community recognizes its shaman's social function by associating his insignias with a special kind of performativity.

Looking at healthcare practices as objectifications of ordinary acts that are socially pervasive and anthropologically omnipresent, patients judge the conformity between the experiences they have during formal healthcare and the expectations which they bring with them from the outside, from the non-technical world of human care. Assuming the role of judges rather than evaluators, patients implicitly refer to this psychological contract to evaluate healthcare practitioners' *ethics*. While providers expect to understand what patients have to say about the outcomes of their practices, patients communicate their judgment focusing the very process of realization of such practices. Instead of focusing on the product (outcome), patients focus on the process (acts). And this may be one of the reasons why patients respond that care is more valuable than its product. Admittedly, this analysis lacks more empirical observation... But, after all, its aim is precisely to justify the realization of such an observation in order to better understanding why patients *judge* practices rather than *choose* outcomes. I'll propose at the end of the article a set of characteristics that this observation eventually can assume.

If the wishful thinking of combatting hunger encompasses the wishful thinking of combatting disease, we can then conclude that the hierarchization of values performed by patients defines 'sustenance' as the encompassing value and 'supervision' and 'looking after' as fundamental encompassed values. So, as argued, if the maintenance of equilibrium that makes possible to sustain life by controlling socioeconomic contingencies helps to prevent hopelessness, then the good care fosters the psychosomatic balance, nourishing, thus, the wish that drives hope, as Ernst Bloch (1995a) would say.

The researchers' astonishment at the results of the surveys on the value of healthcare for patients (e.g., Nilsson et al., 2017; Pendleton, 2018) is due to their effort to understand why patients do not choose to cure their condition as their main value – after all, that was why they sought healthcare services in the first place. The explanation necessarily falls into two parts. The first is that those researchers guide their interpretation of value based on economic rationality, while patients are guided by the mostly a-rational (which is radically different from irrational – an aspect that economists hardly understand) cadence of their ways of living. The second is that patients know that after care they will never be what they were before, nor will their life be the same it used to be, either because treating and healing are different things, or because the experience of illness makes patients aware of the fragility of their existence, which can induce changes in their lifestyle. Someone who, for example, had undergone a splenectomy maybe he/she was taken care of by a health professional but he/she will never have a spleen anymore, additionally, he or she had experienced the confrontation with biomedical apparatuses with all their paraphernalia of impressions and expressions, technologies, smells, tastes, moans, people suffering or dying, etc., which would remain in his/her memory for more or less long time. The experience of illness shapes the subjects. And this is incorporated into patients' flesh and bone. Whereas researchers *formalize their belief* in healthcare optimal effectiveness, patients *lively perceive* an expectation/experience gap.

Recently, a VBHC program implementation director told me that, while some patients define healthcare value as getting cured as fast as possible, some others define it as dying as fast as possible. This information clearly destabilizes the VBHC model narrative, which is inspired by the evidence-based medicine's principle of treatment effectiveness. In view of this, we should now realize that, by opening the decisional space on healthcare priorities to patients' voice, VBHC model implementers and promoters must also open their epistemic spaces to integrate oddity and idiosyncratic visions and interpretations on healthcare value. And this obligates to embrace a whole system of ideas, imposing to the regulators of technoscientific scriptural economy to give up from extremist enterprises like discursive purification. Otherwise, VBHC model will be but another ad hoc managerialist instrument that lacks the essential of human healthcare.

2.2. Modes of doing: an ethnography of critical capacities on healthcare value

Given the above, anthropologists' focus must be located where ideas and power converge (Wolf, 1999). And, bearing in mind that VBHC model implementation constitutes a *particular program* (cf. Sabatier, 1993) of bioeconomy's political economy, the political subsystem is where ideas and power converge in this case. Political subsystems coproduce particular programs inevitably mirroring the unequal distribution of discursive resources and modalities of expression by which, in this case, the criteria used in the valuation procedures will ultimately be comprised within biomedical sociotechnical imaginary. Inside the political subsystem, conflict and collaboration are managed and turned into a more or less ambivalent final form (Sabatier, 1993; McCool, 1998; Weible & Sabatier, 2009) that black-boxes divergence. This black-boxing hides the quality of the relationships that took place between the sites of agency. Divergence encloses the terms by which negotiations happen that ultimately will impact healthcare financial affordability on the part of both patients and the healthcare system. An anthropologically informed ethnography carried out within the political subsystem where VBHC model's implementation process is programmed can simultaneously reveal those terms and eventually promote their readjustment.

Along that process, the analysis of the way how discursive resources are managed in order to become binding dispositions is paramount. It may reveal not only how those resources are managed but also how their ultimate expressions are founded over lifeworld voices, that is, how VBHC scriptural economy captures heteroglossia by annihilating outliers. As mentioned in the introduction, an anthropologically informed ethnography of stakeholders' critical capacities will surely be an effective approach to map and eventually remap the boundaries between epistemic cultures and power practices that may determine the final outcomes of VBHC model processes of implementation.

By carrying out an ethnography of the critical capacities of the various stakeholders about what healthcare value means to each of them and, starting from there, helping to equalize power topographies and to remap the boundaries between epistemic cultures, anthropologists can decisively contribute to make VBHC model implementation processes truly effective. Anthropologists are not only equipped with modes of knowing that make them aware of the regularity of contradictions in shaping social reality (Berliner et al, 2016), they also are endowed with ways of doing that are closer to the dynamics of social reality and the 'voice of the lifeworld'. They carry with them a wealth of concepts and theories nourished by ethnographies which allow them to direct their gaze to what is fundamental and is difficult to grasp through ad hoc instruments that separate the technical and the social, like questionnaires or focus groups. As it has been alluded to throughout this article, I intend to present here a proposal for an anthropologically informed ethnographic approach to apply along VBHC model implementation processes.

The previous remarks on empirical cases and related theoretical insights help us to understand the problem of defining healthcare value by VBHC model's economicist rationale contrasting it with the anthropological ways of knowing and doing about value. My proposal from the onset has been to undertake an ethnography of the critical capacities of the stakeholders who are involved in implementing the VBHC model. Such an ethnography has some particularities that I propose to summarize in this final part of the article¹⁵.

First, an ethnography of critical capacities is itself a critical ethnography. Critique must be present, not as a quality exclusive to the anthropologist, or as a denunciative criticist attitude, but as a necessary approach to capture, analyse and interpret the processes of evaluation and judgment of the value of health care performed by the informants. Critical ethnography implies the understanding of anthropology as cultural critique, that is, an anthropology "referred not merely to conditions for the validity of knowledge, but to methods of inquiry directed at evaluating cultural and social practices" (Marcus & Fischer, 1999:xvi).

Secondly, it must be multi-situated (Marcus, 1995), that is, one ethnography that follows the object of study throughout society, linking places of knowledge production (e.g. workshops), debate (conferences), technological dramas production (political subsystem), specialized virtual networks and virtual patient associations, interviewing large numbers and a wide range of informants about their perceptions on experts' work and their understanding of value, consulting archives (Hess, 2007), etc. The study of technological dramas and their impact on sociotechnical and social imaginaries implies the realization of an ethnography that navigates and crosses the cultural regions of the participants involved in formulating the discursiveness of the political economy of promise. Scientists, technicians, doctors, activists, patients, economists, etc., should inform this ethnography. Simultaneously, as mentioned above, such ethnography

¹⁵ A more extensive description can be found in Costa, 2019b (in Portuguese).

must include the anthropologist's participation in the centres of debate and controversy where technoscientific discursivity is structured and particular policies are designed, that is, within the places where technological dramas occur. Linking these worlds is a presupposition for a real critical reading of the critical capacities of the actors involved in the political economy of promise, as I have already had the opportunity to defend elsewhere (Costa, 2019a – see also Sonnert & Holton, 2002, among others).

Thirdly, it must be a collaborative and experimental ethnography (cf. Fischer, 2007; Marcus, 2010), which provides data from circles of expertise and allows the emergence of third spaces between specific research projects and epistemological approaches (see Costa, 2018, 2019a).

Fourth, it must be a strategic ethnography (cf. Williams & Pollock, 2009), allowing to investigate the relationships between technology and society at multiple levels and temporal spaces. An ethnography that is dynamic in its geometry, allowing rapid adjustments to the movement of the object of study or the focus of interest that may emerge at that moment (Williams & Pollock, 2009). The methodological challenge is to circumscribe the ways of thinking about value adjusted to actors' concerns, which make up the VBHC model stakeholders' diverse interests, and comparing them against the wider range of meanings that value assumes to all stakeholders. The goal is to apprehend the references of the systems of ideas that the various stakeholders translate through their discourses. In other words, since the meaning of value is explained by the underlying system of ideas, it is necessary to investigate the linkage between value meanings (attributes) and its legitimation, which reflect the related underlying systems of ideas (attributions). Moreover, as it was highlighted, underlying systems of ideas constitute the background against which the diverse attributes of value made by the ensemble of the agents are compared. Although corresponding to different moments of the same procedure, the observation/analysis of the system of ideas (continent) and of the values (content) together reflects the existence of a close relationship between representations of value and their anchored attributions (see Costa, 2011). This relationship also reflects the need to apprehend agents' expressed critical capacities as evaluated discursive forms (here evaluation appears as a method that distinguishes critical capacities from other potentially unreflective capacities) that mix different or even contradictory epistemological approaches (i.e., discursivities that were not subjected to the work of purification).

Fifth, it must be an ethnography that involves an element of surprise. An ethnography that accepts the inclusion of "phenomena, meanings, terms, practices, social relations, institutions, capital flows, culture-power connections, and so on that might not have been expected" (Hess, 2007: 239 – see also Guyer, 2013).

Sixth, it must be an ethnography that informs an anthropology applied to the analysis of the processes involved in sociotechnical imaginary design. Such an ethnography always requires an adjustment of anthropology's traditional ways of doing. It requires a description along the lines of what George Marcus called an "ethnography through thick and thin", that is, an ethnography which "traverse[s] and work[s] through systems and lifeworlds in the very same frame, needing to keep eyes on both institutions and everyday worlds in transcultural space" (Marcus, 1998:240). This ambition, continues Marcus, "adds immense scope and complexity to traditional research processes" (Marcus, 1998:240). This implies the realization of a description both dense and simple, in which the anthropologist, assuming the preferential role of cultural intermediary (Van der Geest, 2010), cultivates a flexible participation, according to the interests of the field(s) and the levelling of the ethnographic relationship (Costa, 2018, 2019a).

Seventh, it must be an ethnography that demonstrates the researcher's political responsibility, that is, one that reflects the researcher's responsibility to promote sub-political ways (Hess, 2007) of how to bring scientific, technical, and patient communities to change their practices in order to achieve goals, such as adjusting the health care value measurement in a way that simultaneously promotes and criticizes the plans, tools and practices dedicated to anticipatorily govern the risk associated to the final impacts of the design that has been adopted.

Finally, it must be an ethnography that allows the realization of a figural interpretation. According to Rabinow & Bennett (2008b), figural interpretation, or figuration, is the aim of the contemporary mode of anthropological inquiry and is a means of

“...connecting elements into an ensemble such that the significance and functions of each element depends on, though may not be reducible to, the form produced by the connections. Figuration involves a kind of synthesis – the production of a composite whole whose logic of composition cannot be reduced to its constitutive elements.” (Rabinow & Bennett, 2008b, cited by Stavrianakis, 2009: 13).

Such a figure will allow us to link the various worlds involved in the implementation of the VBHC model and to obtain a composite figure of how the elements that make up these worlds relate to each other and how these relations transpose and transduce those elements to other worlds, allowing us to obtain a global map of the object's constituent parts.

Conclusion

The implementation of the value-based health care model has been of interest to many governments around the world. The main assumption of the model is to make public healthcare systems economically efficient by directing funding to value-creating healthcare institutions. Creating value consists in improving the healthcare outcomes for the patient. The focus of evaluation of public health institutions thus moves from the statistics of production to the outcomes of treatments as understood by patients.

Despite the systematization of the model and the signs of enthusiasm for its implementation, there has been some controversy about what 'healthcare value' means. Differences in concept interpretation between model implementers and patients have hampered the model's operability.

In this paper I approached this problem starting from the argument that the model designers built it keeping in mind what 'value' means to the economists and formal stakeholders instead of its meaning to the patients. Supported on some empirical examples that demonstrate the potential impacts of the divergence between the meaning of value for VBHC model's designers and implementors and for patients, and on some criticism to the fact that 'the voice of the lifeworld' (patients' voice) is being undervalued in favour to the 'the voice of medicine' and economists' meaning of value by the model's formal implementers, I claim that an anthropologically informed ethnography on stakeholders' critical capacities may help to overcome the gap.

I argue that such an ethnography may bring the different meanings together. I believe that such convergence may be determinant of the local success of the model. From the perspective of anthropology, the motivation for an ethnography of critical capacities stems from anthropologists' responsibility to remember that value has an anthropological nature, which

“differs from scientific truth, which is universal, and varies greatly even within a given society” (Dumont, 1992: 234).

Working on value means doing much more than economists define; it means looking for the common ground between value and values. Investigating this implies “to understand the workings of any system of exchange ... as part of larger systems of meaning, one containing conceptions of what the cosmos is ultimately about and what is worth pursuing in it” (Graeber (2005: 443). My meditations on Bloch’s philosophy of hope and on Gibson’s affordances theory, as well as the reflections on the anthropology of value, appeared as contributions to help thinking about some of the mechanisms humans use to keep a permanent linkage with their conceptions about their place in the cosmos and the function of value to indicate “what is worth pursuing in it”. These meditations and reflections helped me to ultimately realize that separating the value of health care from this cosmological sense of life is the central issue behind the problem of divergence of notions of value among stakeholders participating in the processes of implementation of VBHC model. After all, health and life are tightly interlinked. Thinking through the patient, I would agree with Louis Dumont when he says that “the idea that what man must do has nothing to do with the nature of things, the universe, and its place in the universe, is a bizarre, aberrant, incomprehensible idea” (1992: 242).

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