

Assessment of hegemonic and peripheral healthcare systems: a methodological proposal

*Avaliação dos sistemas hegemônicos e subalternos em
saúde: uma proposta metodológica*

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ABSTRACT

Applied research conducted with some traditional populations has served as the methodological foundation for the social interaction system (SIS) model, which seeks to contrast the hegemonic market system with peripheral socioenvironmental systems. The aim is to check whether the methodology of this model can be extrapolated to the healthcare system. The theoretical framework on peripheral modernity, hegemony, and subalternity serves as a foundation for analysing the historical contexts in which alternative healthcare experiences take place. Arguments from authors who question the hegemonic healthcare system help explore viable alternatives. This raises the question of whether the SIS model can effectively interpret the limitations and potentialities of different health systems, particularly analysing whether the hegemonic and alternative systems can coexist as hybrid systems and what essential conditions underpin such coexistence. Moreover, some of the key limitations and obstacles are discussed, and suggestions are given to enhance communication among different healthcare systems.

Keywords: Social interaction system. Hegemonic and peripheral healthcare systems. Barriers to dialogue in healthcare systems.

RESUMO

Pesquisas aplicadas com algumas populações tradicionais deram suporte metodológico ao modelo SIS (Sistema de Interação Societal), que busca confrontar o sistema hegemônico de mercado com os sistemas socioambientais de borda. O propósito é verificar se a metodologia desse modelo, analisada no artigo, pode ser extensiva ao sistema de saúde. A fundamentação teórica sobre modernidade periférica, hegemonia e subalternidade serve de suporte explicativo aos contextos históricos em que ocorrem as experiências de saúde alternativas. A exposição de argumentos de alguns autores que questionam o sistema de saúde hegemônico busca viabilizar alternativas a eles. Com isso, indaga-se se o modelo SIS consegue interpretar efetivamente os limites e potencialidades dos diferentes sistemas de saúde, ou seja, se ambos os modelos – hegemônico e alternativo – podem coexistir, como sistemas híbridos, e quais seriam os requisitos básicos para essa ocorrência. Além disso, mencionam-se alguns dos principais limites e obstáculos, bem como sugestões para facilitar o diálogo entre os diversos sistemas de saúde.

Palavras-chave: Sistema de Interação Societal. Sistemas dominantes e subalternos em saúde. Obstáculos ao diálogo nos sistemas de saúde.

1 INTRODUCTION

The hegemonic and peripheral systems model, known as the social interaction system (SIS), albeit schematic, seeks to represent certain dynamics of social reproduction within capitalism and its interaction with the practices and knowledge of subaltern social actors, especially those linked to the use of natural resources.

On the one hand, these dynamics reveal the unequal nature associated with the reproduction of the hegemonic system, including asymmetries that lead to social marginalisation and harmful modes of natural resource exploitation. On the other hand, they seek to find out how subaltern actors strive to differentiate themselves from the logics of capitalist agricultural production and from exploitative resource appropriation. Based on the interaction and interplay between the two systems, an analytical model was developed to assess how conflicts, coexistence, subaltern marginalisation, and cooperative complementarities unfold.

The methodological details of the SIS model will be dealt with further ahead. Its development is based on extension research experiences conducted directly with some traditional populations, involving students from two universities (Universidade de Ponta Grossa (UEPG) and Universidade Federal do Paraná (UFPR), public and community agents from some municipalities in the central-southern region of the state of Paraná, as part of the *Unitinerante Project* – Itinerant University for Human Rights, Nature, Peace, and Well-being – associated with the Interconexões Group (UEPG) and with the doctoral program in environment and development - PPGMADE UFPR). Additionally, two doctoral dissertations were developed, one addressing indigenous populations (Fabri, 2020) and their relationship with state institutions, and one focusing on hegemonic and peripheral agri-food systems (Romanini Netto, 2024).

The research studies investigated sustainable practices of agroecological farmers, evaluating their ability to mobilise resources for the development of strategies for socioenvironmental autonomy and community health practices within these populations. The theoretical and methodological development of the model was systematised through research seminars conducted with a group of graduate students from the interdisciplinary program in environment and development, within the epistemology and environmental sociology research area (PPGMADE-UFPR).

One of the major objectives of this essay is to verify whether the SIS model can be effectively applied to the hegemonic and alternative healthcare systems.

The key question is whether a new hybrid modality of healthcare practices can emerge from the coexistence of hegemonic systems (centered around technical and scientific procedures, as well as around market-driven procedures) and subaltern systems (associated with cultural practices of traditional populations).

Should this coexistence be feasible, what are its determining factors? Conversely, if the coexistence is infeasible, what are the main hindrances? In this paper, we further elaborate on the structural elements of both systems and on how the hegemonic healthcare system differs from the peripheral or subaltern healthcare system.

To illustrate how the configurations of this model work, we provide diagrams showing the components of SIS and their respective interfaces, described in the methods section. This methodological approach does not merely aim to portray real-world scenarios. Still, it also embraces action projects, such as those of academic extension, integrating research practice within the framework of a public and

socially relevant science. As pointed out by Fassin (2011, p. 260), “the most compelling work in the social sciences today occurs at the boundary between participation and observation.”

This model is not a universal framework for all research contexts. Instead, it is intended for socioenvironmental contexts in which subaltern actors confront hegemonic ones; hence their designation as peripheral or subaltern actors. As mentioned earlier, this formula is primarily applicable to traditional populations, their knowledge systems, and local socioenvironmental practices, including the healthcare system, which will be dealt with in detail further ahead.

To avoid mechanistic and idealistic interpretations, we define these systems as open, acknowledging that their intersections foster interactive complementarities (potential hybrids) and give rise to transformations, differentiations, and conflicts. Intersystemic dynamics are therefore relational, i.e., they cannot be understood in isolation, as each system in interaction maintains its own structure and organisation, following the foundational principles of complex thought as applied to systems theory.¹

2 THEORETICAL FRAMEWORK ON HEGEMONIC AND PERIPHERAL HEALTHCARE SYSTEMS

2.1 DYNAMICS OF HEGEMONIC AND PERIPHERAL SYSTEMS IN PERIPHERAL MODERNITY OF CAPITALISM

To examine the historical contexts in which hegemonic and subaltern systems confront one another, we are going to define each system in the following two sections and outline the key elements that shape this relationship. The definitions are important for subsequently explaining the rationale behind the methodological approach, thereby assessing its relevance for the study of the hegemonic and subaltern healthcare systems.

The hegemonic system in modern market society manifests through capitalist enterprise and the contemporary state, as described by Habermas (1987, p. 214-215), a perspective that is partially aligned with that of Weber (2004).

The dynamics of the hegemonic system seek to stand out as a world system by leveraging the instrumental rationality and structural logic of capitalist development. Its expansion operates globally through capital financialisation, asymmetric international geopolitics, and environmentally destructive processes (unsustainability), whose impacts are felt differently on the periphery of the globalised system. The diverse ways in which the hegemonic system is reproduced in peripheral regions can be construed as manifestations of multiple modernities.²

Globalisation has asymmetrically distributed not only the resources of geopolitical power but also access to economic goods. At the same time, it has established a system of free commodity circulation, eroding national borders and displacing a vast number of marginalised individuals who, for various reasons, traverse the world, wandering off in search of survival. On a global scale, commodities are granted legal status for circulation, in stark contrast to migrants, whose mobility is deemed irregular or even illegal.

In Latin America, developmental strategies have historically expressed varying degrees of contradiction in relation to the extractivist export model. In the past, the primary export model was challenged for constraining industrial development; today, however, the export of raw materials and neoextractivism are widely celebrated. Commercial subordination to transnational corporations, globalisation, and global governance are widely accepted and encouraged by various governments, including those with progressive agendas (Gudynas, 2011).

Santos (2010) warns that not all of the North, often identified as the hegemonic center of capitalism, is an enclave of prosperity. According to him, the South exists within the North, just as the North exists within the South, as both regions generate mechanisms of social exclusion. Nevertheless, it is in the South that the most profound inequities of the capitalist model are found, also shaped by minority elites. Large segments of the southern middle class enjoy lifestyles comparable to those of the affluent North, with which they identify themselves. The difference between the systems lies in the fact that the scale of social exclusion is dramatically larger in the South.

In the realm of decolonial critical thought, environmental rationality, and southern epistemologies, the ideological underpinnings of development are challenged, not by proposing “another development” but by distinguishing alternative developments from alternatives to development. Even in small local contexts, this leads to a debate surrounding post-development, which reveals a proximity to subaltern subjects, autochthonous or native peoples. Their rationalities do not align with the ideology of progress. Their knowledge and world views on *buen vivir* and harmonious coexistence with nature provide the foundation for alternatives to development.

Regarding concepts of development, it is redundant to delve into the polysemic debate on sustainability, a battleground of interpretation for both hegemonic and subaltern actors. The term is applied indiscriminately to economic, social, and environmental/ecological sustainability, but its formulation emerged from a debate on different concepts of ecology, needs, and culture. In the end, it eventually yields to the notion of economic growth formulated by actors associated with the hegemonic capitalist model.

As pointed out earlier, hegemonic dynamics are dictated by the central systems of action that shape societal structure: the capitalist economy, the modern state, and the nuclear family. Nonetheless, as argued by Habermas (1987), when three additional systemic mechanisms are considered, namely cultural value spheres, cultural action systems, and the personality system, rationalities can be understood differently, as arenas of contested meanings and of existential spaces, encompassing diverse life projects and aspirations, i.e., the lifeworld.

The next step is to assess the reach of the concept of *subalternity* from the perspective of actors that build their strategies within peripheral systems.

2.2 SUBALTERN ACTORS AND SOCIOENVIRONMENTAL PERIPHERAL SYSTEMS

The concept of *subalternity* is linked to collective subjects or social groups or categories that have historically experienced dispossession or deprivation of their original condition, whether through expropriation of their territories, deprivation of freedom, or forced incorporation into the nation-state, as has been the case of indigenous peoples, peasants, and other traditional populations, as well as of the landless, the homeless, Afro-descendants, forest peoples, artisanal fishers, and other collectives defined by gender, alternative ways of life, and diverse sexual orientations.

It is crucial to understand that these subaltern subjects are characterised by their systems of practice (or ecology of practices³), which rely on material processes of production and reproduction. These processes define how nature is utilised and appropriated, promoting and reinforcing cultural values, conceptions of nature, and lifestyles. Furthermore, they rely on technologies that sustain the modes of production and reproduction for communal existence.

Regarding the cultural aspects of modernity in multi-ethnic, intercultural, and plurinational societies, the conventional debate on modernity in opposition to tradition tends to oversimplify and obscure the complexity of these dynamics, portraying the urban-industrial economy and lifestyles as predominant in modernity, overlooking societies that remain weakly industrialised and less urbanised.

To understand these conflicts from the perspective of diverse cultural rationalities, Escobar (2005, 2014) proposes replacing the notion of culture with that of ontology, positing that multiple worlds will lead us to the notion of a pluriverse, through the political activation of relationality among indigenous and Afro-descendant peoples of Latin America. Escobar contends that the hegemonic idea of a singular universe may give rise to a constellation of multiple possible worlds.

Accordingly, new avenues now emerge for reshaping this debate, which originated in the late 20th century through the work of scholars such as Aníbal Quijano, Arturo Escobar, Néstor García Canclini, Édouard Glissant, Homa Bahba, Hountondji, Achile Mbembe, Spivak, and Stuart Hall. Based on cultural, postcolonial, and decolonial studies and epistemologies of the south, these authors looked into various *subaltern subjects* shaped by identity, ethnicity, sexuality, and gender, reflecting a growing political awareness of their peripheral subalternity. Such awareness manifests in the construction of alternative movements, including opposition to globalisation, emancipation movements such *Zapatismo* and *Andean indigenism*, agrarian movements (landless workers, agroecological farmers, and family farmers fighting for food security and food sovereignty), urban movements (homeless people), the prison system (Wacquant, 2013), LGBTQIA+ movement, human rights organisations for migrants, and women’s organisations for equal rights and other rights.

3 MATERIALS AND METHODS: PRESENTATION OF THE SOCIAL INTERACTION SYSTEM (SIS)

It is now important to compare the societal dynamics of hegemonic market systems and subaltern systems so as to understand that, while each system has its own internal logic, they are interdependent and produce complex effects of exclusion-inclusion throughout historical processes (center-periphery relationship). We thus aim to assign the respective concrete components to each of the systems analysed herein, according to Diagram I (Figure 1):

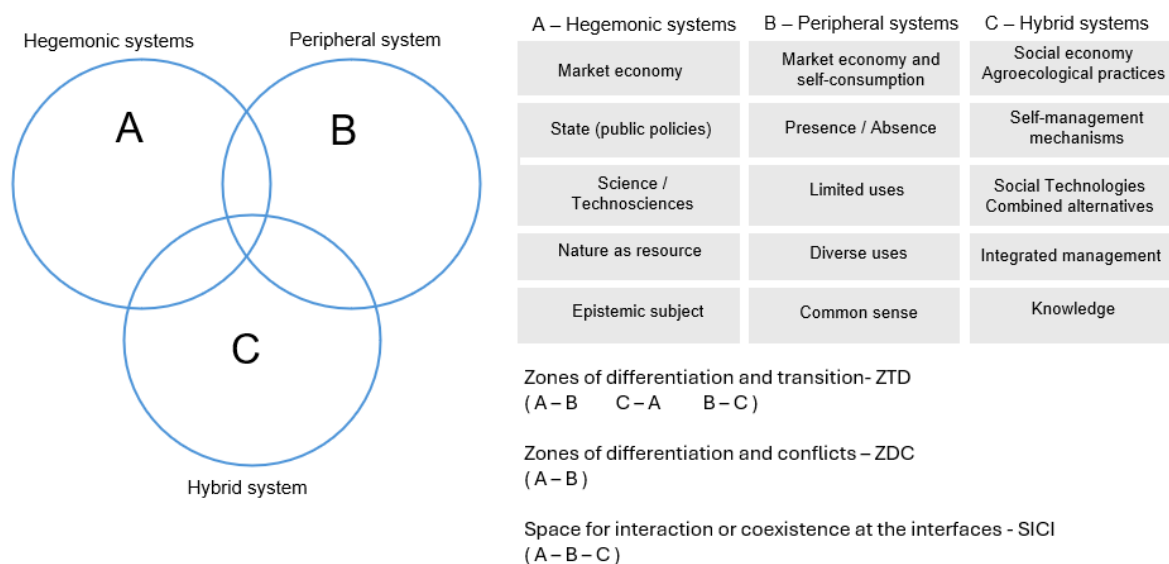


Figure 1 – Diagram I – Intersystemic dynamics with their constitutive elements

Source: Prepared by the author

In our definition, the *social interaction system* (SIS) is composed of a system of material practices, cultural practices (symbolic or immaterial), and arrangements (ecology of knowledge and ecology of practices) that foster the production of subjectivities and their establishment in social and institutional structures. The movement of inclusion/exclusion of these components occurs in the *space of interactions* or *coexistence*, which integrates from the three systems (A, B, C), with their respective *zones of differentiation and transition*, and *zone of differentiation and conflict*, found at the intersections of the hegemonic, peripheral, and hybrid systems, as shown in Diagram II (Figure 2), as well as in their recursivity.

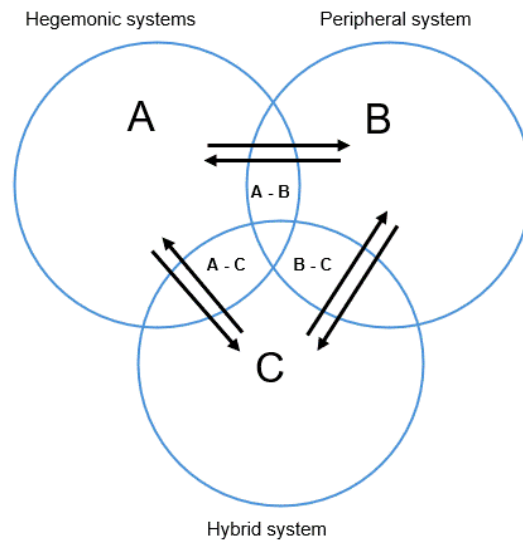


Figure 2 – Diagram II – Intersystemic interactivity and recursivity

Source: Prepared by the author

Thus, the dynamics in the interaction spaces of the diagram encompass the *space of interactions* or *coexistence at interfaces A-B-C*. Zones of differentiation may occur at interfaces A-B, A-C, and BC, which tend to transition into hybrid models, but not without conflicts between the hegemonic and peripheral systems.

What would promote or allow the existence of an emerging hybrid system? This is the central question to be pursued and examined in more detail later, in the context of health. In other words, under what circumstances would it be possible to bring together hegemonic healthcare models with the existing alternative forms found, for instance, in traditional and indigenous populations? According to the diagram, a hybrid system results from the confluence and combination of each of the two systems (hegemonic and peripheral), leading to the coexistence of their main aspects (economic, technological, cultural, socioenvironmental, and educational). Yet, it may generate conflicts when the excessive overlap of some subsystems over others threatens coexistence.

To demonstrate this overlap, take the example of the food system: the indiscriminate use of pesticides can jeopardise the health subsystem, and if no counterbalance is generated from the peripheral systems, it may hinder the creation of alternatives to the hegemonic system, as agroecological farmers have been striving to do. Likewise, the hegemonic system of synthetic drug production, when overlapping with the preventive health system, culturally and institutionally inhibits alternative health practice systems.

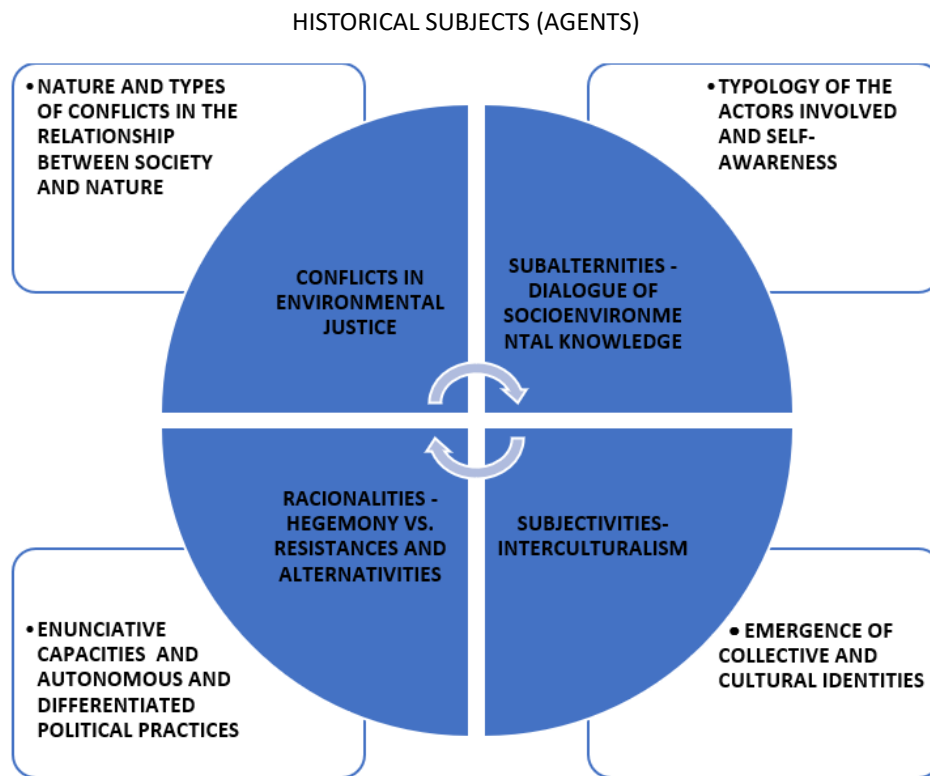


Figure 3 – Diagram III – Dynamics of capitalism and its relationship with subaltern social actors and the socioenvironmental practice system

Source: Prepared by the author

Diagram III (Figure 3) is a typical-ideal model that allows assessing the systems of practices of subaltern actors. Such assessment helps determine whether these actors remain in their subordinate position or aim to develop autonomy projects, and whether they can mobilise resources, using their enunciative skills and autonomous and distinct political practices that foster new subjectivities by triggering emergencies, with the reaffirmation of collective and cultural identities.

4 ASSESSMENT OF CASE STUDIES AS METHODOLOGICAL SUPPORT FOR SIS

Two types of studies carried out with this method (one with agroecological farmers and one with folk medicine practices) enabled the assessment of how different actors assert their role in their projects of autonomy construction and deal with the obstacles to their implementation. Both experiences (agroecology and folk medicine) provide empirical support for illustrating how subaltern systems operate.

Floriani, D. and Floriani, N. (2020) demonstrated how agroecological farmers design their strategies in response to the market production system, aiming at the construction of socioenvironmental autonomies through new productive and cultural arrangements and the creation of new subjectivities.

An analysis of indicators (community organisation; access to basic rights; market integration; ecological production/conservation; and identity reaffirmation) applied to four local traditional communities allowed assessing the capacity of these communities to mobilise resources. These indicators helped trace the trajectories of community actors toward the minimum and maximum thresholds for the construction of socioenvironmental autonomies.

The observed conflicts were also important to verify to what extent peripheral systems (socioterritorial systems) in which the local communities are embedded are affected and threatened by the mechanisms of hegemonic systems, which prioritise the market and the appropriation of nature as an economic resource. This dynamic endangers ecosystems through excessive use of agrochemicals, as occurs in tobacco farming and monoculture reforestation.

Similarly, it helped identify the shortfall in the delivery of basic services for these communities, governance challenges, and threats to identity reaffirmation posed by the expansion of neo-Pentecostal churches. However, it brought attention to positive aspects as well, such as the management of ecosystem resources, implementation of agroecological production in local markets, targeted at promoting the social economy. Conversely, the study also examined how the hegemonic system mobilises to threaten these communities. Several antagonistic actors within the hegemonic system are vying for control over traditional territories. These territories include neo-rural settlers, leisure estate owners, transnational corporations that establish themselves and sign contracts for the exploitation of natural and social communal resources. Furthermore, neo-Pentecostal churches play a role in this dynamic by introducing new habits and behavioral patterns (rooted in individualism and in the private appropriation of common goods, under the auspices of the prosperity gospel or of the new spirit of capitalism for the poor), creating divisions within the communities, weakening customary practices of reciprocity, originally linked to folk Catholicism, such as *puxirões* (collaborative effort groups) and traditional festivals.

Finally, depending on the type of resources and capacities mobilised, it was observed that these capacities can be enhanced through cooperative arrangements with other systems, paving the path for socioenvironmental autonomies. Such a dynamic can give rise to hybrid forms of organisation. Alternatively, these mobilised capacities and resources can be constrained by negative interactions with hegemonic systems (e.g., transnational agribusiness for tobacco production and reforestation), resulting in marginalised and highly dependent peripheral systems.

While the studies conducted with agroecological farmers provided a general framework for outlining the SIS method, comparing the logic and operation of hegemonic and peripheral systems, the study on folk medicine facilitated a more in-depth analysis of various healthcare systems of traditional populations, with the aim of demonstrating that their practices and knowledge are connected with sustainability strategies, in addition to opportunities for dialogue and complementarity with preventive medicine.

The present paper addresses research on folk medicine conducted in recent years (Ferreira Clarindo; Floriani, 2023), with traditional populations, in both rural and urban settings. This study highlights some of the key configurations and operation features of this subaltern healthcare system.⁴

This study examined rural communities located in the countryside of Campo Largo and Ponta Grossa. The same phenomenon was then analysed in the urban area of Ponta Grossa, the major municipality in the Campos Gerais region in the state of Paraná (PR). Paraná is located in southern Brazil, and the investigated rural communities are situated in the central-southern region of PR, as shown in Figure 4:

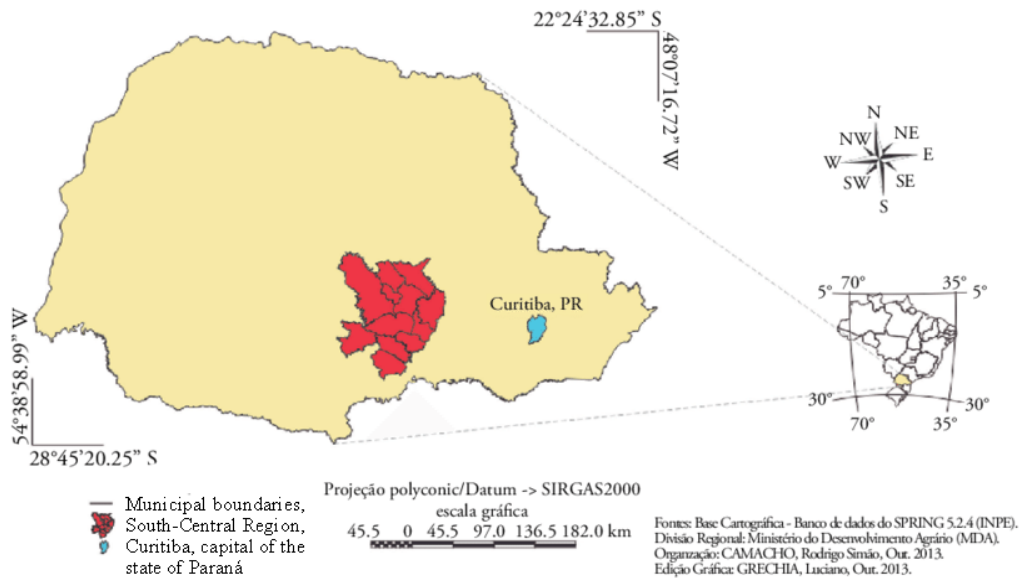


Figure 4 – Central-southern region of the state of Paraná

Source: Cartographic base – Spring 5.2.4 database (Inpe)

By analysing two different spaces (rural and urban areas), the study facilitates a broader understanding of folk medicine.

The study was based on the premise that folk medicine is deeply embedded in multiple aspects of community life, including economic, social, cultural, and spiritual/religious dimensions. The (re) production of folk medicine in the rural context maintains a closer connection with nature, whether due to the availability of resources, cultural factors, or the pressing need arising from the lack of public healthcare services and industrialised medicines. Therefore, this involves a redefinition of nature, incorporating religious beliefs, which have been an integral part of this *savoir-faire* over the years. The effectiveness of medicinal plants and of healing rituals in folk medicine extends beyond the pragmatic function of healing (Ferreira Clarindo; Floriani, 2023, p. 211).

This study sought to bridge health geography with a phenomenological approach, converging toward a cultural, social, critical, and humanistic perspective shaped by complex thought. Blessers (*benzedeiros* or *benzedores* in Portuguese) appear in this context as keepers of a wisdom that links different historical moments of society, forging connections between modern medicine, ancient body care practices, and spiritualities, in an ongoing process of integration (Ferreira Clarindo; Floriani, 2023, p. 202).

Blessers are endowed with a gift and embody the role of doctors, witch doctors, and religious healers. They are individuals whose knowledge encompasses all specialties of modern medicine (psychiatry, cardiology, orthopedics, among others), enabling them to treat a wide range of dysfunctions, whether physical, psychological, orthodontic, social, etc. (Ferreira Clarindo; Floriani, 2023, p. 207).

This study found blessers working in the city, and their characteristics were very similar to those from rural areas (Ferreira Clarindo; Floriani, 2023, p. 208). The research indicates that, in rural areas, folk medicine practices are enveloped in folk Catholicism, which combines the institutional symbols of the Catholic church with elements introduced by modernity and the daily routines of rural life. Urban folk medicine, in turn, incorporates religious syncretism, blending symbols of Catholicism with those of African-based religions (Ferreira Clarindo; Floriani, 2023, p. 210).

The research conducted in the Serra das Almas region (state of Paraná) anticipates what other authors elaborate on later about holistic views in alternative medicine, merging cultural dimensions with human subjectivity: the physical and emotional intertwined with happiness; maintaining a good relationship with others as a sign of social ties; fulfilling religious duties helps people avoid evil; the link between health and both individual and collective actions allows one to do good to others, thereby fulfilling social and religious roles and invoking divine protection.

The referenced study of folk medicine practices allowed concluding that: 1) contrary to what might be expected, globalisation and postmodern symbols did not replace ancient societal practices, but revived them instead, creating hybrid spatialities from a cultural outlook. In this regard, rural is not so “provincial” as commonly thought and, likewise, the urban space is not entirely “cosmopolitan;” and 2) folk medicine is like a lawful transgression woven into the fabric of these communities, which do not abandon the modern way of life or modern medicine, but simultaneously stretch the boundaries of instrumental rationality, disseminating knowledge and a different world view beyond the excesses of capital and the objectification of the human body and life in society (Ferreira Clarindo; Floriani, 2023, p. 214).

5 STRUCTURAL CHARACTERISTICS OF THE HEGEMONIC HEALTHCARE MODELS AND OF SOME COMMUNAL HEALTH PRACTICES⁵

Social sciences, especially anthropology, sociology, geography, and health economics, have significantly contributed to understanding the current challenges between the predominant paradigm of the healthcare model in our modern world and its positive and negative impacts on policy strategies in this field, as noted by Paul (2023) and Fassin (2011), two influential authors who merge their anthropological and sociological interpretations of this issue with their medical training and practices.

An integrative new perspective on the body, nature, and culture draws attention to the escalating degradation of oceans, rivers, and forests, and the action of certain agents, such as heavy metals and pesticides, on the deterioration of human health, leading to the sterilisation of both animal and human populations. Another integrative perspective, taking into account the various factors associated with the living conditions and situations of human populations, is pivotal for a multifactorial diagnosis and the determinants of health policy strategies, as will be discussed later.

There exist numerous ways to approach the body from the perspective of social sciences. It can be addressed in terms of representations (either traditional or contemporary), in terms of performances (from rituals to theater), or in terms of normatization (hygiene instructions or moral guidelines). An important, yet insufficiently developed, perspective, in my view, is that of political anthropology. It seeks to elucidate what the state does with or to bodies (Fassin, 2011, p. 265).

It is essential to highlight some of the epistemological and cultural factors, considering the perspective of both authors (Fassin, 2008, 2011; Paul, 2023) at the foundation of the hegemonic healthcare model that was established with the advent of western modernity, as well as the coexistence of other subaltern and equally cultural practices and ways of dealing with health and disease. Globalisation, a phenomenon that is not recent, has accelerated the production of side effects in terms of health and disease, such as pandemics and their relationship with the deterioration of living conditions on the planet. We are not only interconnected by the global economy, but also ecologically, through the complex web of life (Leff, 2022, p. 39).

The medical practice that prevails nowadays is appreciated and legitimised by technosciences and their technical achievements, as opposed to older models, which were more associated with art. However, scientific foundation reveals a problematic aspect because, as it becomes increasingly objective,

medicine distances itself from the human person altogether. Likewise, this technical modality of the healing act corresponds to a mechanical view of the body, seen as a clock or an automaton.

Therefore, this hegemonic approach to healing emphasised the growing sophistication of medical technology, equipment, or medicines, with computerised procedures designed to ensure healthcare accountability. In this system, techniques and knowledge are the driving forces behind health, in contrast with other, more ecological perspectives, which acknowledge that both the individual and the earth have finite resources. These alternative perspectives place the responsibility for health on prevention and on the individuals' capacity for autonomy (Paul, 2023, p. 70).

Hence, the *modus operandi* of modern medicine singles out the patient by working from a reductionist, mechanistic, and objective approach. By acting independently, each medical specialty ends up ignoring the patient, failing to consider them holistically; what matters is the selection of information to enable the diagnosis of the disease (Paul, 2023, p. 73).

Paul (2023, p. 76) acknowledges, however, that the maximum efficacy of medicine often applies to single-factor and acute diseases; in such cases, simple, mechanical, and specialised actions are effective and valuable. With time, medical care has increasingly required an approach that considers multiple factors, making diagnosis and treatment truly complex, as pointed out by the other authors referenced herein.

On the other hand, the "western" modern lifestyle has seen an increase in the incidence of long-lasting chronic diseases, which are progressive and often associated with disability. As pointed out by Paul (2023, p. 72-73), one of the factors contributing to this increase is associated with the longer life expectancy of the populations, thanks to therapeutic effectiveness and to modern hygiene practices. Nonetheless, other factors that predispose to diseases are linked to the urban lifestyle, pollution, type of agricultural practice, diet, work conditions, stress, and several environmental problems.

The constant reference to this increase in the incidence of chronic diseases highlights the threats to the healthcare protection system and the high costs of public and private treatments, which will eventually make it impossible to provide millions of people with healthcare services. Consequently, the referenced authors propose alternative healthcare models, not just for financial reasons but also for philosophical and paradigmatic reasons, seeking to implement different ecologies of practices linked to new health concepts.

It is claimed that healthcare models reflect the cultural system, and in this case, evidence-based medicine corresponds to instrumental rationality and dominant market logics, but this does not imply that alternative systems should not be considered, as many of them are cultural expressions as well, associated with ways of life that differ from those dictated by instrumental rationality, also representing forms of resistance against the imposition of a single healthcare model.

This way, in line with our proposal to evaluate societal models that seek to investigate the relationship between the logics and procedures of hegemonic systems and those of peripheral and hybrid systems, as introduced earlier in this text, it is necessary to consider the potential for interactions, complementarities, conflicts, coexistence, and hybrid compositions among the dynamics associated with disease production mechanisms and regenerative practices for a healthy life.

Nevertheless, there is an implicit hierarchy here, meaning that evidence-based medicine is central, whereas other "alternative" or "complementary" practices are viewed as secondary, thus more associated with the pursuit of well-being than with actual healing power.

The supremacy of evidence-based medicine was established throughout the 20th century. However, traditional medicine persisted during the same period in

regions or among populations where access to allopathic medicine was difficult. A new phenomenon gradually developed from the 1970s in the Western world: the introduction of new practices, more or less derived from traditional approaches, unfolded gradually. This introduction, following the cultural revolution of 1968, linked to a reappraisal of nature, well-being, and inner experiences, attempts to counterbalance the hegemony of the materialistic principle of evidence-based medicine. (Paul, 2023, p. 74).

Patients' access to allopathic medicine results, in most cases, from a lack of choice or information when, in fact, they could have access to less expensive treatment with fewer side effects. On the other hand, and often for the same reason, patients who opt for alternative treatment with substantial risks, due to delayed diagnosis, are unable to access curative treatments.

It is not a question of determining whether patients are right or wrong in either case; rather, these authors suggest the possibility of integrating evidence-based medicine with alternative or complementary care.

The community health model operates at the interface of the ecological model, fostering local community development practices that prevent the weakening of social ties. Also, it expands individual and group competencies by reintegrating and valuing experiential knowledge. With a primary focus on prevention rather than on treatment, this model underscores the importance of the development of competencies over the identification of pathologies.

Paul (2023) also examines how the medical field that studies diseases and classifies them according to their distinctive features can accommodate the issue of complexity. Medical institutions and medical training programs are still reluctant to adopt complementary and alternative procedures. Nevertheless, some U.S. universities have introduced theoretical, clinical, and practical programs that incorporate meditation, yoga, breathing techniques, *tai-chi chuan*, alternative nutrition, acupuncture, music, arts, and other established methods of holistic medicine (Paul, 2023, p. 84).

Therefore, how can the necessary advancement of biomedical technology be reconciled with the introduction of complementary medicine? The answer is not so straightforward. To institutionalise this new approach, medical schools would have to reconsider the hegemony of the scientific framework that underpinned their creation.

Given the complexity of the factors influencing health, a shift in paradigm and thought is imperative if we hope to minimally address the challenges that lie ahead.

A broader, more open, and more complex understanding of the human being is essential not only to integrate but also to transcend the current paradigm. A holistic understanding of the human being, including subjectivity and the meaning of life, demands a plural approach that goes beyond mere causality. This insight brings forth a dual problem. It proposes, in fact, a new status for the human being in medicine that extends beyond the laws of biology and their physiological or pharmacological outcomes and embraces the humanisation of medical care (Paul, 2023, p.89).

Thus, according to the author, it is essential to foster the development of a new health model in which the human being is not merely viewed as an organ, function, disease, or object, but rather through a new perspective that considers subjects, subjectivity, and the relationship between biological, psychological, social, and spiritual dimensions of the disease. In this framework, medical care becomes part of a cognitive construct involving multiple parameters that current training cannot integrate or resolve.

This perspective suggests that health and medical care are equally part of a cognitive construct involving numerous indicators that are absent or insufficiently addressed in current professional training, as

well as in the reactions and attitudes of people influenced by the prevailing cultural health model. This cognitive framework on disease would also imply that suffering can be perceived and processed by individuals as an opportunity for personal growth and self-awareness, prompting reflection on inappropriate behaviors, incorrect attitudes, and false beliefs that require life changes so that they do not recur.

These aspects highlight the need to develop a more complex and interactive view of the human being, considering diverse environments (natural, familial, social, cultural, and spiritual).

6 DISCUSSION

The set of conceptual elements underpinning the proposed model for interpretation of SIS, equivalent to a socioenvironmental system, applies primarily, but not exclusively, to contexts of capitalist peripheralisation, where multiple modernities confront one another, shaped similarly by subaltern resistance, marked by conflicts, and the search for socioenvironmental alternatives to the hegemonic model.

Given that the hegemonic healthcare model is relational, i.e., it is influenced by social critique, it is possible to observe changes, coexistence, and complementarities with other subaltern healthcare systems. Therefore, it is necessary to approach this model from this perspective.

After presenting the key elements of the SIS model as an analytical framework primarily applicable to historical, socioterritorial, and socioenvironmental contexts where hegemonic (dominant) systems are opposed to peripheral (subaltern) systems, the text focused on a theoretical approach that was capable of addressing the historical conditions of peripheral modernity within capitalism. It is in this context of peripheral capitalist social formation that subaltern actors, from traditional populations, come to the forefront.

To demonstrate that the SIS analytical model is not merely a formal exercise or detached from observation and research experiences, results were presented, the outcomes of which contributed to reflections and empirical insights for the formulation of the model.

The main objective of this paper was to assess how the SIS model could be applied effectively to interpret and explain the modern structure of the hegemonic healthcare system, its understanding of disease, and the technologies employed to fight it. In a similar vein, alternative perspectives on disease were presented, based on critical authors who challenge the hegemonic system, not focusing on the morbidity caused by the disease but on its determinants.

These determinants are linked to other holistic epistemologies that consider health as a phenomenon simultaneously connected to the body, to the individual's subjectivity, and to the balance of the surrounding environment, all of which should be integrated harmoniously as part of a new health culture. The authors who advocate this new concept highlight the need for dialogue among health professionals in order to implement practices and knowledge rooted in the tradition of the healing art, rather than solely relying on specialised technologies that treat the human body as a mechanical object or clockwork.

It is questioned whether, through intercultural dialogue between the various healthcare systems, it is possible to think of hybrid systems that combine specialised technologies with the art of healing, embedded in the tradition of traditional populations. According to the critical authors, this goal can be achieved through a change in the profile of health professionals, supported by a careful process of (re) education that alters the way health is conceived, alongside the formulation of new public policies that encourage this dialogue.

The debate on health is an issue that concerns society as a whole, making it complex and challenging to manage. There is no single model capable of solving it completely. In the case of the SIS model, it is possible to enhance its effectiveness by applying it on a smaller scale, to local populations, in which community-based folk medicine practices are already well-established. Such practices can be integrated with specialised technologies in cases of severe acute diseases, without overlooking prevention as the core method used by health professionals. In this case, educational processes are equally crucial for paradigm shifts.

In contemplating the issue of health, it is essential to consider other imaginaries, as proposed by Paul (2023, p.82). As the image of the human being evolves slowly, it is assumed to correspond to a vision that anticipates the future of medicine, in which the representation of the body or of spirituality is not confined to ideas associated with organs, functions, diseases, or objects, but instead reflects the complexity, plurality, and paradoxes of the human condition. This new human condition equally corresponds to new societal and social commitments, to the relationship between academic and non-academic knowledge, and to a fresh perspective on subjects, on subjectivity, on the relationship between biological, psychological, social, and spiritual influences on the disease.

The SIS model is not the only framework available for evaluating alternative health practices; other transdisciplinary and transcultural methods can promote a shift in the health model, leading to an alternative paradigm. The question of autonomy, as a strategy for recognising a new status for patients and their families, would also arise from this new design, which implies the reintroduction of the subject and subjectivity into medical care. While this is not a novel approach, the challenge would now be to mobilise the new cultural and collective capacities developed by the involved agents, so as to institutionally support this new healthcare model.

Note that, with no changes in interprofessional relationships, dialogue becomes difficult between individuals with different academic backgrounds, each with specific methodologies and discourses. Such difficulty hinders the interactions that could lead to alternative understandings, with practices that are equally different and indifferent to discussions on health and disease.

Therefore, in line with this perspective, and pursuit of a new commitment to the future, strategies are combined, moving from a rational and assuring social contract of modernity to an emotional pact driven by subjectivity, passions, and complexity. Nevertheless, this transition would require the mediating role of educational diagnosis, in conjunction with medical diagnosis and with disease, thus promoting autonomy, accountability, and therapeutic effectiveness.

The hegemonic healthcare model cannot be seen as a monolithic block, as it is influenced by conflicts and contradictions, which allow for the incorporation of innovations and critiques suggested by society itself. This will depend on the capacity of the social actors involved in this debate. The creation of the Brazilian public health system (SUS) as a public policy illustrates these innovations and changes in the hegemonic healthcare system, because SUS provides all individuals living in Brazil with comprehensive, universal, and free access to healthcare.

Whether utopian or not, the arguments suggest a dialectical interplay between different perspectives on medical care, including the existing tensions between biology and spirituality and body and mind. Expanded access for all would be guaranteed through democratic public policies, hybrid and plural health systems, and the inclusion of cultural traditions rooted in community-based alternative practices and knowledge.

NOTES

1 | For further information on complex thought and systems, see Morin (1998), García (2006), Raworth (2019, ch.4, p.143-177), Weaver (1948), among others. According to Morin (1998), the notion of complex thought assumes that scientific

knowledge advances through the elimination of errors rather than through the accumulation of truths. Progression of knowledge should be accompanied by progression of ignorance. Scientific truth is not found in theories, but in the interplay between truth and error.

2 | The term ‘multiple modernities’ was coined by Israeli sociologist N.S. Eisenstadt (2007). Globalization processes and their effects on societies that have shaped their integration into the context of capitalist modernity afford them a degree of relative autonomy. It is essential to consider their historical and cultural specificities rather than treating these societies as identical to others within a single global homogenization process; as a matter of fact, it is common knowledge that the world does not operate like that. It is crucial to assess the role of culture in modernity, especially in multi-ethnic, intercultural, and plurinational societies. The paper examines modernity in opposition to tradition and tends to oversimplify and obscure the meaning of oppositions, relying on economic reductionism or urban-industrial lifestyles to assert the dominance of one system of modernity over the others that are neither industrial nor urban (FLORIANI, 2016).

3 | The term ‘ecology of practices’ can be attributed to Isabelle Stengers (2006) and has been revisited by some authors, including Jonathan Peuch (2012).

4 | In a recent publication on health imaginaries and interculturality (FLORIANI, D.; FLORIANI, N.; VERGARA, 2023), a collection of experiences was gathered from extension projects applied to local communities, among traditional populations. These projects, grounded in health-related themes, carry important implications for the so-called alternative folk medicine in the context of traditional and indigenous populations in local rural communities.

5 | “Here, the concept of health is directly related to the study of “Determinantes Sociais em Saúde” (Social Determinants of Health), which encompass social, economic, cultural, racial, psychological, and behavioral factors that influence disease patterns and risk factors in a given population” (CARDOSO COSTA *et al.*, 2021).

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