

Metaphors Matter: Unraveling Three Essential Propositions*

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Abstract: This article delves into the significance and role of metaphors in shaping knowledge, perceptions, and decisions within the healthcare domain. Through a critical analysis of their impact, particularly in the dynamics between healthcare professionals and patients, three dimensions are proposed for unraveling their significance: the political dimension views metaphors as agents of power and tools for legitimizing inequalities; the cultural dimension sees them as cultural residues challenging prevailing biomedical knowledge; and the ethical dimension raises questions about the moral implications of the constructed narratives. This holistic approach aims to enhance our understanding of the intricate interplay between language, cognition, and disease, ultimately advocating for more comprehensive approaches in healthcare.

Keywords: Metaphors, public health, medical anthropology, symbolic violence, disease, illness

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Las metáforas importan: Desentrañando tres proposiciones esenciales

Resumen: Este artículo examina el significado y la función de las metáforas en la configuración del conocimiento, las percepciones y decisiones en el ámbito de la salud. Al analizar críticamente su impacto, especialmente en la relación entre profesionales de la salud y pacientes, se proponen tres dimensiones para desentrañar su significado: la política, que las examina como agentes de poder y como instrumento para la legitimación de las desigualdades; la cultural, que considera las metáforas como sedimentos culturales que desafían el conocimiento biomédico predominante; y la ética, que cuestiona las implicaciones morales de las narrativas construidas. Este enfoque holístico busca mejorar la comprensión de la interacción compleja entre lenguaje, cognición y enfermedad, promoviendo aproximaciones más completas en el ámbito de la salud.

Palabras clave: Metáforas, salud pública, antropología médica, violencia simbólica, enfermedad, sufrimiento

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To the memory of Jacquineau Azetzop (†), my professor of critical anthropology.

Introduction

In an article published in 1990, Nancy Scheper-Hughes (1990) begins an academic joke about medical anthropology involving a doctor and three academics: Hans Baer, Michael Taussig, and Arthur Kleinman. In the story, as they stand by a river, they hear the screams of a man carried away by the water current, seemingly drowning. The doctor is the first to react, jumping into the river and attempting to save the man, but with no success. Soon, other bodies float on the water, and the doctor's efforts to rescue and revive them prove futile. Hans Baer heads towards the source of the current to investigate the contradictions of the capitalist mode of production responsible for the mass appearance of these corpses. Meanwhile, Taussig goes off alone in search of the enigmatic message in a bottle, a foresight one dying man might have sent to account for the deaths. Kleinman remains on the shore, facilitating the doctor-patient relationship.

From these three statements, Scheper-Hughes points out three key proposals for applying medical anthropology in a critical context: recognizing the influence of power and politics, questioning biomedical knowledge, and promoting social justice and ethical practices. Although the author insists on working on these three presuppositions together, it cannot be denied that this task still seems far from being completed. For example, some cultural elements, such as those that Taussig seeks to decipher in the joke, are often not considered on the grounds of biomedical biases. This last approach repeatedly forgets how certain everyday practices, symbols, language, and beliefs condition the perceptions and behaviors of individuals concerning disease¹ and health.

In this sense, it is important to turn our attention to the use of metaphors in the medical field. Metaphors play a crucial role in diseases. (Bleakley, 2017) They make technical and sometimes abstract aspects of medicine more intelligible and often function as a bridge between this dimension and patients' particular and subjective experiences (Karska & Prażmo, 2017; Landau et al., 2018). Metaphors frequently facilitate greater communication between healthcare professionals, patients, and their families (Margaryan & Petrosyan, 2016). Methodological metaphors work in both directions. In other words, doctors and nurses are often better able to translate concepts, diagnoses, and procedures to their patients, and patients are better able to communicate their ailments more effectively. Thus, metaphors, understood as frames of reference and narrative structures, can encourage or modify behavior, promote

¹ In this article, I assume the conceptual distinction between disease (the biological condition) and illness (the social meaning of the condition). However, I favour the constructionist approach, which argues that both illness and disease undergo a process of social negotiation in their definition.

making medical decisions, and even forge certain relationships or identities. Therefore, it is worthwhile to analyze their use critically and not to underestimate their function.

This article aims to analyze the role of metaphors concerning health and disease. By exploring the intricate ways metaphors are employed in the health field, starting with some metaphors used during the COVID-19 pandemic, I attempt to reveal how they both shape the conceptualization of health and become a political resource that guides a given public health policy. This article sheds light on the dual nature of metaphors, serving as linguistic tools that construct meanings and as instruments of power that influence the socio-political landscape. This exploration contributes to a deeper understanding of the complex interplay between language, health, and politics in health care.

Metaphors: Avoiding their reductionist use

Traditionally perceived as mere stylistic resources² (Karska & Prażmo, 2017), metaphors extend beyond this narrow perspective. They embody the human ability to forge connections between seemingly unrelated concepts, processes, and objects. This capacity to establish similarities is not confined to the literary or artistic realm. Today, metaphors are study subjects in various fields, including psychology, technology, and health³. A tacit agreement exists that metaphors permeate all aspects of our daily lives, enriching our understanding of the world and communication beyond logic and literalism. Metaphors shape, nuance, and deepen our ideas, conversations, behaviors, and social bonds.

Establishing metaphorical relationships involves a conceptual process where one domain is represented with the characteristics or terms of another domain. This allows for precisely identifying source and target domains (Karska & Prażmo, 2017; Lakoff & Johnson, 2008; Thibodeau & Durgin, 2011). The former serves as the point from which conceptual forms are imported to express the latter. The latter domain is often more abstract or difficult to intelligibly express. For instance, in the metaphor "marriage is a plant," we can articulate the need to water or fertilize the marriage and describe it as withered or flowering. A solid understanding of the source domain generally enables the stipulation of sharper connections.

² Metaphors were initially disregarded as the focus of the study. Instead, literal language was deemed the cornerstone of truth and logic, and it took center stage in the analysis, particularly in philosophy. Within this perspective, metaphors were viewed as something anecdotal and lacking in legitimacy. See more: Lakoff and Johnson 2008.

³ Herrmann and Berber Sardinha (2015) provide a detailed exploration of the utilization of metaphor in specialized discursive contexts. The authors examine the various ways metaphor is employed across ten articles, focusing on fields such as biology, psychology, sports, labor, and certain legal documents.

Metaphors surpass their linguistic use; they are not merely embellishments or ornaments (Abrams & Harpham, 1998; Venkatesan & Saji, 2020). In linking two domains, language assumes a secondary role. The critical aspect lies in the inference and connection of the two domains, followed by applying appropriate language codes. The discursive or lexical component aligns with a conventional mapping process (Lakoff & Johnson, 2008), facilitating the conceptual representation of one concept by the other. This necessitates contemplation of the relationship, the epistemic correspondences, and not just the terms through which it is denoted (Karska & Prażmo, 2017).

George Lakoff and Mark Johnson (2008) emphasize that metaphors extend beyond human thought to encompass the field of human action. According to this perspective, metaphors play a substantial role in conceptualizing the world, thereby shaping the behavioral ways in which we interact with it. In essence, metaphors organize our thinking and model our everyday behavior and decisions. Recognizing that the essence of metaphors is to understand and experience one kind of thing in terms of another underscores their significance beyond the stylistic use of language and intellectual reflection. Instead, they become a powerful instrument that frames and drives our perceptions and actions in the world (Venkatesan & Saji, 2020). Lakoff and Johnson encourage us to view metaphors as an effective, dynamic, and transformative tool at both the levels of thought and action⁴.

The link established by human reason between two conceptually distinct domains proceeds through more than a simple comparison. Instead, in most cases, it is based on the correlation of individual experiences in both domains, wherein interactions with the physical environment, context, and culture play a transcendental role (El Refaie, 2016). Metaphors, therefore, extend beyond indicating vague similarities; rooted in the routines and interactions of individuals in diverse environments and their capacity for abstraction, they are expressed through conceptual constructs. This process reveals that personal experiences in the physical and cultural worlds are reflected and represented through language. Even the simplest sensations carry sociocultural meanings, indicating that bodily experiences not only give rise to metaphors but also constitute their purpose (El Refaie, 2014). These metaphors reflect and communicate these assumptions, transcending mere tropes. As Frank expressed (2011, p.193), "A metaphor is no longer a trope, in the sense of twisting language. Instead, reality is what is twisted, and language is a process

⁴ Lakoff and Johnson (2008) emphasize that while contemporary metaphors may give rise to questions of truth, their central significance lies in their capacity to motivate or elicit suitable actions. The focus often shifts from whether a metaphor is true or false to its impact on perceptions, inferences, and subsequent actions. Metaphors play a crucial role in shaping our actions across various domains, such as politics, religion, family, and love. They have a pervasive influence on our daily lives and our plans for the future.

of straightening." In summary, metaphors and diverse cultural and social notions are interconnected to express and convey these notions and make sense of other experiences in specific cultural and social contexts.

From this perspective, metaphors offer an alternative way of understanding the truth about a fact or an experience, diverging from an exclusive adherence to an objective-logical view (Landau et al., 2018). The notion of objectivity, driven by the pursuit of pure logic and data verification, involves a rational analysis of facts that tends to exclude the subjective or emotional dimension. In contrast, the concept of "imaginative rationality"⁵ (Lakoff & Johnson, 2008) illustrates how metaphors can blend objectivity with subjectivity and logic with creativity. Metaphors, therefore, do not assert immovable truth claims but embody constantly changing and evolving concepts. Their interpretation depends on both the conceptual system of the enunciating subjects and the socio-cultural context in which human experiences unfold.

Metaphors in the medical field.

Metaphors in the medical field have been a recurrent theme. For instance, Pena and Andrade-Filho (2010) retrieve a series of metaphors in medical texts. Tajer (2012) explains how diseases are metaphorically modeled, and Elena Semino and Demjén (2016) demonstrate how pain, in both clinical and social literature, is represented through figurative language. David Biro (2010) delves into the power of metaphors to alleviate the pain of the sick. On the other hand, Susan Sontag⁶ (1978, 1989) provides a poignant description of various images employed in literature and medical discourse, particularly representations of cancer and tuberculosis. She critically analyzes their effects on the collective perception of disease and argues for a discourse on disease purified of metaphorical thinking.

Regarding diseases, their existence, development, and effects are intrinsically dependent on the patient. This relationship is cardinal because a disease cannot be understood apart from the person experiencing it; it can only be conceptualized as a condition affecting an individual's body. These states often show themselves in the form of a series of symptoms, which can vary in degree of intensity and length, shaped not only by biological ailments but also by each patient's lifestyle. Within this setting,

⁵ Metaphors serve as a tool to partially understand aspects that are beyond complete comprehension. The use of imagination and everyday thought in this context is seen as a rational endeavor (Lakoff & Johnson, 2008).

⁶ Susan Sontag, in her analysis of the influence of metaphors on the experience of illness, emphasizes how certain metaphors can contribute to the stigmatization and marginalization of patients. She identifies two dimensions of diseases: the biological dimension and the socio-cultural dimension. Sontag argues against prioritizing the socio-cultural dimension over the biological one.

examining how patients and clinicians represent diseases, ascribe characteristics and meanings to them, and define them is essential.

In the complex yet fascinating process of representation, diseases are often depicted through "inanimate or even personified forms." (Karska & Prażmo, 2017, p. 110) The range of images evoked is diverse. From one perspective, the disease is often perceived as an unwanted visitor invading our lives, a stealthy enemy lurking in the darkness, an insatiable animal devouring our energies, or a devious intruder disturbing every aspect of our personal lives. Alternatively, some individuals view diseases as tests, indulgent friends that help us grow, gifts reminding us of the value of life and the importance of care, or a form of training. Furthermore, not only disease is understood through metaphors but also the body and medicine itself. For instance, the body is conceptualized as a machine, and some treatments are likened to a battle (Bleakley, 2017; Buchbinder, 2012).

Regardless of the characteristics and connections established, metaphors accumulate and synthesize people's attitudes toward disease and its hazards. In many cases, these concepts enable individuals to make sense of their ailments, process certain emotions, better understand the complexity of being ill, and become more interested in medical treatment or adopting healthier lifestyles. Metaphors are, therefore, a powerful tool revealing the intricate relationship between humanity and disease, together with the concrete and constant interest in understanding and controlling health, the fragility of life, and death. In this sense, both representations of diseases and therapeutic interventions reflect the sociocultural environment in which they are shaped and implemented (Unschuld, 1998, p. 23).

Metaphors in the health field primarily stem from the everyday experiences of both patients and health professionals. To articulate their physical sensations, patients often draw on figures related to their jobs, culture, or level of education. Health professionals, including doctors, not only share these sources but also construct metaphors from visual contact with patients' symptoms, involving radiology data, laboratory images, and sensitive signs. Rizzutto (2001) suggests that doctors later link initial images with concepts by recognizing patterns, arriving at or converting the initial image into a familiar metaphorical term. In this context, medical metaphors can be seen as a discursive means of rationalizing the unknown or complex (Buchbinder, 2012, p. 102).

The functionality of metaphors in the clinical field is diverse, serving various purposes. Some previously mentioned elements include facilitating the understanding of a diagnosis or enhancing communication fluency between doctors and patients (Bleakley, 2017; Margaryan & Petrosyan, 2016). Metaphors are also employed for persuasive purposes, with some authors asserting that they stimulate imagination and innovation (Fauconnier & Turner, 2003), contribute to disease prevention (Hauser &

Schwarz, 2015; Landau et al., 2018; Landau et al., 2014), and reinforce certain types of treatments (Mukherjee, 2010). Understanding the functioning and effects of metaphors can help maximize their benefits and minimize their costs (Hauser & Schwarz, 2015). Furthermore, it is recommended that research focus on the inferences people draw from metaphorical language to ensure that it does not undermine public health or science efforts (Landau et al., 2018).

Some researchers caution that using metaphors in the medical field may not consistently encourage behaviors in patients that reduce the risk of disease (Hauser et al., 2017; Mukherjee, 2010; Sontag, 1978). Even persuasive use can be inert and sometimes counterproductive (Kövecses, 2010). For instance, military metaphors about cancer emphasizing its aggressive nature have been observed to make patients less motivated to adopt self-management behaviors (Hauser & Schwarz, 2015). Additionally, some studies found that metaphors did not elicit more concern or stronger intentions than literal messages (Landau et al., 2018). Explanations for these effects include the nature of the metaphors employed and the type of individuals with whom they were used. It could be that certain types of people may be more susceptible to the metaphorical effect. (Fetterman et al., 2016; Ottati et al., 1999)

Metaphors can not only generate misunderstandings and communication problems between doctors and patients but, despite their initial impact and persuasiveness, they may experience a decline in effectiveness over time. This phenomenon is attributed to what is described as "cultural shrinkage and atrophy." (Bleakley, 2017, p. 218) Over the years, these metaphors can become inoffensive, predictable, and meaningless due to changes in the context in which they originated or simply due to overuse. Moreover, when used in different contexts, metaphors can lead to misunderstandings and difficulties in memorization, highlighting the importance of using them sensibly and thoughtfully in persuasive communication (Masukume & Zumla, 2012).

An example: The COVID metaphors

Diseases are often associated with invisible or invading enemies, and treatments are likened to fierce battles. These and other images serve to express the frustrating experience of pain, the individual and collective challenges that a treatment may require, and the impacts that a disease may cause among the people involved. However, metaphors do not always aid in making both the tangible and intangible aspects of a disease more intelligible; in some cases, metaphors can also contribute to misunderstandings.

The COVID-19 pandemic was not an exception. In many countries of the world, due to the thousands of deaths caused by the contagion, metaphors about COVID have multiplied. Among the most prevalent metaphors are: "enemy," "alien invader," "fire,"

"killer," (Crespo-Fernández, 2021; Semino, 2021; Todorova, 2021) "flood," "marathon," (Brugman et al., 2022) "spiritual inoculation," "acting like a hedgehog," "glitter," (Pérez-Sobrino et al., 2022) "tanker," "green shoot," "storm," (Garzone, 2021) "lion," "dragon," "Israeli soldier," "the *via dolorosa,*" "the cross," "illegitimate son," "king kong," "bull," "long dark tunnel," (Abdel-Raheem, 2023)⁷ "monster storm," "disaster," (Lahlou and Rahim, 2022) "attack," "fight," "battle," "hit," "catch," "burden," "wave," "earthquake." (Rasool, Jan, & Noreen, 2021) There was also prevalent talk of a "battle of humanity," of a "fight against darkness," of "trenches in hospitals," of "heroes winning a battle" or "heroes on the front line"⁸ (Bartilotti, 2021; Cassandro, 2020; Charteris-Black, 2021; Costa, 2020; Musu, 2020; Semino, 2021; Xu, 2023).

The authors have categorized metaphors in various source domains, including recurrent categories such as "the journey," "natural phenomenon," "person," "game," and "war." (Pérez-Sobrino et al., 2022, p. 137) These metaphors offer unique dimensions and perspectives on the pandemic and its effects, enriching our understanding without contributing to increased anxiety and pessimism. Despite intentionality, metaphors are expressions of knowledge (van Dijk, 2014) closely linked to their originating and usage contexts. Therefore, it is crucial to consider both the individuals who propagate them and the contexts in which they circulate, as metaphors serve as models for understanding reality and the challenges they address (Abdel-Raheem, 2023). The diversity of contexts implies many sources for metaphor generation, suggesting that metaphors are not static or predefined but continually evolve and adapt.

During the COVID-19 pandemic, metaphors serve various purposes. Firstly, they aim to instill courage in the population, acting as a moral incentive. Metaphorical discourse evokes emotions and values like hope, resilience, self-efficacy, solidarity, and care. Secondly, metaphors inform about the seriousness of the issue, warning citizens about the danger and magnitude of the virus, sometimes through exaggeration. Thirdly, they justify the measures taken. Political leaders, health authorities, and opinion leaders use metaphors to legitimize imposed rules and maintain a positive public image regarding their responsibilities (Castro Seixas, 2021; Crespo-Fernández, 2021).

These predominantly military metaphors highlight several characteristics of the pandemic: its overwhelming and threatening nature, health workers' collective and delicate efforts, and the urgency of an adequate and determined individual and collective response. Labeling COVID-19 as a war paints a dramatic picture resembling an armed conflict, where prevention actions become weapons, health professionals are

⁷ Abdel-Raheem (2023) analyses a set of political cartoons and examines the existence of other possible important sources of metaphorical creativity, more based on visual or multimodal thinking than on verbal.

⁸ Cassandro (2020) emphasizes that the current situation is not a war but a healing time. Drawing a contrast between war and healing, the author highlights that war involves elements like enemies, borders, trenches, weapons, and deception. In contrast, care is characterized by qualities such as proximity, solidarity, compassion, humility, dignity, gentleness, tact, listening, authenticity, patience, and perseverance.

likened to the military, and political leaders are portrayed as generals or war strategists, with hospitals serving as trenches. This metaphor invites the population of each country to unite against a common and invisible enemy. However, war metaphors can evoke feelings of co-responsibility and cohesion, as well as anxiety, discord, and uncertainty (Lahlou & Rahim, 2022).

War metaphors, moreover, foster the need for a massive and determined mobilization against the virus, positioning health professionals at the forefront and depicting medicines and care as powerful weapons. These metaphors also evoke a sense of urgency and inevitability; thus, the call to combat the virus seeks to minimize the number of lives lost, interpreting them as collateral damage or casualties akin to military casualties. Similarly, they convey the binary idea of a defending "us" that must move to the front and an enemy that must be attacked with all available forces.

Why are military metaphors so effective and widespread in the medical field? War metaphors are ubiquitous because they rely on "a basic and widely shared schematic knowledge that efficiently structures our ability to reason and communicate about various situations, expressing an urgent and negatively courageous emotional tone that captures attention and motivates action." (Flusberg et al., 2018) However, both elements are debatable, as most metaphors possess these qualities. Their basic structure generally enables memorability and the identification links they suggest while generating a reaction that can easily motivate action or attention. So, the question arises: Why might war metaphors be more effective than others?

The answer may lie in the argument put forth by Flusberg, Matlock, and Thibodeau (2018, p. 4), who contend that metaphors are effective when they meet three requirements: (a) the source domain recalls a relevant knowledge (or feeling) structure; (b) this knowledge is well known to speakers in the linguistic community; and (c) the comparison of the target with the source domain is appropriate in a given culture. These three criteria highlight the effectiveness of war metaphors, particularly in their relation to language and culture. In this sense, the figure of war becomes powerful firstly because battles generally have a strong basis in people's understanding and sensibility, secondly because they are a diffuse truth in most cultures, and thirdly because, despite having detractors and supporters, this subject always generates a particular responsiveness.

Research indicates that war metaphors used in the health field quickly attract financial resources for scientific innovation, vaccine investment, or medical treatments (Hartmann-Mahmud, 2002; Nie et al., 2016). These images emotionally impact public opinion and decision-makers, prompting governments, international organizations, and philanthropists to act swiftly.

While metaphors are powerful tools for conveying ideas and feelings, effectively prompting action, we must recognize that they can also have limitations and risks, one of which is simplification (Amón, 2020; Cassandro, 2020; Elie, 2020). By emphasizing

particular characteristics, metaphors can lead to a biased or fragmented interpretation of reality, often reducing complex concepts to make them more easily understandable. For this reason, it is essential to analyze the cultural context and the circumstances in which they are used (Flusberg et al., 2018; Gibbs, 1999, 2011).

However, such metaphors may have drawbacks at the individual level. Specific individuals facing diseases may experience feelings of guilt or defeat when their health does not improve, or medical treatment fails to produce the expected results (Semino and Demjén, 2016; Sontag, 1978). In the context of a long-term disease or a pandemic, invoking such metaphors may be counterproductive, especially when it remains uncertain whether the battle can be won (Flusberg et al., 2018). Additionally, some experimental research suggests that certain war metaphors may diminish individuals' sense of individual responsibility, as they may hold the government accountable instead (Benzi & Novarese, 2022).

Many war metaphors promote a positive view of political actors. Notions of sacrifice, honor, and heroism contribute to legitimizing disproportionate authoritarian measures and maintaining their power (Crespo-Fernández, 2021; Garzone, 2021). Some governments, such as those led by Donald Trump and Boris Johnson, extensively utilize war metaphors for programmatic purposes, employing them as disciplinary devices (Garzone, 2021; Todorova, 2021). This becomes problematic when it divides the population into factions of winners and losers, masking and dispersing government responsibility (Benzi & Novarese, 2022).

The use and effect of medical metaphors, particularly war metaphors, are not unidirectional. Some authors have shown that during COVID-19, war metaphors were effective primarily on individuals who declared support for right-wing political positions (Panzeri & Domaneschi, 2021). This suggests that the impact of war metaphorical discourse varies among individuals and contexts. Individual reactions are also influenced by beliefs and attitudes toward the sources of dominance embedded in the metaphors (Brugman et al., 2022). For instance, soldier metaphors may resonate with those with little fear of military presence and intervention. Still, they may be inappropriate for individuals for whom the military's presence is a constant threat. Therefore, caution is warranted when using these metaphors. Politicians and opinion leaders can manipulate us through war metaphors, influencing our attitudes or opinions during health crises. However, assuming the full effectiveness of such metaphors without evidence can also lead to misconceptions (Benzi & Novarese, 2022).

The refusal to use Metaphors.

Many studies from critical anthropology tend to disregard disease metaphors, primarily focusing on the political-structural aspects of these phenomena. Symbolic representations, practices, and cultural meanings that human groups use to explain

and cope with disease are often neglected. This type of analysis overlooks both subjectivity and other aspects of individual character. Although some cultural aspects are occasionally considered, they are typically relegated to macro-sociological research, often deemed merely anecdotal. By exclusively concentrating on the economic and political forces that constrain the lives of entire populations and individuals, we overlook that most social science theories and concepts are laden with metaphors. Categories such as the social body, network, and biosocial are just a small example of this common usage (Tootle et al., 2015). Given our linguistic and epistemological limitations in addressing the relations between the world and everyone, between what we call objective and subjective, metaphors not only evidence this precariousness and disconnection but also serve as a means for our knowledge and language to describe and explain what is happening in society, in our history, and each of our bodies.

Susan Sontag (1978, 1989) is among the researchers who have sharply criticized the use of metaphors in the medical field. She emphasizes that all diseases have a material and objective dimension expressed in the body through signs and symptoms. Additionally, all diseases have a "double" that manifests itself in cultural representations, particularly in metaphors, as an attempt to understand and cope with something that appears absurd and tragic. However, instead of providing relief or a solution, this "double" ends up reproducing stigmas and prejudices, generating more pain, fear, and exclusion in patients.

Nancy Sheper-Hugues and Margareth Lock (1986) criticize Sontag's work in which she advocates for a "de-poeticization and de-metaphorization of disease." They argue that not employing these resources would not only mean, in the medical field but at the level of all human experience, the acceptance of crude materialism that would entail the medicalization and reification of human misery or a form of "self-alienation or false consciousness." (Taussig, 1980) Although numerous scholars agree on the need to eliminate metaphors, our minds depend on them; thus, we cannot escape them (Lakoff & Johnson, 2008). We use them to understand suffering and disease. These alternatives are problematic because, firstly, metaphorical discourse is part of our way of understanding the world. Secondly, these processes of interpretation generally come from various sources, follow paths that are difficult to control, and often stem from very intense and personal human experiences.

Instead, we could take this "double" or "other" of diseases seriously (Scheper-Hughes & Lock, 1986). If both diseases-illness and metaphors are social constructions, the duty of the researcher should be to describe their production, the interests at stake, who benefits from them, how they are reproduced and perpetuated, and what effects they have on society and on the experience of those who suffer from diseases. By proceeding in this way, the influence of metaphors on the perception and treatment of disease and the stigmatization or dehumanization of those who experience it could

be uncovered, exposing the power relations that influence health policies and medical practices that reflect their use.

Three proposals.

Metaphors offer something to think about, talk about, and work with (Flusberg et al., 2018). In this sense, I propose to explore three elements to unravel their meaning at political, cultural, and ethical levels.

The recognition of the influence of power and politics

The health field, mainly that of diseases, is a political space. According to the French sociologist Didier Fassin, health is a culturally determined construction that amalgamates the common sense of a social group and specialized knowledge and a space politically structured by the relationship between the physical and social body (Fassin, 1996, p. 35). This field encompasses the interaction of those considered sick, health professionals, and administrators⁹. Within this space, struggles occur to define the content of the notion of health and diseases, shaping the worldview itself.

Politics is a constitutive element in the social construction of disease and illness. The endeavor to "bring politics out of hiding" (Tesh, 1988, p. 177) involves not only focusing on public policies and health institutions but also delving into the narratives and language used, often laden with metaphors. Metaphors can be crucial in revealing the relationships between health and underlying power dynamics that perpetuate inequalities, reinforce implicit hierarchies in health, and obscure the social forces and actors involved. Metaphorical discourse can help highlight the medical environment's power structure and understand how and who is marginalized from it. For example, using the metaphor "soldiers" or "heroes" applied to health professionals could lead to an over-reliance on their tasks in this context. Also, this metaphor could contribute to the idea that the solution to a health crisis depends solely on health professionals and not on directly dealing with the root causes of such health problems.

⁹ For Didier Fassin (1996), the political space of health extends beyond the biomedical domain, encompassing the social, political, and cultural context. He puts forth three crucial elements for comprehending this space: the integration of inequalities, the power to heal, and the governance of life. Fassin advocates for a holistic examination that includes not only health policies and institutions but also the discourses, rumors, and narratives surrounding the health field. This broader perspective emphasizes the interconnectedness of health with broader societal and political dynamics, urging a more comprehensive understanding of the complex factors influencing health outcomes.

Eliminating metaphorical discourse, as evidenced by the COVID-19 pandemic, is not feasible. First, governments incorporate these resources into their strategic plans for political and administrative purposes. Second, the spontaneous use of metaphors by the public, both in daily interactions and in the doctor-patient relationship, is pervasive and thus uncontrollable (Garzone, 2021).

Looking at the strategic dimension, assessing the forms and contexts in which metaphors are employed is crucial. Semino, Demjén, and Demmen (2018) rightly state that a metaphor's appropriateness, usefulness, and empowering nature depend on its contextualized use. Therefore, when politicians, governors, health professionals, and opinion leaders refer to COVID and other diseases using terms such as "war," "killer," "monster," "via dolorosa," or "long dark tunnel," we have to question whom they include with these images, whom or what they hold responsible for their origin and treatment, what images are being disseminated or legitimized, and what voices or interpretations are silenced (Castro Seixas, 2021). In other words, examining how people, particularly politicians, employ metaphorical discourse and its association with power is crucial. It is essential to understand what legitimizes these forms of expression and who benefits from them.

Metaphors, when misapplied, can render people helpless victims of invisible and random threats, hindering the identification of underlying economic and social violence as the true cause of health inequities, especially in impoverished communities. Instead of delving into the deep roots of a health problem, these metaphors often pave the way for superficial interventions that overlook the systemic inequities contributing to health disparities.

In the everyday dimension, it is acknowledged that controlling the creation and dissemination of metaphors is nearly impossible, as people tend to propose them spontaneously. However, we must note that these resources typically originate within the framework of shared discourses, ideas, beliefs, and practices within a given social space. Those who dismiss metaphorical discourse, even in its spontaneous use, as innocuous are mistaken, as it can embody a subtle yet potent form of "symbolic violence"¹⁰ (Bourdieu, 1998), which entails internalizing social asymmetries through lenses that enable individuals to endure, survive, and adapt to even the most inhumane conditions. By attributing meaning and significance to specific characteristics at the expense of others, metaphors play a role in reproducing, reinforcing, and perpetuating power structures, social privileges, hierarchies, and their associated interests and narratives. Consequently, metaphors can contribute to shaping perceptions where

¹⁰ Symbolic violence operates subtly and often imperceptibly, typically exerted through mechanisms of ignorance. It aims to validate existing social orders and hierarchies, contributing to normalizing social, political, and economic asymmetries.

the conditions of specific patients and the health status of certain social groups are viewed as natural and deserved in some instances (Biehl, 2005; Bourdieu, 1998; Bourgois & Schonberg, 2009). At other times, these conditions may be rendered invisible or even complicit in maintaining existing power dynamics (Bourdieu, 2000; Kleinman et al., 1997).

Questioning Biomedical Knowledge

Metaphors play a crucial role in unraveling the intricacies of biomedical knowledge, acting as a direct conduit to its transmission and functioning. They often render abstract and complex medical concepts comprehensible, bridging the gap between physicians' technical language and the everyday knowledge of the general population. Beyond serving as a mere communication vehicle, the analysis of medical metaphors provides insights into mental frameworks, encompassing beliefs, values, and ideas that contribute to the social construction of medical paradigms. By identifying and interpreting the nuances of metaphors in medical discourse, we can uncover the rhetorical and linguistic resources employed, shedding light on the fundamental ways we comprehend and articulate the complexities of disease.

Metaphors concerning health and disease serve as a lens through which we can discern the values, beliefs, and communal perspectives on well-being. Selecting a peculiar metaphor is not arbitrary; instead, it reflects a complex interplay of ideological considerations encompassing social norms, ethical orientations, religious viewpoints, and economic and political interests. Consequently, these metaphors encapsulate diverse cultures' collective thoughts and actions regarding the body, healing, death, and overall interpretations of what it means to be healthy (Conrad & Barker, 2010).

The above observations yield two significant consequences. Firstly, it underscores that metaphors serve as evidence of the social construction of biomedical knowledge. This acknowledgment implies an understanding that medicine, along with the comprehension of health and disease, is not exclusively objective or absolute. Instead, it is influenced by subjective, political, cultural, religious, and economic factors. Definitions of disease or medical treatment are not neutral; they are shaped by cultural contexts, impacting how health and disease are perceived by a social group and its health specialists (Fassin, 1996; Gibbs, 1999). For instance, in the case of metaphors like war and fire concerning COVID-19, both their interpretation and effect depend on the context (Semino, 2021), as does their production. This recognition emphasizes the limitations of biomedical knowledge, encouraging a more holistic view of disease that accepts multiple perspectives in understanding, describing, naming, and addressing them.

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Secondly, as cultural elements, metaphors possess the ability to shape and influence states of health. Although contentious, this concept suggests that metaphors, as agents of action, can evoke emotional responses, facilitate the integration of the social world into individuals' bodies, and impact public perceptions and health-related decision-making (Scheper-Hughes & Lock, 1986).

On this matter, Scheper-Hughes and Lock (1986) caution against both converting tangible organic diseases (e.g., cancer) into poetic metaphors and transforming metaphors (e.g., depression) into diseases. Similarly, Alexander (2012, p. 1480) argues that "there can be no medical remedy for a problem that is not a disease," challenging those who advocate for addressing any phenomenon clinically–essentially seeking to medicalize¹¹ personal or social problems (Maturo, 2012; McGann & Conrad, 2007). The question arises: Is medicine aimed at alleviating a disease or a metaphor? In essence, while disease symptoms are biological entities that can be understood and communicated through metaphors, some other metaphors reflect the harshness of the social world, expressing feelings and ideas that may not necessarily warrant medicalization.

Promoting Social Justice and Ethical Practices

As a third proposal, the potential of metaphors can be harnessed to combat social injustices in healthcare and improve the physician-patient relationship. These discursive tools can raise awareness of ethical issues in healthcare, given their persuasive nature that transcends linguistic and cultural barriers. Moreover, public perception and political decision-making can be influenced by analyzing the entirety of metaphorical discourse in specific health contexts. Metaphors thus become narrative tools that reveal the ethical realities at stake and mobilize society toward a more profound commitment to social justice and implementing ethical and equitable health practices.

Acknowledging the limits of biomedical knowledge and recognizing the diversity of ways of representing and dealing with the disease problem is vital in the context of social justice within the healthcare field. The first step towards equity in healthcare is epistemological and involves recognizing cultural beliefs, values, practices, norms, and individual perceptions. These differences are not simply rhetorical but encompass worldviews, social structures, and forms of action that, when delegitimized, can lead to inequity. Thus, which metaphors hold greater validity and veracity: those of war that frame a battle against the pandemic or those portraying it as the invasion of

¹¹ Medicalization can be defined as "the process through which certain aspects of human life come to be regarded as medical problems" and then treated medically (Maturo, 2012, p. 123).

an evil spirit? Additionally, which are more effective in mobilization and prevention: the metaphors used by politicians and educated doctors or those originating from popular wisdom?

Along these lines, we could speak of epistemic injustice¹² as a systematic means of invalidating the collective knowledge and social understanding of certain excluded subjects and groups by a sector of the population wielding more power to shape the meaning of a phenomenon (Broncano, 2020; Fricker, 2009, 2017; Lobb, 2018; McKinnon, 2016; Medina, 2018). Fricker particularly discusses hermeneutic injustice, where individuals are wronged in their capacity as subjects of social understanding (2009, p. 7). Hermeneutic injustice serves as a heuristic tool to illustrate how war metaphors employed during the pandemic may perpetuate inequalities by reinforcing dominant narratives and simplifying reality to the advantage of some while marginalizing alternative or peripheral interpretations.

What occurs on a general level can also apply to the doctor-patient relationship. Hegemonic medical knowledge and language often hinder understanding of patients' lived experiences. Typically, patients attempt to articulate their pain and suffering through metaphors, which healthcare professionals frequently dismiss (Broncano, 2020, p. 208). While Fricker proposes "proactive listening" to foster a more inclusive hermeneutic microclimate and open dialogue (2019, p. 173), it is imperative to recognize that a structural imbalance cannot be rectified solely through individual virtue. Therefore, we must discuss resistance against "blindness and meta-blindness," the dominance of normative and oppressive structures, and the struggle to proliferate diverse social narratives.

Accepting these narratives and their integral inclusion in healthcare structures and daily practice is working for justice. Healthcare professionals must recognize these nuances, which implies both linguistic proficiency and a deep appreciation of the cultural context in which health and disease are perceived. When these competencies are not included, there is a danger of imposing highly discriminatory models. For example, physicians, guided by an exclusionary medical vision, may inadvertently convey certain attitudes or expectations that influence patients' perceptions of their diseases. Social justice in the health field requires a commitment to address not only individual biases but also institutional and structural inequalities, perpetuated or reproduced through, but not limited to, metaphors that disproportionately affect certain social groups. Policies and actions that have as their basis the recognition of this diversity can collaborate in building a more inclusive and equitable health system.

¹² The coloniality of knowledge, akin to epistemic injustice, highlights how colonial repression manifests in knowledge forms, systems of images, symbols, and expressions. It generates structural forms of nullifying the knowledge of subaltern groups (Quijano, 1992, p. 12).

Conclusion

This article has delved into the significance and utility of metaphors as cognitive tools and drivers of action. It has particularly emphasized the role of metaphorical discourse within the realm of health. The exploration has highlighted that metaphors extend beyond mere linguistic expressions and are inseparable from our cognitive processes and daily experiences. Their constructive and detrimental impact in the medical domain is unmistakable. Metaphors play a pivotal role in shaping the perceptions, experiences, communication, and coping strategies related to diseases for healthcare professionals and patients.

This reflection, inspired by Scheper-Hughes' story, puts forward three propositions to unravel the meaning and function of metaphors at the political, cultural, and ethical levels. From a political perspective, metaphors are scrutinized for their influence on shaping perceptions and decisions in the public sphere, particularly in normalizing inequalities within the health domain and legitimizing the taxonomies that govern this space. From a cultural standpoint, metaphors are seen as cultural sediments, reflecting alternative ontologies and diverse worldviews concerning health and disease. This provides a means to challenge the dominance of biomedical knowledge and offers alternative perspectives on social issues that are often narrowly medicalized. Finally, from an ethical vantage point, metaphors prompt an examination of the moral implications embedded in the narratives they construct, raising questions about their contribution to justice and equity in decision-making and the formulation of social policies. Exploring these three dimensions enhances our understanding of the intricate interplay between language, cognition, and the lived experience of diseases and suffering, facilitating the development of more holistic health approaches.

References

- Abdel-Raheem, A. (2023). "Where Covid Metaphors Come from: Reconsidering Context and Modality in Metaphor." Social Semiotics 33(5):971-1010. https://doi.org/10.1080/103 50330.2021.1971493
- Abrams, M. H. & Harpham, G. (1998). Glossary of Literary Terms. 7th edition. Cengage Learning
- Alexander, B. K. (2012). "Addiction: The Urgent Need for a Paradigm Shift." Substance Use & Misuse 47(13-14):1475-82. https://doi.org/10.3109/10826084.2012.705681
- Amón, R. (2020). "No es una guerra: el coronavirus y la advertencia de Susan Sontag." elconfidencial.com. Retrieved November 13, 2023 (https://www.elconfidencial.com/ cultura/2020-03-27/coronavirus-guerra-advertencia-susan-sontag_2519016/)
- Bartilotti, F. (2021). "COVID and Its Metaphors." The Polyphony. Retrieved November 13, 2023 (https://thepolyphony.org/2021/01/26/covid-and-its-metaphors/)

- Benzi, M. & Novarese, M. (2022). "Metaphors We Lie by: Our 'War' against COVID-19." History and Philosophy of the Life Sciences 44(2):18. https://doi.org/10.1007/s40656-022-00501-2
- Biehl, J. (2005). Vita: Life in a Zone of Social Abandonment. University of California Press
- Biro, D. (2010). The Language of Pain: Finding Words, Compassion, and Relief. 1st edition. W.W. Norton & Company
- Bleakley, A. (2017). Thinking with Metaphors in Medicine: The State of the Art. Routledge https:// doi.org/10.4324/9781315389448
- Bourdieu, P. (1998). Masculine Domination. Stanford University Press
- Bourdieu, P. (2000). Pascalian Meditations. Stanford University Press
- Bourgois, P. & Schonberg, J. (2009). Righteous Dopefiend. University of California Press
- Broncano, F. (2020). Conocimiento Expropiado. Epistemología política en una democracia radical. Akal ediciones
- Brugman, B., Droog, E., Gudrun Reijnierse, W., Leymann, S., Frezza, G., & Renardel de Lavalette, K. (2022). "Audience Perceptions of COVID-19 Metaphors: The Role of Source Domain and Country Context." Metaphor and Symbol 37(2):101-13. https://doi.org/10.1080/1 0926488.2021.1948332
- Buchbinder, M. (2012). "Sticky' Brains and Sticky Encounters in a U.S. Pediatric Pain Clinic." Culture, Medicine and Psychiatry 36(1):102-23. https://doi.org/10.1007/s11013-011-9237-8
- Cassandro, D. (2020). "Siamo in guerra! Il coronavirus e le sue metafore." Internazionale. Retrieved November 13, 2023 (https://www.internazionale.it/opinione/danielecassandro/2020/03/22/coronavirus-metafore-guerra)
- Castro Seixas, E. (2021). "War Metaphors in Political Communication on Covid-19." Frontiers in Sociology 5. https://doi.org/10.3389/fsoc.2020.583680
- Charteris-Black, J. (2021). "Metaphors of the Pandemic: War." Pp. 31-59 in Metaphors of Coronavirus: Invisible Enemy or Zombie Apocalypse?, edited by J. Charteris-Black. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-85106-4
- Conrad, P. & Barker, K. (2010). "The Social Construction of Illness: Key Insights and Policy Implications." Journal of Health and Social Behavior 51 Suppl: S67-79. https://doi. org/10.1177/0022146510383495
- Costa, P. (2020). "Emergenza coronavirus: non soldati, ma pompieri." SettimanaNews. Retrieved November 13, 2023 http://www.settimananews.it/societa/emergenza-coronavirus-nonsoldati-ma-pompieri/
- Crespo-Fernández, E. (2021). "Metaphors Used to Communicate the Coronavirus State of Emergency in the United Kingdom and Spain: A Contrastive Analysis." Miscelánea: A Journal of English and American Studies 64. https://doi.org/10.26754/ojs_misc/ mj.20216050

- El Refaie, E. (2014). "Appearances and Dis/Dys-Appearances: A Dynamic View of Embodiment in Conceptual Metaphor Theory." Metaphor and the Social World 4(1):109-25. https:// doi.org/10.1075/msw.4.1.08ref
- El Refaie, E. (2016). "Analysing Metaphors in Multimodal Texts." in E. Semino & Z. Demjén (Ed), The Routledge Handbook of Metaphor and Language (pp. 148-162). Routledge
- Elie, P. (2020). "(Against) Virus as Metaphor." The New Yorker, March 19
- Fassin, D. (1996). L'espace politique de la santé : Essai de généalogie. 1re éd. Presses Universitaires de France PUF. https://doi.org/10.1016/S1240-1307(97)86228-0
- Fauconnier, G. & Turner, M. (2003). The Way We Think: Conceptual Blending And The Mind's Hidden Complexities. Basic Books https://doi.org/10.1515/9783110895698.79
- Fetterman, A. K., Bair, J. Werth, M., Landkammer, F., & Robinson, M. (2016). "The Scope and Consequences of Metaphoric Thinking: Using Individual Differences in Metaphor Usage to Understand How Metaphor Functions." Journal of Personality and Social Psychology 110(3):458-76. https://doi.org/10.1037/pspp0000067
- Flusberg, S., Matlock, T. & Thibodeau, P. (2018). "War Metaphors in Public Discourse." Metaphor and Symbol 33(1):1-18. https://doi.org/10.1080/10926488.2018.1407992
- Frank, A. W. (2011). "Metaphors of Pain." Literature and Medicine 29(1):182-96. https://doi. org/10.1353/lm.2011.0316
- Fricker, M. (2009). Epistemic Injustice: Power and the Ethics of Knowing. 1st edition. Oxford University Press https://doi.org/10.1387/theoria.7
- Fricker, M. (2017). "Evolving Concepts of Epistemic Injustice." in I.J., Kidd, J. Medina & G, Pohlhaus, G. Jr. (Ed), The Routledge Handbook of Epistemic Injustice (ed). (pp. 53-60). Routledge https://doi.org/10.4324/9781315212043-5
- Garzone, G. (2021). "Rethinking Metaphors in COVID-19 Communication." Lingue e Linguaggi 0(44):159-81. https://doi.org/10.1285/i22390359v44p159
- Gibbs, R. W. (1999). "Taking Metaphor out of Our Heads and Putting It into the Cultural World." in J. Gibss & G.J. Steen (Ed), Metaphor in Cognitive Linguistics: Selected papers from the 5th International Cognitive Linguistics Conference, Amsterdam, 1997, Current Issues in Linguistic Theory (pp. 146-166). John Benjamins Publishing Company https://doi. org/10.1075/cilt.175
- Gibbs, R. W. (2011). "Evaluating Conceptual Metaphor Theory." Discourse Processes 48(8):529-62. https://doi.org/10.1080/0163853X.2011.606103
- Hartmann-Mahmud, L. (2002). "War as Metaphor." Peace Review 14(4):427-32. https://doi. org/10.1080/1040265022000039213
- Hauser, D. J., Nesse, R. & Schwarz, N. (2017). "Lay Theories and Metaphors of Health and Illness." in C.M. Zedelius, B.C. Müller & J. W. Schooler (Ed), The Science of Lay Theories: How Beliefs Shape Our Cognition, Behavior, and Health (pp. 341-54). Springer International Publishing https://doi.org/10.1007/978-3-319-57306-9_14

- Hauser, D., & Schwarz, N. (2015). "The War on Prevention: Bellicose Cancer Metaphors Hurt (Some) Prevention Intentions." Personality and Social Psychology Bulletin 41(1):66-77. https://doi.org/10.1177/0146167214557006
- Herrmann, J. & Berber Sardinha T., eds. (2015). Metaphor in Specialist Discourse. Amsterdam ; Philadelphia: John Benjamins Publishing Company. https://doi.org/10.1075/milcc.4
- Karska, K., & Prażmo, E. (2017). "Didactic Potential of Metaphors Used in Medical Discourse." Linguistics Beyond and Within (LingBaW) 3:102-16. https://doi.org/10.31743/ lingbaw.5653
- Kleinman, A., Das, V., & Lock, M. (1997). Social Suffering. University of California Press https:// doi.org/10.1525/9780520353695
- Kövecses, Z. (2010). Metaphor: A Practical Introduction. 2e edition. Oxford University Press
- Lahlou, H., & Rahim, H.A. (2022). "Conceptual Metaphors in North African French-Speaking News Discourse about COVID-19." Indonesian Journal of Applied Linguistics 11(3):589-600. https://doi.org/10.17509/ijal.v11i3.35949
- Lakoff, G. & Johnson, M. (2008). Metaphors We Live By. University of Chicago Press
- Landau, M., Arndt, J. & Cameron, L. (2018). "Do Metaphors in Health Messages Work? Exploring Emotional and Cognitive Factors." Journal of Experimental Social Psychology 74:135-49. https://doi.org/10.1016/j.jesp.2017.09.006
- Landau, M., Keefer, L., & Rothschild, Z. (2014). "Epistemic Motives Moderate the Effect of Metaphoric Framing on Attitudes." Journal of Experimental Social Psychology 53:125-38. https://doi.org/10.1016/j.jesp.2014.03.009
- Lobb, A. (2018). "Prediscursive Epistemic Injury': Recognizing Another Form of Epistemic Injustice?" Feminist Philosophy Quarterly 4(4). https://doi.org/10.5206/fpq/2018.4.6232
- Margaryan, S., & Petrosyan, A. (2016). "Metaphor through the Lens of Clinical Medicine: The Case of Specialty-Specific Signs." Armenian Folia Anglistika 12(2 (16)):38-48. https://doi. org/10.46991/AFA/2016.12.2.038
- Masukume, G., & Zumla, A. (2012). "Analogies and Metaphors in Clinical Medicine." Clinical Medicine (London, England) 12(1):55-56. https://doi.org/10.7861/clinmedicine.12-1-55
- Maturo, A. (2012). "Medicalization: Current Concept and Future Directions in a Bionic Society." Mens Sana Monographs 10(1):122-33. https://doi.org/10.4103/0973-1229.91587
- McGann, P. J., & Conrad, P. (2007). "Deviance, Medicalization Of." in The Blackwell Encyclopedia of Sociology. American Cancer Society. https://doi.org/10.1002/9781405165518.wbeosd049
- McKinnon, R. (2016). "Epistemic Injustice." Philosophy Compass 11(8):437-46. https://doi. org/10.1111/phc3.12336
- Medina, J. (2013). Epistemology of Resistance. Gender and Racial Oppression, Epistemic Injustice, and Resistant Imaginations. Oxford University Press https://doi.org/10.1093/acprof:o so/9780199929023.001.0001

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- Medina, J. (2018). "Misrecognition and Epistemic Injustice." Feminist Philosophy Quarterly 4(4). https://doi.org/10.5206/fpq/2018.4.6233
- Mukherjee, S. (2010). The Emperor of All Maladies: A Biography of Cancer. Simon and Schuster
- Musu, C. (2020). "War Metaphors Used for COVID-19 Are Compelling but Also Dangerous." The Conversation. Retrieved November 13, 2023 (http://theconversation.com/warmetaphors-used-for-covid-19-are-compelling-but-also-dangerous-135406)
- Nie, J., Gilbertson, A., de Roubaix, M., Staunton, C., van Niekerk, A., Tucker, J., & Rennie, S. (2016). "Healing Without Waging War: Beyond Military Metaphors in Medicine and HIV Cure Research." The American Journal of Bioethics : AJOB 16(10):3-11. https://doi.org/ 10.1080/15265161.2016.1214305
- Ottati, V., Rhoads, S., & Graesser, A. (1999). "The Effect of Metaphor on Processing Style in a Persuasion Task: A Motivational Resonance Model." Journal of Personality and Social Psychology 77(4):688-97. https://psycnet.apa.org/doi/10.1037/0022-3514.77.4.688
- Panzeri, F., Di Paola, S. & Domaneschi. F. (2021). "Does the COVID-19 War Metaphor Influence Reasoning?" PLOS ONE 16(4):e0250651. https://doi.org/10.1371/journal.pone.0250651
- Pena, G., & Andrade-Filho, J.deS. (2010). "Analogies in Medicine: Valuable for Learning, Reasoning, Remembering and Naming." Advances in Health Sciences Education: Theory and Practice 15(4):609-19. https://doi.org/10.1007/s10459-008-9126-2
- Pérez-Sobrino, P., Semino, E., Ibarretxe-Antuñano, I., Koller, V. & Olza, I. (2022). "Acting like a Hedgehog in Times of Pandemic: Metaphorical Creativity in the #reframecovid Collection." Metaphor and Symbol 37(2):127-39. https://doi.org/10.1080/10926488.2021.1949599
- Quijano, A. (1992). "Colonialidad y modernidad/racionalidad." Perú Indígena 13(29):11-20. https:// www.lavaca.org/wp-content/uploads/2016/04/quijano.pdf
- Rasool, S., Jan, A. & Noreen, R. (2021). "Disease and Conceptual Metaphors: A Corpus Analysis of English Newspaper Articles Related to COVID-19." Corporum Journal of Corpus Linguistics 4(2):95-111. https://journals.au.edu.pk/ojscrc/index.php/crc/article/view/168
- Rizzuto, A. M. (2001). "Metaphors of a Bodily Mind." Journal of the American Psychoanalytic Association 49(2):535-68. https://doi.org/10.1177/00030651010490021601
- Scheper-Hughes, N. (1990). "Three Propositions for a Critically Applied Medical Anthropology." Social Science & Medicine 30(2):189-97. https://doi.org/10.1016/0277-9536(90)90079-8
- Scheper-Hughes, N., & Lock, M. (1986). "Speaking 'Truth' to Illness: Metaphors, Reification, and a Pedagogy for Patients." Medical Anthropology Quarterly 17(5):137-40 https://doi. org/10.1111/j.1937-6219.1986.tb01061.x
- Semino, E. (2021). "Not Soldiers but Fire-Fighters' Metaphors and Covid-19." Health Communication 36(1):50-58. https://doi.org/10.1080/10410236.2020.1844989
- Semino, E., & Demjén, Z. (2016). "Using Metaphor in Healthcare: Physical Health." in The Routledge Handbook of Metaphor and Language (pp. 385-399). Routledge https://doi. org/10.4324/9781315672953

- Semino, E., Demjén, Z., & Demmen, J. (2018). An Integrated Approach to Metaphor and Framing in Cognition, Discourse, and Practice, with an Application to Metaphors for Cancer. Applied Linguistics, 39(5), 625-645. https://doi.org/10.1093/applin/amw028
- Sontag, S. (1978). Illness as Metaphor and AIDS and Its Metaphors. 1st edition. McGraw-Hill Ryerson Ltd
- Sontag, S. (1989). AIDs and Its Metaphors. 1st edition. Farrar, Straus and Giroux
- Tajer, C. (2012). "Thinking Medicine Metaphorically." Argentine Journal of Cardiology 80(6):485-93
- Taussig, M. (1980). "Reification and the Consciousness of the Patient." Social Science & Medicine. Part B: Medical Anthropology 14(1):3-13. https://doi.org/10.1016/0160-7987(80)90035-6
- Tesh, S. (1988). Hidden Arguments: Political Ideology and Disease Prevention Policy. Rutgers University Press
- Thibodeau, P., & Durgin, F. (2011). "Metaphor Aptness and Conventionality: A Processing Fluency Account." Metaphor and Symbol 26(3):206-26. https://doi.org/10.1080/10926488.20 11.583196
- Todorova, B. (2021). "War Metaphors in Bulgarian Official Discourse during the COVID-19 Crisis." Rhetoric and Communications (46):99-117. http://rhetoric.bg/war-metaphorsin-bulgarian-official-discourse-during-the-covid-19-crisis.
- Tootle, W., Ziegler, J. & Singer, M. (2015). "Individuals Are Continents; or, Why It's Time to Retire the Island Approach to Addiction." Substance Use & Misuse 50(8-9):1037-43. https:// doi.org/10.3109/10826084.2015.1007684
- Unschuld, P., trans. (1998). Forgotten Traditions of Ancient Chinese Medicine: A Chinese View from the Eighteenth Century. Paradigm Pubns
- Van Dijk, T. (2014). Discourse and Knowledge: A Sociocognitive Approach. Cambridge University Press https://doi.org/10.1017/CBO9781107775404
- Venkatesan, S., & Saji, S. (2020). "Reflections on the Visceral: Metaphors and Illness Experience." Rupkatha Journal on Interdisciplinary Studies in Humanities 12(1):1-11. https://dx.doi. org/10.21659/rupkatha.v12n1.12
- Xu, Q. (2023). "Comparing COVID-19 Metaphors in Chinese and English Social Media with Critical Metaphor Analysis." Frontiers in Psychology 14. https://doi.org/10.3389/ fpsyg.2023.1198265

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