Tracing narratives and perceptions in the political ecologies of health and disease

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Abstract

Political ecology has, in the past decade, emerged as an increasingly accepted framework for studying issues of health and disease and has thus given rise to a distinct sub-field: the political ecologies of health and disease (PEHD). More recently, scholars have suggested more specific avenues through which the sub-field can be further developed and focused. Building on recent work, we suggest that the role of health perceptions and health discourses is one area that could benefit from examination through the lens of political ecology. The papers in this special section thus intend to further contribute to the empirical richness of this area of study, through an emphasis on anthropological and cultural aspects of health injustices. We emphasize the role of health perceptions, in particular, as a way of exploring how people's experiences of the local environment often differ from dominant discourses related to un/healthy environments, and the effects stemming from this disjuncture.

Keywords: Political ecology of health, disease, perceptions, discourse, ethnography, environmental justice

Résumé

Au cours de la dernière décennie, l'écologie politique a émergé comme cadre analytique de plus en plus courant pour étudier des questions de santé et de maladie, jusqu'à devenir un sous-domaine à part entière: l'écologie politique de santé et de maladies. Plus récemment, certains chercheurs ont suggéré des pistes plus spécifiques permettant de développer et orienter ce sous-domaine. A partir de travaux récents, nous suggérons que le rôle de perceptions de la santé et de discours sur la santé constitue un champ qui pourrait gagner à être analysé par le biais de l'écologie politique. Les articles dans cette section visent donc à contribuer à la richesse empirique de ce champ de recherche, en mettant l'accent sur les aspects anthropologiques et culturels d'injustices de santé. Nous soulignons le rôle des perceptions de la santé, en particulier, comme manière d'explorer comment les expériences populaires de l'environnement local souvent divergent des discours dominants sur des environnements sains/malsains, et les effets de cette divergence.

Mots clés : Ecologie politique de la santé, maladie, perceptions, discours, ethnographie, justice environnementale

Resumen

La ecología política ha surgido, en los últimos diez años, como un marco cada vez más aceptado para estudiar problemas de salud y enfermedad e incluso se ha convertido en un sub-campo distinto: las ecologías políticas de salud y enfermedad. Más recientemente, los académicos han sugerido avenidas más específicas a través de las cuales el sub-campo puede seguir desarrollándose y enfocando. Sobre la base de trabajos recientes, se sugiere que el papel de las percepciones y los discursos sobre la salud es una área de investigación que podría beneficiarse a través de la lente de la ecología política. Por lo tanto, los artículos de esta sección especial tienen la intención de seguir contribuyendo a la riqueza empírica de esta área de estudio, a través de un énfasis en los aspectos antropológicos y culturales de las injusticias de salud. Hacemos hincapié en el papel de las percepciones sobre la salud, en particular, como una forma de explorar cómo las experiencias del entorno local de la gente a menudo difieren de los discursos dominantes relacionadas con los entornos saludables/insalubres, y los efectos derivados de esta disyunción.

Palabras clave: Ecología política de la salud, enfermedad, percepciones, discurso, etnografía, justicia ambiental

1. Tracing the role of discourse in public health

> How do people perceive an environmentally risky situation? When do they fail to understand what is objectively a clear and present danger? (Auyero and Swinston 2008: 357).

> What happens when "the factual ground is somewhat slippery"? (Mangiameli 2013: 318)

A focus on health and disease has been evolving alongside broader developments in political ecology (PE) over the last two decades. From highlighting winners and losers in environmental conflicts (Bakker 2005; Peet and Watts 2004; Swyngedouw 2004) to further contemplating the social construction of nature (Castree 2003; Castree and Braun 1998), the materiality and the discursive reality of nature are seen as historically co-produced through contestations and power/knowledge clashes in society. Similarly, *political ecologies of health and disease* (PEHD) have built upon these foundations, while aiming to foster more critical and diverse perspectives (Harper 2004; Houston and Ruming 2014; Jackson and Neely 2014). PEHD builds on the established fields of health geography, medical anthropology (Morsy 1979), and disease ecology, which on their own have often proved weak in powerfully demonstrating how health is shaped through the combination of cultural, political, economic and environmental (or biophysical) factors.

Accordingly, a new wave of scholars are now beginning to recognize the increasing usefulness of PE as a general framework for studying issues of health, while suggesting more specific avenues through which the field can be further developed (see Carney 2014; Jackson and Neely 2014; King 2010; Mangiameli 2013; Parizeau 2015). Along these lines, attention has been brought to bodily expressions, the perceptions and meanings surrounding them, and the social/political embeddedness of individual and collective bodies as crucial elements in environmental conflicts. The articles in this Special Section therefore intend to further contribute to the empirical richness of this area of study, through an emphasis on the discursive and embodied aspects of health injustices. We emphasize the role of health perceptions, in particular, as a way of exploring how peoples' experiences of the local environment often differ from dominant discourses related to un/healthy environments, and the effects stemming from this disjuncture.

Whereas 'environmental health' started to emerge in the 1990s as a term bringing together concerns around environmental pollution, degradation and protection, and human health, the integration of political and cultural theory took place rather independently in the fields of environmental and health sciences. For the most part, health ecologies (Collins 2001; Hunarī and Boleyn 1999), geographies of health (Gatrell 2005; Kearns 1993; Kearns and Moon 2002) and medical anthropologies (Myrick 1996; Nichter and Nichter 1996)

have grown in parallel with - if not apart from - environmental justice, human geographies, and political ecologies. As a result, bio-cultural explanations of disease have either failed to a) consider the behavioural and social aspects defining peoples' vulnerabilities and adaptive capacities towards disease (Lock 2001; Singer *et al*. 1992); or b) interrogate the interconnections between biological, social and cultural components constituting the human experience of disease through a critical interpretive lens asking "who benefits and who suffers from the economic structures that provide [disease] the opportunity to take hold and spread"? (Joralemon 2010: 42).

Political ecology offers the necessary theoretical grounding and analytical tools for interrogating human health and disease, critically and holistically. However, the field still falls short of empirically problematizing the diverse health perceptions and the meanings attached to disease. It often eludes demonstrating how ontological divisions of 'real' and 'perceived' health risks are linked to the formation of subjects and identities, as well as to relations of power within wider socio-economic structures and institutions. Richmond *et al*. (2005) were the first to focus explicitly on health perceptions within a political ecology of health framework. Yet, their article was arguably more concerned with demonstrating the advantages of the PE approach due to its consideration of economic and environmental factors in shaping health inequalities and less on the discursive strategies bound up in controversies related to health and disease.

In light of the above, the approaches brought together in this Special Section incorporate a diverse range of perspectives, united under a focus on health perceptions and narratives. The collection aims to enrich conversations within and beyond political ecology, by bringing together articles that explore how discourses regarding public health and disease become social constructions infused with particular political motives. Part of this motivation concerns the 'how and why' some claims around health gain prominence in the public sphere and consciousness, while others are discarded as unscientific or irrelevant. In this sense, we demonstrate how local experiences and perceptions of disease are used to contest official (i.e. government) positions on un/healthy environments. As such, this Special Section explores the role of narratives surrounding healthy or diseased bodies in producing particular moral landscapes, and resistances to them.

The articles take a specific focus on discursive aspects, using empirical cases from different geographical contexts, and contribute new, culturally embedded and place-specific ways with which PE views health and disease. In particular, they examine one or more of the following aspects:

- the politics of public health communication;
- the role of local communities in producing and contesting knowledge around health issues;
- the different meanings associated with disease;
- and how all of these phenomena shape particular logics of governance and control, but also of resistance and change.

The Section as a whole traces the social construction of dominant health risk discourses, the changing perceptions around disease, and the effects that the above can have on environmental health justice movements at local and global scales. Before a more detailed overview of the particular cases explored here, we will now turn to a brief conceptual overview of the literature on political ecologies of health and disease, and the work that we have mobilized in shaping the theoretical foundations of this collection.

2. Situating political ecologies of health and disease

The nexus of public health, environment and society has been a topic of social interest and scientific analysis since the times of Rudolf Virschow and John Snow during the middle of the 19th century, who showed the connection between epidemics (typhus and cholera, respectively), the socio-economic context and the management of natural resources. Critical research in various disciplines has since drawn attention to how markets, power relations and the distribution of resources determine the way disease is spread geographically and within society. For instance, health and medical geographers have traditionally examined the political economic factors shaping the spatial distribution of biophysical disease in order to achieve a more systemic

understanding of health (see Mayer 1996, 2000; Turshen 1984). However, this work has paid little attention to the socio-cultural elements that continuously redefine the observed place-based patterns of disease. This task is often left to medical anthropologists, many of whom do not ask enough critical questions about environmental change and degradation beyond the local scale (but see Harper 2004). Consequently, critical explanations of disease that engage with socio-political complexities often maintain ontological divisions, viewing health as a 'real', biomedically decipherable attribute that is often measured against specific normative judgments of bodily well-being. On the other hand, many anthropological approaches to disease and the human body have engaged sparingly with critical materialist explanations of environmental degradation, enclosure and accumulation processes; or with how power relations come to define both the understanding and outcomes of disease at various scales. Last but not least, efforts in disease ecology have been criticized for deeming economic and political process irrelevant in the analysis of disease (King 2010).

Despite their limitations, these distinct disciplinary approaches have developed through cross-fertilization and constructive criticism, ultimately leading to the emergence of political ecologies of health and disease as a new approach in health geography (King 2010). At the same time, works such as Foucault's *Birth of the clinic* (2003[1973]) and his immense contribution through the concept of biopolitics and the government of life; Douglas' (1970) *Purity and danger*; Rose's *The politics of life itself* (2007) and Lock's *Troubling of natural categories* (2001) have inspired a new engagement between critical geography, medical anthropology and social theory. These interventions have brought the division between 'natural' and 'social' explanations of the body, health and disease into question. As Lupton (2013: 8) phrased it, medical knowledge has come to be understood as "a series of relative constructions which are dependent upon the socio-historical settings in which they occur and are constantly renegotiated." Recent writing on the political ecology of health has advanced alongside groundbreaking contributions in the environmental justice literature (see: Baer and Singer 2009; King and Crews 2013; Martinez-Alier *et al.* 2014; Nash 2006; Parizeau 2015; Singer 2014). These studies bring vernacular knowledge to the forefront of scientific discourse, while highlighting the crucial role of environmental conditions for human health, and representing struggles against health related injustices (see in this Section, D'Alisa *et al.* 2017; Rose 2017).

Given the diverse foci of work in the subfield, a number of studies have sought to develop the approach further by exploring different conceptual and methodological tools with which to enrich critical approaches to the study of health and disease. In particular, King (2010) argued that political economic factors, socio-ecological considerations, and health discourses constitute equally important factors in shaping decision-making over health. Recent work in PE has begun to explore the role of health discourses and environmental factors in shaping disease (Huff 2014; Mangiameli 2013). Jackson and Neely (2014) suggested incorporating insights from science and technology studies and the history of medicine to explore the role of partial and situated knowledges and more-than-human dimensions of health and disease, and using critical feminist approaches. They call this approach 'triangulating health', which, they argue, enables a political ecology of health that is more grounded, nuanced and situated. This approach demonstrates how local knowledges, which are often grounded in embodied experiences, can conflict with official and 'elite' understandings or definitions of health and disease.

Situating the contribution of this Special Section in the above literature, we emphasize the usefulness of foregrounding the role of environmental justice, place and landscape, and the use of discourse in political ecologies of health and disease. This builds on King's (2010) initial framework, described above, while emphasizing the discursive representation of health and disease at a variety of scales and paying attention to how different discourses align or conflict with local understandings, perceptions and experiences. We mobilize rich empirical material and cultural analyses to investigate the processes that produce particular kinds of partial and situated knowledges and reproduce healthy and unhealthy people, both socially and materially (Jackson and Neely 2014: 48). With the incorporation of such empirically based theoretical insights, this Special Section builds on previous work and further develops a political ecology of health and disease (PEHD).

In achieving the analytical aims of a PEHD, the articles in this collection deal with the following related themes:

Environmental justice and resistances

Environmental justice is a central concept to concerns in political ecology as it seeks to expose the way that marginal populations, minorities, and the poor are more vulnerable to environmental and health hazards (Houston and Ruming 2007; Kotsila 2017; Robbins 2007). The most affected by the disease are also (often) seen as the least credible in generating knowledge about environmental justice disputes, as the article by Iengo and Armiero (2017) demonstrates, forcing such individuals to mobilize particular forms of embodied resistance. For this reason, Porto *et al.* (2017) mobilize a political epistemological approach to the political ecology of disease, which recognizes that the way knowledge is produced (epistemology) plays a fundamental role in generating and confronting environmental justice disputes. They also develop the concept of 'health as dignity' to highlight the capacity of affected communities and their democratic alliances in addressing environmental conflicts. It is clear that a PEHD cannot be discussed without reference to the concept of environmental justice and the insights it offers. On the other hand, D'Alisa *et al.* (2017) show the importance of using a PEHD approach to study environmental conflicts, firstly to illuminate the role of victims of environmental disasters in fighting environmental crimes, and second, to challenge the 'slow violence' of toxic crimes (Nixon 2013).

Place and landscape

Two of the articles in this section use landscape as a form of inquiry for addressing political ecologies of disease (Connolly 2017; Rose 2017). In doing so, the authors place the landscape as the focus of analysis, while illustrating the mediating role of landscape in health disputes. Some scholars working on the political ecology of health have already begun to use landscape as an analytical lens to consider how various discourses of health and disease can become materialized (see King 2010; Mulligan *et al.* 2012; Parizeau 2015). As Nash (2006: 8) has asserted, to examine the political ecology of health "without reference to specific landscapes is to assume at the outset that landscapes do not matter." Moreover, she argues that previous understandings of disease, including disease ecology, did not "fully encompass individuals' experience of disease or place." For instance, Iengo and Armiero (2017) speak of place-based struggles and how people inhabit their bodies in relation to their environments. Connolly (2017) and Rose (2017) (both in this section) show further how the landscape concept can be utilized in seeing disease as not only determined through biophysical factors, but also constructed out of a particular set of social relations and lived experiences mediated through the landscape.

Discourse and the political economy of disease

We refer to the political economy of health and disease as a set of material and discursive practices that influence the incidence of disease, or are otherwise involved in the production of (un)healthy landscapes. Such an analysis recognizes that health is structured by political and economic systems that influence the transmission of disease and the ability - or willingness - of health care agencies to effectively respond (King 2010). This relates to Houston and Ruming's (2014) study, which was concerned with how particular health hazards become "entangled with socio-natural assemblages of governance, labor, home and city making, decay, disposal and suburban cultural imaginaries" (2014: 401). Furthermore, a PEHD approach can also unravel the relationship between power and knowledge, by tracing the effects of different discourses, interventions and opinions in generating health injustices (Auyero and Swistun 2008; King 2010). All of the articles in this Section scrutinize the interface between health discourses and political economies of disease; explore popular epidemiologies (Iengo and Armiero 2017; Porto *et al.* 2017) and changing (self-) perceptions amidst environmental health injustices (D'Alisa *et al.* 2017); contrasting claims over health risks (Connolly

2017) or the individualization and moralization of disease as a tool of health dispossession and governance (Kotsila 2017; Rose 2017). These types of analyses supplement work on the health geography literature, which King (2010: 39) has criticized for "[providing] less rigorous attention to the role of political economy in producing disease and shaping health decision-making." The empirical investigations that they provide further rectify the gap between the material and the discursive, highlighting how the politics of health is shaped through the confluence of power relations, specific discourses and practices of communication in particular sites.

3. Contributions to this Special Section

Given the action-oriented nature of much political ecology research, many of the articles in our collection have employed a range of ethnographic methods (including informal and semi-structured interviewing, observation, participant observation, and secondary data analysis). For political ecologists, ethnographic analysis involves considering the importance of lived experience in shaping the perceptions of stakeholders on the issue(s) being studied. Often, traditional qualitative methods have been used in combination with non-traditional and/or quantitative methods (amongst others - household surveys, network analysis, use of epidemiological and socio-economic census data, photography, or GIS), in order for the ethnographer to better "understand the cultural system in which he or she is studying" (Whitehead 2005: 2). Such combinations of methods in the empirical articles of this collection have been essential in shedding light on the discursive framings of disease employed by various actors in each of the study sites. It has also allowed for an unveiling of the power relations that shape official decision making in public health and of the ways in which the voices of marginalized groups can be silenced (see Richmond *et al.* 2005).

Through a 16-month critical ethnography, Rose's article engages directly with a group of "hillside residents" who reside in and among the margins of an urban municipal park in the United States. Facing abject poverty, threats from law enforcement, and the trials of living outdoors, these individuals cite the local health department as the primary source of potential displacement from the place they call home. His research uses political ecology to consider the role of material and discursive cleanliness as an agent of health in the social reproduction of capitalism to create 'sanitary' urban natures and subjects that further support the social consumption of urban landscapes.

In a similar vein, Connolly's article details the social construction of the 'swiftlet farming' industry in George Town, Malaysia. It argues that narratives of health and disease continually police which landscape practices are acceptable for the increasingly globalizing and image conscious city. 'Swiftlet farming' refers to the use of inner city shop-houses and other commercial buildings for harvesting the edible nests of swiftlets (constructed from their saliva). The competing discourses and reactions to swiftlet farming in George Town offer an apt entry point for studying this contested normative landscape, particularly in relation to its alleged potential for causing outbreaks of disease such as avian flu or dengue fever.

Moving to the so-called Land of Fires, in the northern periphery of Naples, Iengo and Armerio aim to shed some light on the politicization of ill bodies of Campania. They analyze three practices of political action and resistance that have employed the subjectivization of physical bodies and illnesses in order to expose the environmental injustice affecting those communities. The politicization of illness and bodies conflates public and private, challenges the mainstream production of knowledge, and proposes an alternative narrative for affected communities and individuals, as they demonstrate through in the three case studies. Similarly, D'Alisa and colleagues investigate how the contraction of serious diseases influences perceptions of falling victim to waste-related environmental crimes. Their contribution renders visible the victims of more silent environmental crimes, which are often perceived as 'victimless.' In so doing, they use a PEHD approach, integrating qualitative and quantitative methods, which allows for an empirical explanation of how health issues have become a central factor in the resurgence of grassroots movements against waste (mis)management in Campania.

Kotsila's article examines the potential of public health policy and discourse for promoting inclusive, useful and empowering education against the spread of diarrhea in the Mekong Delta, Vietnam. Her findings show the neoliberal tendency to individualize responsibility, and moralizing behaviours, to be strongly present

in public health discourse. By moralizing disease and by selectively focusing on top-down prescribed "hardware" (infrastructural) solutions, the state enhances its legitimacy while dispossessing people from the knowledge and material tools ("software") needed to prevent disease.

Finally, Porto *et al.* discuss conceptual and methodological issues related to the study of environmental risks and health issues in the context of environmental justice disputes. They propose a comprehensive vision of health that relates not only to illness and death, but also to life, nature, culture and fundamental rights. They summarize this in the expression "health as dignity", which is intrinsically related to the capacity of affected communities and their democratic alliances to face environmental conflicts. The article points to strategies for strengthening the shared production of knowledge and the activism of communities that mobilize to confront environmental injustices.

4. Narrating political ecologies of health and disease

A final point is that we see the specific emphasis on disease, as opposed to a political ecology of health in general, serving as a powerful analytical point or entry. This is because, firstly, reference to a common vocabulary facilitates multi-disciplinary dialogue and exchange with epidemiologists, public health experts and policy-makers. Secondly, critical political ecology becomes a strategic resource for citizens and groups suffering particular diseases to target their claims and struggles amidst a heavily medicalized health discourse. Moreover, by framing the field as a PEHD, we aim to problematize health beyond the positive and normalized notion of healthy bodies, cleanliness and hygiene, engaging more with aspects of uncertainty and vulnerability that are inherent in human and non-human co-existence. The concept of disease carries this broader notion of risk, allowing us to face and deconstruct it, in ways that can also be mobilizing. Last but not least, a focus on disease not only demonstrates winners and losers in socio-environmental change, it also encourages an analysis of the public health sector as a biopolitical domain where what is 'desired' or 'normal' plays out through imbalances of power/knowledge. Such a focus is not meant to advocate an understanding of health as simply the absence of disease, but to unwrap established definitions and meanings around disease, turning attention to the role of cultural diversity, vernacular knowledge and alternative health perceptions.

In order to realize these aims, we argue, it is not only the bio-physical, political, or economic attributes of health and disease that need to be contested, but also the claims, perceptions and discourses involved in producing health injustices. This is how the three key themes explored in this Section are related (environmental justice and resistance; place and landscape; discourse and political economy of disease), and is also why they must be considered in relationship to one another. For instance, as the articles in this Section attest, the spread of infectious disease, or exposure to non-infectious disease is influenced by biophysical processes and political-economic considerations. Yet, as many of the articles illustrate, the ability of health care agencies to effectively respond to potential or confirmed instances of disease is not only shaped by political considerations, but also their willingness to respond to the issue, which is best explored through discursive analysis. A broad political ecology approach is suitable for this task, and it has proven its value for examining the political economy of disease, emerging health discourses, and the role of socio-environmental factors in producing disease and shaping health decision-making.

Political ecologies of health and disease, edited by Creighton Connolly,
Panagiota Kotsila and Giacomo D'Alisa

1. Jeff Rose - Cleansing public nature: landscapes of homelessness, health, and displacement
2. Creighton Connolly – "Bird cages and boiling pots for potential diseases": contested ecologies of urban 'Swiftlet farming' in George Town, Malaysia
3. Ilenia Iengo and Marco Armerio – The politicization of ill bodies in Campania, Italy
4. Giacomo D'Alisa, Anna Rita Germani, Pasquale Marcello Falcone and Piergiuseppe Morone - Political ecology of health in the Land of Fires: a hotspot of environmental crimes in the south of Italy
5. Panagiota Kotsila - Health dispossessions and the moralization of disease: the case of diarrhea in the Mekong Delta, Vietnam
6. Marcelo Firpo Porto, Diogo Rocha Ferreira and Renan Finamore - Health as dignity: political ecology, epistemology and challenges to environmental justice movements

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