# Epistemologies of the South and decolonization of health: for an ecology of care in collective health

Epistemologias do Sul e descolonização da saúde: por uma ecologia de cuidados na saúde coletiva

#### João Arriscado Nunesa

https://orcid.org/0000-0003-0109-8268 E-mail: jan@ces.uc.pt

#### Marília Louvisonb

https://orcid.org/oooo-ooo3-1630-3463 E-mail: mariliacpl@gmail.com

<sup>a</sup>Universidade de Coimbra. Centro de Estudos Sociais e Faculdade de Economia. Coimbra, Portugal.

<sup>b</sup>Universidade de São Paulo. Faculdade de Saúde Pública. São Paulo, SP, Brasil.

### **Abstract**

This essay focuses on the importance of decolonizing health care, based on the theoretical framework of the epistemologies of the South proposed by Boaventura de Sousa Santos, and points to an ecology of care to be produced in the field of public healthcare, approaching health and illness, suffering and healing, disorder and care through struggles that emerge in facing capitalist, colonialist and patriarchal dynamics. The process of biomedicalization emerges within a monoculture of dominant conceptions of biomedical knowledge that define the terms of validity of knowledge and interventions on health, illness, care and healing. This analysis points to the importance of collaborative and non-extractivist research projects based on the recognition of the diversity of knowledges, practices and experiences, of their copresence and their encounters, of the struggles for social and cognitive justice and of the multiple and diverse struggles for health and access to medical care. The relations between collective health and the knowledge, care, and healing practices that are part of the experience and of the world of the indigenous peoples emerge as an important example of how to learn to think and act ecologically in the field of health.

**Keywords:** Collective Health; Health Decolonization; Biomedicalization; Epistemologies of the South.

### Correspondence

Marília Louvison
Universidade de São Paulo. Faculdade de Saúde Pública.
Av. Dr. Arnaldo, 715. São Paulo, SP, Brasil. CEP 01246-904.



### Resumo

Este ensaio aborda a importância da descolonização da saúde, fundamentada no referencial teórico das epistemologias do Sul de Boaventura de Sousa Santos, e aponta para uma ecologia de cuidados a ser produzida no campo da saúde coletiva, abordando saúde e doença, sofrimento e cura, agravo e cuidado por formas de luta que emergem no enfrentamento das dinâmicas capitalista, colonialista e patriarcal. O processo de biomedicalização tem se produzido na emergência de uma monocultura de concepções dominantes do saber biomédico que define as condições de validade do conhecimento e das intervenções sobre saúde, doença, cuidado e cura. Esta análise aponta para a importância de pesquisas colaborativas e não extrativistas que partem do reconhecimento dessa diversidade de saberes, práticas e experiências, da sua copresença e dos seus encontros, das lutas pela justiça social e cognitiva e das múltiplas e diversificadas lutas pelo acesso à saúde e aos cuidados de saúde. As relações entre a saúde coletiva e os saberes e práticas do cuidado e da cura que fazem parte da experiência e do mundo dos povos indígenas aparecem como um exemplo importante para o aprendizado de um pensamento e de um agir ecológico em saúde.

Palavras-chave: Saúde Coletiva; Descolonização da Saúde; Biomedicalização; Epistemologias do Sul.

### Introduction

Modern Western medicine has constituted itself as a domain of knowledge and practices with a privileged relation to biological knowledge and subject to specialized human intervention, separate and autonomous from other domains of social life aspects. Even the "broad" definitions of health adopted in the Universal Declaration of Human Rights (ONU, 1948) and by the World Health Organization (OMS, 1946) - later included in the Constitutions of several countries, including Brazil's (1988) - stand on the centrality of the definitions of illness, health and wellbeing on which Western medicine is based. The dominant conceptions of the right to health and to access to health care and to an environment and living conditions that can protect and promote it, join a monoculture of illness, heath, care and healing that has at its core a configuration of knowledges, practices and institutions that, since the end of World War II, has been described as "biomedicine," becoming the hegemonic version of knowledge and practices on health and illness.

Around the world, however, the disorders, illnesses or forms of distress that affect human life are described and understood resorting to of different vocabularies, ways of knowing and ontologies. Healing practices that respond to different forms of suffering are present in all societies, although usually linked to powers, processes and entities that most often are not divided into organic, psychic and social, natural or resulting from human action. The ways of describing and dividing the world may greatly differ, when taking into account the existing diversity of societies, communities and collectives.

The naturalist view, the basis of modern Western medicine, was introduced in the majority of societies through the same channels that have brought colonialism, bringing along a trail of disqualification, suppression, invisibilization or appropriation of other knowledges and practices, even to the point of physical annihilation of those who collectively owned these knowledges and experiences. In the global South, biomedicine - the result of the combination of biological knowledge and medical knowledge and practices - and the concept of health as a separate domain of knowledge,

practices, professions and institutions expanded under the form of tropical medicine and, nowadays, of global health.

The diversity of "idioms of distress" (Nitchter, 1981) and of the vocabularies and expressions of suffering, while it does not exhaust what is at stake when it comes to conceptions of experiences of life and death, violence and suffering, illness and healing, does offer a convenient entry point to the engagement and dialogue with non-Eurocentric understandings of what falls under "health," "disorder" and "illness" and for the exploration of the emerging dynamics of ecologies of knowledges and practices of care and healing (Meneses, 2004). This dialogue does not imply the rejection of the knowledge and practices of biomedicine, but rather a rigorous scrutiny of both its important and inescapable contributions to the knowledge and struggle against disease and of its partial character, which justifies the demand of recognizing the diversity of experiences, knowledges and practices that seek to deal with suffering and illness, care and healing. To ensure access to the resources of biomedicine and to the conditions of production of its knowledge is one side of the struggle for global cognitive justice and for the right to health. The other side is the recognition of the diversity which emerged, and emerges, from the struggles of peoples, communities, social movements and different groups that create their own ways of testing and validating knowledges and practices of healing.

In the following sections, we present a set of proposals for a program of collaborative and nonextractivist research based on the recognition of copresence and encounters of the diversity of knowledges, of the fights for social and cognitive justice and of the multiple struggles for access to health and to healthcare, for the recognition of the several conceptions of health and of the knowledges and practices of care and healing, and for the right of protecting ways of life and the ecologies which shape and sustain these experiences. The relations between public health and the knowledge, care, and healing practices that are part of the experience and of the world of the indigenous peoples emerge as an important example for the learning how to think and act ecologically in the domain of health.

# Epistemologies of the South, decolonization of science and cognitive justice

The epistemologies of the South are currently a research program enacted through a diversity of projects and interventions in different parts of the world, inspired by the works of Boaventura de Sousa Santos. According to Santos (2018, p. 19), "the epistemologies of the South refer to the production and accreditation of knowledge based on the experiences of resistance of all social groups who have been systematically victims of injustice, oppression and destruction caused by capitalism, colonialism and patriarchy. The South here refers to the broad and diversified set of these experiences that, in different contexts and regions of the world, both in the geographic South and North, emerge from struggles and resistance actions against imperial domination. In another formulation, the same author describes the South as the name of the unjust and unnecessary suffering that exists in the world, and the resistance and the struggles against such suffering, in their multiple forms (Santos, 2014, 2018; Santos; Meneses, 2010).

The epistemologies of the South approach health and illness, suffering and healing, disorders and modes of caring through the forms of struggle that emerge in responding to the dynamics of capitalism, colonialism, and patriarchy. These give rise to entangled forms of domination, oppression and exclusion, generating and perpetuating zones of non-being and predation, of destruction of ecologies and modes of existence, and of abyssal exclusion of a growing part of the world population. Cognitive justice, inseparable from social justice and ecological justice, feeds the answers that emerge from these struggles, demanding access to the knowledge, means and practices of biomedicine, but also the recognition of the diversity of knowledge, healing and caring practices that exist in the world. The decolonization of the hegemonic knowledge associated with modern science - including biomedicine - is a key moment of such struggle for cognitive justice.

This decolonization of modern science and of its knowledge does not imply a radical discontinuity of modern science nor its rejection. Instead, it seeks to identify and promote conditions allowing the mutual

recognition and dialogue between knowledges and practices, including those of modern science, without disqualifications or suppressions, with special attention to the knowledges and practices that emerge from the experiences and struggles for dignity and for life against the different forms of oppression and exclusion. The encounters between different knowledges open the path for ecologies of knowledges that rely on the knowledges and practices born from those experiences and struggles.

The terms used to name this epistemological South are themselves diverse, and often originate in the self-designation of those who suffer oppression and domination, but also in descriptions and conceptualizations by intellectuals committed to their struggles: "the wretched of the Earth" (Frantz Fanon), "the oppressed" (Paulo Freire), "the subaltern" (Antonio Gramsci, Ranajit Guha, Gayatri Spivak), "the poor" (Paul Farmer," "the popular classes" (Victor Valla). The epistemologies of the South grant special focus to phenomena of exclusion, distinguishing the non-abyssal exclusions associated with inequalities in zones of metropolitan sociability, characterized by the tension between regulation and emancipation, and abyssal exclusions, common in the zones of colonial sociability, dominated by the relation between violence and appropriation (Santos, 2014). The nexus between self-designation and conceptualization may vary according the epistemological and theoretical orientations and propositions and relations established between the production of knowledge and the experiences and struggles of peoples, communities, social movements and marginalized and persecuted groups. The recognition of such relations is important to understand the different forms of relations among knowledges, practices, experiences, collectives and forms of intervention that are associated to emancipatory versions of health and of the right to health.

The decolonization of hegemonic knowledge has two moments; both are connected to distinct and yet interconnected aspects. The first moment is called "sociology of absences"; the second, "sociology of emergences" (Santos, 2014, 2018). The sociology of absences seeks to identify the silences, the suppressions, invisibilizations and disqualifications

that deny the existence of other knowledges or convert them into forms of ignorance, opposed to the allegedly true and rigorous knowledge of science. Thus, the knowledge accredited by science or by the knowledges recognized as such by institutions or accredited authorities (academic or professional knowledge, for example, or knowledge sanctioned by religious authorities as theology) tend to become monocultures. Santos (2018) draws attention to the identification of three conditions in this process, representing what he calls "decolonizing hermeneutics." The first is the attention to a bias affecting all knowledge: all forms of knowledge have as their reverse corresponding forms of ignorance; to dismiss this condition amounts to dismissing what a certain form of knowledge is not capable of recognizing, relegating what is unknown to a condition of non-existence or to being obstacle to the progress of true knowledge.

The second condition is the abyssal nature of partiality: "Along with the law, modern science turned into [...] the main producer of absences, actively creating invisible, irrelevant, forgotten and inexistent realities" (Santos, 2018, p. 232). The destruction, declaration of inexistence or predatory appropriation of other knowledges is inextricably linked to this active production of the abyssal line that separates metropolitan sociability from colonial sociability.

The third condition is the tension between autonomy and trust, to which we will return further ahead. The affirmation of the autonomy and objectivity of scientific knowledge may turn into a justification for the suppression of other knowledges and experiences, acting as a pretext to claim an authority that demands unconditional trust in scientific knowledge and in its surrogates, yet equally allowing developments and appropriations of this knowledge by projects of domination and oppression.

The sociology of absences does not stop at the identification of these gaps and at the conditions that allow a certain knowledge form to actively produce them and turn this production into a premise of the continued existence and affirmation of its condition of monoculture. It "operates through the replacement of monocultures by ecologies" (Santos, 2014, p. 175):

By ecology I mean sustainable diversity based on complex rationality. It is therefore a normative concept based on the following ideas. First, the value of diversity, complexity, and relationality must be recognized: nothing exists by itself; something or someone exists because something else or someone else exists. Second, complex and relational diversity means that the criteria that define diversity are themselves diverse. Third, the choice among them is a political one, and in order to respect diversity, it must be based on radical and intercultural democratic processes. Fourth, the robustness of the relations depends on nurturing diversity and exerting vigilance against monocultural temptations that come from both within and without, even if the distinction between what is within and what is without is intrinsically problematic.

The word "ecology" inseparably designates, in this perspective, a way of thinking/organizing the word and a description of intervention in the world. It is characterized by the emphasis on relation, interdependence and sustainability, but always attentive to heterogeneity, diversity and uncertainty. The concept of ecology is strongly attached to forms of ontological politics - actions that contribute to create versions of the world - distinct from those based on non-ecological views, as, for example, ways of understanding and coping with infectious diseases or mental disorder linked to notions of linear causality: the cause of tuberculosis is a bacillus, the mental disorder is caused by an imbalance in the brain's chemistry. In both cases, the relational and procedural complexity of the illness, or of the onset and evolution of the disorder, are ignored or left in the background; the illness or disorder is identified as an entity or process recognizable by the nosology of the respective medical specialty.

The experience of suffering associated to illness or disorder and the understanding of the processes that are at their genesis is thus fragmented, reaffirming the segmentations and divisions of the world as a result of the disciplinary organization of scientific knowledge, of its bias and of the abyssal nature of such bias. Science produces knowledge through procedures that separate, fragment and

reduce its study object. Even when it recognizes the relevance of processes outside its bounded field of knowledge, disciplines and specialties treat us, in general, as external factors, that may condition or influence processes such as becoming ill, and that are described and explained in terms of the discipline or specialty of reference. In certain cases, these factors regarded as external may be internalized and converted into descriptive and explanatory elements of the illness process – as the history of the concept and practice of prevention in modern Western medicine shows (Arouca, 2003).

It is important, however, to recognize the differences between the versions of scientific knowledge that emerge from the internal plurality of sciences, from the debates and experiences that involve its practitioners, and those that are forged in the relations between these versions and the knowledges and practices that are born out of the experiences and struggles against forms of domination and oppression that become manifest in suffering, illness, violence in its different forms and in the precariousness of existence, but also in its coping and resistance through knowledges and practices of solidarity, of care and healing. Therefore, it is important to give special attention to the conditions in which versions of internal plurality are open to dialogue with other experiences and knowledges (Nunes, 2019; Santos; Meneses; Nunes, 2004).

The sociology of emergences, in turn, postulates the identification of experiences, knowledges, and practices born out of the struggles and resistances against diverse forms of oppression and domination, especially those that stem from capitalist, colonial and patriarchal domination. A struggle is an affirmation act of freedom that, under given circumstances, may turn into collective action for liberation. The practices of daily survival of groups, communities and peoples abyssally excluded are part of these forms of struggle, as well as the social movements and forms of collective action that often reclaim, recreate or reinvent experiences and stories of past struggles and resistances (Santos, 2018).

In the following section, we propose a sociology of absences that identifies the main characteristics

of the monoculture of knowledge and practices of medicalized health, seeking to identify the forms of pluralism or internal dissent that make room for dialogue with other knowledges and practices.

### Health and (bio)medicalization

Western medicine displays several particularities that differentiate it from other medical systems and knowledges and practices related to illness and health. First, its constitution as a separate and autonomous domain from other social practices such as religion, for example -, claiming the right to govern and regulate itself according to its own criteria of distinction between the true and false. In the history of medicine, this claim of autonomy has coexisted with - and served to legitimize - the medicalization of issues from different domains of the social life, that is, their framing as issues that may be identified, diagnosed and solved through their redefinition as pathological phenomena or as interventions shaped by medicine or public health. This autonomy of the domain of knowledge about disease and healing is characterized by the claim of epistemological exclusivism, at the cost of invisibilizing, disqualifying or destroying forms of care that do not assume said autonomy, the body/ spirit-soul-mind split or the naturalist ontology peculiar to modern science.

Secondly, the tension between the capacity to heal but also to cause damage. This capacity, acknowledged by healers in all forms of healing practices, is reformulated as an obligation inscribed in the Hippocratic Oath: above all, do no harm to patients. If it occurs at all, it will be laid on malpractice or on the voluntary or involuntary violation of this precept by practitioners. The iatrogenic dimension of biomedicalization biomedicalization itself as producer of pathogenic effects (Focault, 1976; Illich, 1975; Tesser, 2017) - is, therefore, understood not as an expression of the double condition of pharmakón (the Greek word to describe what can be a remedy or a poison, according to dosage and usage) that the medical knowledge shared with other knowledges of caring and healing, but rather as a tension that will find an answer in the progress of biomedicalization itself.

This situation on a global scale and in the different contexts where these issues became visible - as recent health emergencies, such as the Ebola epidemic in Western Africa in 2014 or the ongoing COVID-19 pandemic, have made clear forces us to reconsider what is understood as the right to health (Nunes, 2009). It is not possible to reduce that right solely to access to medical care. In the recent history of global health, this access had often been limited and selective, be it in the response to issues regarded as urgent, be it in relation to prevention and educational initiatives. By drawing on arguments that reproduce or recycle old colonialist hypothesis about cultural obstacles, the ignorance or superstition of the "natives" of the global South, who were and still are denied access to treatment for preventable or curable diseases and for chronic conditions - such as AIDS -, the limits to or deprivation of access to primary and high complexity care, to the conditions for the training of professionals, to the production of knowledge and to health resources and the recognition of and dialogue with the diversity of knowledges and experiences that have been enabling, under conditions of vulnerabilization, the response to extreme occurrences of health emergency stand in the way of cognitive justice and of "health for all".

Petryna (2013) is thus right in highlighting the fact that the right to health cannot be just the right to access care or drugs, but also what she calls the "right to recovery." Without it, the iatrogenic condition of biomedicine potentiates those of colonialism and neoliberal capitalism (Wallace et al., 2015). This limitation may appear in many forms, including partial enactments of national health policies intended to provide universal coverage, as is the case of the pharmaceutical citizenship established in Brazil through the program for free and universal distribution of antiretroviral therapy to HIV seropositive people or to persons with AIDS while failing to ensure adequate coverage of the public health care system. The understanding of health as a right is entangled with the fulfillment of cognitive justice, as a condition for sanitary and social justice.

In the post-World War II era, the field of medicine went through a process of reconstruction/redefinition and transformation through the

convergence/entanglement of the knowledges and practices of the life sciences and of medicine, especially of clinical medicine and epidemiology. This convergence and reconstruction coexists with disciplinary divisions and with the fragmentation of medical knowledge, enforcing the trend towards increasing specialization. This process, described in the social studies of health as "biomedicalization of health," significantly expands the jurisdiction of the medical knowledge in society (Nunes, 2012).

The main features of this process of biomedicalization may be summarized as follows:

emergence of a monoculture of the (new) biomedical knowledge, which defines the criteria for the validation of knowledge and of interventions aimed at the prevention, diagnosis, treatment, prognosis and cure of diseases; dependence from a technoculture that implicates major investments in research and development; the establishment of a new regime of truth, based on lab research and on random and controlled clinical trials, on evidence-based medicine and on its extension to public health as procedures for production and accreditation of knowledge that creates a set of metrics of allegedly universal use (Adams, 2016); reaffirmation of the centrality of the hospital as a space of platforms that articulates biology and pathology, of the clinic and the laboratory; the domestication of uncertainty through the concept of risk and of ignorance through the notion of the placebo effect; the privilege of the cell and molecular scales in explaining disease, coexisting with interscalar practices in the clinic; expansion of the idea of prevention to include iatrogenic effects of medical procedures; persistence of internal divisions by specialty in tension with a larger thematic fragmentation of research, implying forms of dialogue and articulation between disciplinary and specialty knowledges; internal pluralism, but subject to accreditation under the norms of monoculture:

- creation or transformation of care, research, training and certification in health, scientific and medical societies, journals, and scientific meetings;
- expansion of what counts as health, connecting the past, the present and the future through the central concept of risk and of new forms of vigilance allowed by technoscientific resources (genetics, genomics, medical imaging);
- tendential privatization of the healthcare and care sectors; emergence of a capitalist sector in health, including private health insurance programs, public-private partnerships and private healthcare units, private clinical research organizations and others;
- the growing importance of biocapital and of extractivist-predatory interventions in territories, bodies, biodiversity, knowledges and practices regarded as traditional or local as the base for new forms of biocapital accumulation; alliances with the financial, insurance and pharmaceutical and biotechnology sectors;
- emergence of new professions linked to the expansion of health and prevention as an imperative of a responsible life-style;
- creation of new subjects of health and of new forms of citizenship (biological, pharmaceutical, sanitary, biosocial, and etc.); emergence of social movements of carriers of a disease or disorder, or seeking recognition of these as health problems (Nunes, 2009);
- creation of a global infrastructure claiming universal health coverage as its aim, through global health and the new global institutions, foundations and others, with the corresponding decrease of the role and power of the World Health Organization and the change in the set of priorities for research and intervention and of their funding; the conception of the world as a laboratory, updating a tradition that comes from Pasteurism and pervaded colonial and tropical medicine; the growing orientation towards "emergent" or "reemergent" diseases that appear as threats to the North,

the redefinition of endemic conditions in the countries of the South and among sectors of excluded populations of the North, such as neglected diseases, recently relabeled diseases of neglected populations; the articulation of two regimes of global health governance, biosecurity/global vigilance and humanitarian medicine (Lakoff, 2017).

# For an ecology of knowledge and practices in health

Internal pluralism crosses the history of modern medicine since its consolidation in the 19th Century, as shown by Rudolf Virchow (apud Farmer, 2005), who was not only a pioneer in the use of laboratory practices, but also of social medicine and the idea of medicine's nature as politics through other means.

The debates and controversies that are part of the field's history include not only the internal confrontation of positions in medicine and in epistemology, but also dialogues with critical or heterodox currents in other disciplines and fields of knowledge, such as ecological developmental biology (Gilbert, Epel, 2015) or the currents in immunology that postulate an ecological approach (Tauber, 2017). These currents bring under scrutiny the idea of individuality of species/organisms and its evolution, proposing instead concepts such as holobiont, which redefines an organism as a consortium of several organisms existing in cooperative relations (Gilbert; Sapp; Tauber, 2012).

These approaches outline the general condition of interdependence that makes life possible. Even the very existence of monocultures would not be viable without these webs of interdependence, as in the case of monocultures of vegetable and animal species, but also of the monocultures of knowledge, such as biomedicalized health, which is supported by exchanges, appropriations and circulation of knowledges, practices, tools and competences expressed, for instance, in descriptions of contemporary biomedicine as a convergence and cooperation of pathology and biology, the knowledge of diseases and the knowledge of life. The celebration and legitimation of multidisciplinarity and interdisciplinarity - and,

occasionally, of transdiciplinarity - coexist with a selective practice of connecting knowledges and practices, to which we shall return.

In the health domain, the notion of ecology invites us, for example, to consider the diversity of entities, forces and relations that constitute ecologies - such as virus, bacteria, fungi, lichens -, the metabolic processes that make life possible and that problematize the notion of organism, or the new conceptions of immunity and of the immune system. Yet it can also open up a more complex and broader view when human interventions enter the picture, as is the case of intervention in health or in environmental policies or of environmental and health impacts of human actions. Defining what is inside or outside an ecology is the outcome of a political decision (Levins, 1998).

An ecological approach enables a specification of the boundaries of the monocultural reading of biomedicalized health and, simultaneously, the mobilization of resources from scientific knowledge to search for connections that make room for ecologies of knowledges of/in health and for ecologies of care.

How to open up room for dialogue between the versions of the sciences of life and of health that explore and, in certain cases, raise challenges to the limits of their monocultural conception and other knowledges of health and illness, caring and healing, like the knowledges of indigenous peoples? This dialogue appears as an imperative as we face new forms of infection that proliferate and toned to draw on the resources of biomedicine. Yet there is a point that may support this dialogue: the recognition by the indigenous worldviews of entities and forces invisible or unrecognizable by other epistemologies/ontologies, and the possibility of a meeting of the existing differences through the stories that these worldviews construct and open up to the building "on" the difference in answers to urgent issues, such as infectious outbreaks or the treats to ecological balance.

For this dialogue, the ecological approach, understood as the description of phenomena but also as a way of creating relations between knowledges and practices based on intercultural translation, must take into account the questions

of the scales and relations among scales, the temporalities, what is relevant to the issue in question and what is not, the ways of deciding which knowledge form or set allows for an appropriate and better response to the issue.

From the situations of radical copresence and forms of intercultural translation that enable the creation of spaces of dialogue that respect the differences of knowledges and cultures, sets of similarities/proximities (Santos, 2018) may emerge, opening the path to ecologies of knowledges and practices, ecologies of caring, in the broad sense recalled by Puig de la Bellacasa (2017): everything that we do to maintain, continue and repair the world in which we seek for the best possible life, as part of a complex and interdependent web, weaving the relationships that sustain life and existence.

In this process, it is crucial to recognize and articulate the forms of connection between biomedicine and other forms of knowledge and practices of care and healing, in the most suitable and effective way to respond to the situation.

The presentation and discussion of the methodological inventions that arise from resistances and struggles in health and the challenges they face, given the centrality of methodology in the rise and consolidation of hegemonic knowledge and its epistemic authority will have to be left to another occasion. Some of these challenges, presented to several experiences in public health or in the dialogue with it, were brought to discussion in other places - for example, by Fasanello, Nunes and Porto (2018), Siqueira-Silva and Nunes (2018) and Vieira (2019). To respond to these challenges, it is important to reclaim the experiences of engaged intellectuals such as Paulo Freire and Orlando Fals Borda, among others, that have left a legacy of rich experiences and a set of participatory and non-extractivist procedures and of practices of popular education now reappropriated and renewed through dialogue and the artisanship of practices born in struggles and resistances for human dignity, be they expressed in the language of human rights or in other languages and idioms. Against the modern separation between reason and passion, collaborative and non-extractivist methodologies argue for a warm reason, a sentirpensar, as Fals Borda called it (2009),

which do not separate the validation of knowledge from its capacity to respond to human suffering and to recognize the belonging of human beings to a world that they share with other species, entities and forces. Thus, it is possible to work for the mutual knowledge and intercultural translation between universes of experience, thinking and language, and to explore the possibilities of responses supported by the dialogue between experiences and artisanal knowledges and the scientific knowledge produced in relation to struggles or that can be appropriated by those struggles (Santos, 2018).

How to open room for a dialogue between the life sciences in their new versions and, for example, indigenous knowledge? This dialogue seems to be not only desirable, but also required and urgent in facing the new threats against life and against the very existence of a planet able to sustain and feed it, such as environmental pollution and contamination due to human intervention associated to capitalist and predatory technologies and means of production. The conditions of this new dialogue will go through the recognition of entities and forces invisible to the Western/ modern epistemology/ontology, through the very stories constructed by indigenous epistemologies/ ontologies, enabling to elaborate "on" differences proper ways of responding to urgent matters, such as infectious outbreaks or ecological destruction and degradation. The experiences of encounters of the indigenous peoples of Brazil with biomedicine and collective health may help to understand the possibilities and difficulties of the emergence of new configurations of knowledges and practices.

## Epistemologies of the South, collective health and indigenous health: towards ecologies of vigilance and care

Collective health has been characterized as a field of knowledges and practices (Paim; Almeida Filho, 2000) or, tendentially, as a space of knowledges and practices that organizes itself as a field, in the sense pointed out by Bourdieu (Viera-da-Silva, 2018). It grew out of the encounter between social medicine and the social sciences,

especially sociology (Vieira-da-Silva, 2018). Currently, three major fields of knowledge and practice are identified as the ground for collective health: epidemiology, planning and management of health policies and social and human sciences. Due to the limits of space, it would be an impossible task to recap the history of collective health, its constitution as a field and its transformations, yet it is important to signal some questions that stand out in questioning the relation between collective health and the diversity of knowledges and practices, regarding health and illness, care and healing that exist in the Brazilian society and are a fundamental component of the social, cultural and territorial heterogeneity and diversity of the country, as well as one of the multiple expressions of human suffering and exclusion, abyssal and non-abyssal, that affects most of its population.

The history of collective health has drawn attention to the internal plurality of biomedicalized health and in particular to the manifestations of what Donna Haraway and María Puig de la Bellacasa describe as the forms of dissenting within that cut across it (Puig de la Bellacasa, 2017). According to these authors, dissent opens up spaces for thinking about forms of relational ontology.

The concept of ecology of knowledges, proposed within epistemologies of the South, expands and complexifies this opening, from the idea of the radical copresence of multiverses with their knowledges and practices. The possibility of ecologies of knowledges depends on the capacity to identify what Boaventura de Sousa santos (2018) calls "sets of similarities/proximities," allowing the recognition of mutual concerns and the collaborative work of creating responses to matters defined as of common concern. These responses are based, simultaneously, on the recognition and respect for differences and on the search for convergence and possibilities of agreement for common action. In this process, the knowledges and the practices associated with dissent within biomedicalized health are pushed to recognize their limits and the possibilities of dialogue with other knowledges and practices.

The experience of collective health shows that internal dissent is not a sufficient condition for

the emergence of ecologies of knowledges and practices, but it signals a meaningful moment of openness to the recognition of limits and specific forms of ignorance that characterize all knowledges. The possibility of emergence of an ecology of knowledge depends on the relation that the knowledges and practices of collective health are able to forge with the struggles that breed other knowledges and practices. The history of collective health is punctuated by moments when these sets of similarities fueled fruitful dialogues and processes of mobilization and transformation moved by the struggle for dignity, social justice and cognitive justice.

The Health Reform movement appears as a civilizational project in defense of health as a right that produces mobilization in the presence of inequalities and the commodification of health, with a crucial influence on the creation of a universal health system in Brazil, the Brazilian National Health System (SUS) (Arouca, 2003). As part of this broad movement, the Brazilian Psychiatric Reform went a step further in offering a radical critique of psychiatric knowledge and of its hegemony in the field of mental health, as well as the exploration, by users, activists, and professionals, of new responses to suffering and the affirmation of the dignity and of the rights of those who had their humanity denied in the name of an exclusionary conception of reason (Amarante, 1998; Nunes; Siqueira-Silva, 2016; Oliveira; Pitta; Amarante, 2015). The condition of social "non-existence" attributed to insanity has thus been contested by the recognition of difference as it is enacted through practices of aesthetic creation of collective and solidaristic knowledges and practices (Nunes; Siqueira-Silva, 2016).

Other experiences, such as the struggles against pesticides and in defense of agroecology, in defense of the health of indigenous peoples, quilombolas, peripheral urban communities, peasant communities, in defense of water and forests, the initiatives of popular education and health, the dialogues with integrative and complementary practices or the proposals for popular surveillance in health are examples, among others, of how the capacity of collective health to connect with various struggles for health and

dignity fuels the liberatory capacity of the dialogues between knowledges and experiences and of the forms of intercultural translation and artisanship of practices that turn this capacity into collective action towards liberation.

Yet, the recognition and the accreditation of the knowledges that emerge from these experiences and struggles goes through the disciplinary or interdisciplinary filters of knowledge recognized as scientific, which remain a crucial element of collective health as a field. We should emphasize, thus, what distinguishes the difference that grows out of internal dissent in a monoculture - like modern science and, in this case, biomedicine - from those that emerge from encounters of diverse knowledges associated with different epistemologies/ontologies. In the first case, dissent operates by reference to hegemonic postulates of the monoculture - for example, naturalism or human exceptionalism, in the case of biomedicine -, even when it criticizes it or searches for alternatives to the hegemonic or conventional formulations of this knowledge. As Santos (2018) observed, the knowledge produced under conditions of internal dissent may emerge in struggle contexts of struggle and respond to matters or conditions raised by the struggles themselves. The critical leverage of knowledge production comes, in general, from the encounter of the challenge posed by struggles and pragmatic solidarity (Farmer, 2005), on the one hand, and on the other, from internal criticism aimed at hegemonic positions in the scientific field or area in question.

In any of these versions of scientific knowledge grown out of internal dissent, it is important to consider the biased character of the scientific knowledge – as of all forms of knowledge –; the exclusions and the silencing associated to this bias, especially through allegations of authenticity and authority that subordinate or disqualify other knowledges; and the tension between trust and autonomy that defines the spaces of scientific knowledge in contexts of struggle (Santos, 2018).

In the second case, the dissident or critical positions refer to and are anchored in epistemologies and ontologies based on postulates distinct from those that are common to modern science. To understand the possibilities of creative

encounters and dialogues between these positions, it is important to return to the central proposition of thinking and acting based on the notion of ecology, as opposed to monocultures.

The ecological way of thinking/acting that crosses the epistemologies of the South may contribute to the field of collective health, through the expansion and complexification of some of the decisive contributions of the field to the understanding of health, disease and care, such as the concept of health-illnessattention as a process, or moving from the focus on determinants of health and illness to determination as a dynamic process. There are two main sources to be considered here. The first is the diversity of worldviews, languages, stories, forms of expression, ways of life and relation to the territory and the different "existents" - humans and nonhumans, living and not-living (Povinelli, 2016). The second arises from the current debate on the need to think health as a unified phenomenon, considering the relations between human health, animal health and ecosystem health, within the frame of One health, without neglecting some of the problems that have been raised by their attempts at a productive dialogue (Wallace et al. 2015). This debate has shown the relevance of the diversity of knowledges in the search for responses to the current challenges to health, such as the COVID-19 pandemic, but also all challenges that have, for a long time, affected the most vulnerable sectors of the world population.

The defense of indigenous peoples of Brazil, of the integrity of their territories, ecologies and ways of life, fueled by a memory of the disasters connected to the diseases brought by colonization, at the same time that it calls for protective measures that can only be guaranteed by the state, summons us to respond to the current state of exception through the reaffirmation of life. The struggle for land and the production of existence are increasingly threatened by forces of oppression which claim an authority often legitimated by hegemonic forms of knowledge. The diversity of knowledges denied or destroyed by the monocultures of knowledge and care and the urge for ecological thinking-acting find in the epistemologies/ontologies of indigenous peoples an exemplary instance. Thus, we leave the closing remarks to Krenak: (apud Vieira, 2019, p. 210):

I think that a fair share of the people in indigenous villages manage to treat the health subsystem as a complementary complex. When the pajé cannot heal, when the rituals cannot heal, when the indigenous therapies cannot heal, you take the person and let... let the white doctors treat them. When you get to this level of autonomy, I think it is a progress [...]. May we, at least, have some infrastructure, that we managed to star putting up and may this infrastructure not be entirely lost, we keep on having a foundation on which to build new paradigms to [...] drug interaction from here, to the drug stores, to the drugs, to the interaction to different therapies that our villages still maintain, capable of keeping on reproducing, in a creative way, integrating a few concepts of diagnosis and things from white men.

### References

ADAMS, V. (Org.). *Metrics*: what counts in global health. Durham: Duke University Press, 2016.

AMARANTE, P. (Org.). Loucos pela vida: a trajetória da reforma psiquiátrica no Brasil. 2. ed. Rio de Janeiro: Editora Fiocruz, 1998.

AROUCA, S. *O dilema preventivista*. Rio de Janeiro: Editora Fiocruz, 2003.

BRASIL. Constituição da República Federativa do Brasil de 1988. *Diário Oficial da União*, Brasília, DF, 5 out. 1988.

FALS BORDA, O. *Una sociología sentipensante* para América Latina. Bogotá: Siglo del Hombre: Clacso, 2009.

FARMER, P. *Pathologies of power*: health, human rights, and the new war on the poor. Berkeley: University of California Press, 2005.

FASANELLO, M. T.; NUNES, J. A.; PORTO, M. S. F. Metodologias colaborativas não extrativistas e comunicação: articulando criativamente saberes e sentidos para a emancipação social. *Reciis*: Revista Eletrônica de Comunicação, Informação e Inovação em Saúde, Rio de Janeiro, v. 12, n. 4, p. 396-414, 2018.

FOUCAULT, M. La crisis de la medicina o la crisis de la antimedicina. *Educación Médica y Salud*, Washington, DC, v. 10, n. 2, p. 152-169, 1976.

GILBERT, S. F.; EPEL, D. *Ecological developmental biology*. 2. ed. Sunderland: Sinauer, 2015.

GILBERT, S. F.; SAPP, J.; TAUBER, A. I. A symbiotic view of life: we have never been individuals. *Quarterly Review of Biology*, Chicago, v. 87, n. 4, p. 325-341, 2012.

ILLICH, I. *A expropriação da saúde*: nêmesis da medicina. Rio de Janeiro: Nova Fronteira, 1975.

LAKOFF, A. *Unprepared*: global health in a time of emergency. Berkeley: University of California Press, 2017.

LEVINS, R. The internal and the external in explanatory theories. *Science as Culture*, London, v. 7, n. 4, p. 557-582, 1998.

MENESES, M. P. G. "Quando não há problemas, estamos de boa saúde, sem azar nem nada": para uma concepção emancipatória da saúde e das medicinas. In: SANTOS, B. S.; SILVA, T. C. (Org.). Moçambique e a reinvenção da emancipação social. Maputo: Centro de Formação Jurídica e Judiciária, 2004. p. 77-110.

NICHTER, M. Idioms of distress: alternatives in the expression of psychosocial distress: a case study from South India. *Culture, Medicine and Psychiatry*, Dordrecht, v. 5, n. 4, p. 379-408, 1981.

NUNES, J. A. Saúde, direito à saúde e justiça sanitária. *Revista Crítica de Ciências Sociais*, Coimbra, v. 87, p. 143-169, 2009.

NUNES, J. A. Embodied expectations: the somatic subject and the changing political economy of life and health. In: CALDAS, J. C.; NEVES, V. (Org.). *Facts, values and objectivity in economics.*New York: Routledge, 2012. p. 126-137.

NUNES, J. A. "Um ser que não foi feito para sofrer": da diferença do humano e das diferenças dos humanos. In: SANTOS, B. S.; MARTINS, B. S. (Org.). *O pluriverso dos direitos humanos*: a diversidade das lutas pela dignidade. Coimbra: Edições 70, 2019. p. 67-92.

NUNES, J. A.; SIQUEIRA-SILVA, R. Do "abismo do inconsciente" às razões da diferença: criação estética e descolonização da desrazão na Reforma Psiquiátrica Brasileira. *Sociologias*, Porto Alegre, v. 18, n. 43, p. 208-237, 2016.

OLIVEIRA, W.; PITTA, A.; AMARANTE, P. (Org.). *Direitos humanos e saúde mental.* São Paulo: Hucitec, 2015.

OMS - ORGANIZACIÓN MUNDIAL DE LA SALUD. Constitución de la Organización Mundial de la Salud. Nova York, 1946. Disponível em: <a href="https://bit.ly/3dH0l4A">https://bit.ly/3dH0l4A</a>>. Acesso em: 19 out. 2020.

ONU - ORGANIZAÇÃO DAS NAÇÕES UNIDAS. Declaração universal dos direitos humanos. Paris: Assembleia Geral da ONU, 1948.

PAIM, J. S.; ALMEIDA FILHO, N. A crise da saúde pública e a utopia da saúde coletiva. Salvador: Casa da Qualidade Editora, 2000.

PETRYNA, A. The right of recovery. *Current Anthropology*, Chicago, v. 54, p. S67-S76, 2013. Suplemento 7.

POVINELLI, E. A. *Geontologies*: a requiem to late liberalism. Durham: Duke University Press, 2016.

PUIG DE LA BELLACASA, M. Matters of care: speculative ethics in more than human worlds. Minneapolis: University of Minnesota Press, 2017.

SANTOS, B. S. *Epistemologies of the South*: justice against epistemicide. Boulder: Paradigm Publishers, 2014.

SANTOS, B. S. *O fim do império cognitivo*: a afirmação das epistemologias do Sul. Coimbra: Almedina, 2018.

SANTOS, B. S.; MENESES, M. P. (Org.). *Epistemologias do Sul.* São Paulo: Cortez, 2010.

SANTOS, B. S.; MENESES, M. P. G.; NUNES, J. A. Introdução: para ampliar o cânone da ciência: a diversidade epistemológica do mundo. In: SANTOS, B. S. (Org.). *Semear outras soluções*: os caminhos da biodiversidade e dos conhecimentos rivais. Porto: Afrontamento, 2004. p. 19-101.

SIQUEIRA-SILVA, R.; NUNES, J. A. Encounter(s): engaging suffering across the abyssal divide. In: NUNES, M.; MARQUES, T. P. (Org.). *Legitimidades da loucura*: sofrimento, luta, criatividade e pertença. Salvador: Edufba, 2018. p. 341-367.

TAUBER, A. I. *Immunity*: the evolution of an idea. New York: Oxford University Press, 2017.

TESSER, C. D. Por que é importante a prevenção quaternária na prevenção? *Revista de Saúde Pública*, São Paulo, v. 51, art. 116, 2017.

VIEIRA, N. B. S. "Tem que ser do nosso jeito": participação e protagonismo do movimento indígena na construção da política de saúde no Brasil. 2019. Tese (Doutorado em Ciências) - Faculdade de Saúde Pública da Universidade de São Paulo, São Paulo, 2019.

VIEIRA-DA-SILVA, L. *O campo da saúde coletiva*: gênese, transformações e articulações com a Reforma Sanitária brasileira. Salvador: Edufba; Rio de Janeiro: Editora Fiocruz, 2018.

WALLACE, R. G. et al. The dawn of Structural One Health: a new science tracking disease emergence along circuits of capital. *Social Science & Medicine*, Oxford, v. 129, p. 68-77, 2015.

### Authors' contribution

Nunes conceived the article, researched sources and drafted the manuscript. Louvison directly contributed throughout all stages. Both authors have reviewed the manuscript and approved the final version.

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