Regulating epidemic space: the *nomos* of global circulation

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After the Severe Acute Respiratory Syndrome (SARS) outbreak in 2002, legal theorist David Fidler diagnosed the arrival of the 'first post-Westphalian pathogen'. The coinage indicates that the spread of infectious disease transforms the spatial coordinates of the modern political environment. This article analyses this transformation by asking how the legal regime, designed to prepare for the pandemic, envisions the globe as an object of government. It demonstrates that the WHO's International Health Regulations (IHR) articulate a space of global circulation that exhibits two features. First, the infrastructures of microbial traffic become the primary matters of concern. The IHR do not focus on human life so much as they aim at securing transnational mobilities. Second, the IHR circumscribe a space that is fragmented by zones of intensified governmental control at transportational nodal points, such as airports and harbours. In these zones, technologies of screening and quarantine are applied to modulate the connectivity of people, organic matter and things. As a whole, the article investigates how processes of de- and re-territorialisation interact in the context of global health security. In analysing forms of legal worldmaking, it unearths a *nomos* of global circulation which applies its regulatory force to the post-human materialities of microbial traffic.

Introduction: the nomosphere of global health security

Epidemics are inherently spatial phenomena. According to an understanding that reaches back to the Hippocratic writings, the epidemic should not be mistaken for the illness itself. Rather, the term designates a certain mode of its dissemination. Combining the Greek *epi* (on, over, upon) with *demos* (people), 'epi-demics refers to a condition set upon people who are close in time and space' (Van Loon 2005: 42). Consequently, the different measures taken against epidemics have always reckoned with their spatiality. Ranging from villages barring themselves from strangers over techniques of quarantine and border policing to panoptic surveillance — the protective efforts against the spread of epidemics have regularly led to innovations

in spatial design (Bashford 2006a). Epidemics and the political ordering of space thus share a common genealogy. Throughout history, the government of epidemics has entailed particular modes of governing space.

This common trajectory has been in the process of being re-shaped since the last decade. Shortly after the outbreak of the Severe Acute Respiratory Syndrome (SARS) in 2002, the legal scholar David Fidler (2003) characterised the coronavirus responsible for SARS as the 'first post-Westphalian pathogen'. This statement indicates that a certain spatial matrix of government became problematic during the crisis. The de-territorialising logic of viral contagion was regarded to be at odds with the territorial segments that form the international order of modern states (Elden 2006). Confronted with this incompatibility, the WHO operated in an 'extra-legal experimental space' (Weir 2012: 323) to address the trans-border dynamics of disease transmission. Only after the emergency response, the requirements for a re-articulation of the political landscape were to be accommodated within the revised version of the main legal document designed to guarantee global health security: the International Health Regulations (IHR).

While the WHO portrayed its actions during the SARS crisis as an anticipatory 'roll-out' of the new IHR, the experience with the first pandemic of the twenty-first century also accelerated and informed the revision process at its last stage (Fidler and Gostin 2006: 85; Elbe 2010: 59). Therefore, the IHR — whose final version was adopted in 2005 and was put into force by most of the WHO member states by 2007 — can be considered as a protocol of the attempts to reconfigure the contours of the Westphalian order. In a sense, SARS turned the world into a juridical-political laboratory in which new governmental geographies were delineated and tested. By incorporating the *ad hoc* measures taken against SARS into a fully fledged juridical framework, the IHR contain the efforts to rearticulate the coordinates of global political space. Accordingly, the IHR have to be analysed as a solution to the problem of how epidemic contagion is rendered governable in ways that resolve the constraints of the Westphalian territorial order.

This article seeks to excavate the spatial rationality enshrined in the IHR. It will address the following set of questions: How do the IHR take part in the spatial making of our current political world when it comes to governing pandemics? How do they render the global contours suitable for controlling the flux of 'post-Westphalian pathogens'? What kind of *nomos* is being forged in the regulatory context of global health security? Guided by this set of questions, the article unfolds the intimate relationship between the governance of pandemic emergencies and the legal fabrication of a planetary political space.

Methodologically, the analysis is informed by the interdisciplinary field of 'legal geography' (Blomley 1994; Blomley *et al.* 2001). Authors in this field question the clear-cut division between space and law. Instead of opposing law as a textual domain of meaningful representations to a notion of space as materially given and static, law itself is considered to be spatialising: law circumscribes territorial orders, draws boundaries and configures mobilities. For capturing such modes of legal

'world-making', David Delaney (2004, 2010) has introduced the notion of the 'nomosphere' (24–33). The term is derived from the Greek *nomos* that relates to acts of division, separation and demarcation. Most famously, these connotations have assumed centre stage in Carl Schmitt's (2003) *Nomos of the Earth*. In this book, Schmitt traces the geopolitical contours of the international order enshrined in the *Jus Publicum Europaeum*. Unlike Schmitt, however, Delaney does not assume a mythological foundation of law in 'concrete spatial orders' — a view most palpable in Schmitt's portrayal of the Earth as the element that 'contains' and 'sustains' law (Schmitt 2003: 42; Dean 2006). Rather, Delaney seeks to highlight how law is constitutively involved in the articulation of always contingent spatialities. Accordingly, this article wants to look at how the IHR become imbricated in the production of our spatial present. Undertaking such 'nomospheric investigation', however, does not imply that legal documents shape the political cartography single-handedly in a causal way. They are but one element in the material practices that configure the spatial setup of global governmental assemblages (Collier and Ong 2005; Valverde 2015).

Theoretically, the following argument engages with Foucault's genealogy of liberal government (Foucault 2007; Valverde 2007). Foucault is important in this context since he is one of the few thinkers who have emphasised the inherent connection between political rationalities, space and infectious disease (Legg 2005). For him, the history of modern political power is, to a large extent, a history of how epidemics were dealt with. Diseases such as leprosy, plague or smallpox gave rise to specific modes of spatial ordering that correspond with specific technologies of governing. This article adopts this perspective for understanding the making of 'nomospheres'. It looks at the legal document of the IHR as an operative device in the fabrication of governmental spaces, which are supposed to provide security against the pandemic threats to come.

The analysis will show that the IHR entail a modulation of what Foucault has described as the governmental rationality of planetary circulation. Two particular nomospheric features encoded in the IHR stand out in this respect. The first concerns the referent object of governmental practice: the regulatory effort to secure global public health does not focus on human life so much as it does on post-human materialities of global traffic. Infrastructures and objects of mobility are its main concern. The second feature pertains to the particular type of territorial control envisioned under the current conditions of intense globalisation. For governing 'viral traffic', the IHR stipulate technologies such as screening and quarantine, which supplement the liberal image of a smooth and borderless world. These technologies re-territorialise the planetary space by forming thresholds at which the movement of risky bodies is interrupted and rhythmicised. The IHR thus constitute a 'nomadic nomos' (Vissmann 2012: 37) that incorporates territorial strategies into the government of the networked topologies generated by global traffic.

For developing this argument, the article proceeds in three steps. The first section reconstructs the relationship between epidemic crisis and the emergence of spatial

orders to be found in Foucault. Unfolding this heuristic framework for the subsequent analysis of the IHR, it elaborates especially the role that legal concepts play in translating the idea of liberal circulation into the global sphere. Against this background, the second section investigates the peculiar mode in which the IHR constitute a nomosphere of global circulation. It traces the shifting concern from the health of the individual and the population towards a continuum of organic and inorganic bodies travelling along infrastructures of transmission. The third section focuses on the role played by technologies of thermal screening and quarantine in this peculiar rationality of governing circulation. It presents them as territorial strategies designed to govern the de-subjectified flows of universal traffic.

Epidemic spaces: towards the planetary horizon of circulation

In Western modernity, issues of public health have never been just about health (Rosen 1993). They became deeply intertwined with politics and the making of political spaces in particular. Whereas the first quarantine regulations in the Mediterranean city-states of the fourteenth century were famously directed at maritime trade, it was not before the seventeenth century that sanitary measures 'came to be used consciously as instruments of statecraft' (Harrison 2013: 24). On the one hand, the politics of public health influenced states' external relations deeply. To combat the epidemics of the 1660s, England interfered with the Dutch trading empire by imposing quarantines against vessels sailing from Amsterdam; about a 100 years later, Austria had completed a sanitary cordon over 1,600 kilometres along the lines of a former military cordon at its Eastern border (Rothenberg 1973: 16); and in the nineteenth century, the European powers established consular commissions in Alexandria or Constantinople for 'defending Europe from Asiatic infections' (Harrison 2013: 70). On the other hand, public health had a tremendous impact on the internal politics of evolving nation states. A wide array of administrative practices, such as isolation, segregation, or urban planning, were led by the concern for health as a 'common good' — an understanding that triggered regulatory reforms to set up systems of 'medical police' by the end of the eighteenth century in most European states (Carroll 2002). Despite their extreme heterogeneity, all these instances share one common feature. In each case, the history of public health reveals itself to be tightly coupled with a history of spatio-political settings.

Foucault belongs among the few theorists who have explored the relation between political space and infectious diseases in a systematic manner. Epidemics in particular assume a place of pride in his work. In *The Birth of the Clinic*, they are introduced as 'collective phenomena' that have 'a sort of historic individuality' (Foucault 1973: 25). Epidemics appear as singular moments of crisis that provoke the development of novel spatial orders and political technologies. However, Foucault is not so much interested in the historical vicissitudes as such as he uses the historical

material to identify distinct rationalities. He distinguishes schematically the responses to leprosy, plague and smallpox, each of which is tied to the emergence of a peculiar cartography of power (Thacker 2009: 139–42). It is worthwhile to recall shortly this reference to epidemiology in Foucault's otherwise well-known genealogies of power in order to link it both to its spatial and juridical underpinnings.

The government of leprosy operates through expulsion (Foucault 1991: 198–99). The medieval leper is barred from the city into an outside populated by the living dead. The juridical structure of this operation is the exile that produces a life in pure abandonment. It constitutes a sovereign power based on territorial exclusion. The disciplinary response to the plague of the seventeenth century reverses this procedure. Its basic formula reads: 'Not rejection but inclusion.' (Foucault 2003: 46) Instead of drawing a single boundary delimiting an interior from an absolute exterior, discipline imposes a partitioning grid. It creates a space segmented into differentiated enclosures that seek to isolate individuals, reduce contacts and allow for panoptic surveillance. Foucault describes discipline as a form of 'counter law' for it works in the interstices of liberal law, subverting freedom and equality from below through its minute normalising procedures (Golder and Fitzpatrick 2009: 22–3).

The smallpox of the eighteenth century gave rise to yet another amalgam of political rationality and spatial order: liberal governmentality with its aim to maintain spaces of circulation (Foucault 2007: 10–23, 57–63; Elbe 2009: 45–9; Opitz 2011; Voelkner 2011). Within this political rationality, epidemic disease appears as a collective affair with immanent regularities to be rendered visible by statistics. It is dealt with as a mass phenomenon through measures of public hygiene and practices of inoculation. Accordingly, governmental power is not exercised over a territory but within a population. This, however, does not amount to a neglect of the individual. Rather, the government of populations is linked intrinsically with the individualisation of the liberal subject (Foucault 1978: 139–45). Modern biopolitics addresses the health of the population through individual well-being and *vice versa* (Foucault 2001: 13–27).

Governing disease within a framework of liberal governmentality has important spatial implications. The population forms a dynamic, living entity that is tied closely to the circulation of bodies, goods, and resources in space. Since the circulatory flows are considered to be the well-spring of the population, liberal government aims at protecting and enhancing this metabolism in its vital force against the inherent threat of disease (Swyngedouw 2006: 107–12; Dillon and Lobo-Guerrero 2008). Beyond this background, measures of containment and fixation through enclosures appear as inherently problematic. Each parcelling of space that hinders or even immobilises those elements that are assumed to circulate is seen to constrain the life process. Furthermore, since disease exists 'within a collective field' (Foucault 2007: 60) it cannot be simply externalised. It is an unfortunate, but intrinsic phenomenon that cannot be made subject to a total ban. All in all, liberal government is careful not to obstruct contacts. Rather, it facilitates and organises connectivities, aiming to secure

them against their immanent dangers — 'maximizing the good circulation by diminishing the bad' (Foucault 2007: 18). In principle, the space of circulation is therefore an open and unbounded space. Liberal government operates, in Foucault's own words, 'centrifugally'. 'New elements are constantly being integrated […]. Security […] involves […] allowing the development of ever-wider circuits.' (Foucault 2007: 45)

Ultimately, this centrifugal dynamic places the liberal government of circulation within a planetary horizon (Mattelart 2000: 1–21; Lobo-Guerrero 2008). Foucault himself devotes only a few pages to this consequence. However, this short passage — that has, thus far, also received relatively little attention — is of utmost importance for the current argument, since Foucault (2008) links the 'appearance of a new form of global rationality' in governmental practice with what he calls a 'juridification of the world' (56). After gesturing towards maritime law and the problem of piracy as examples of such 'elaboration of a worldwide space' (*ibid.*), he turns to Immanuel Kant's text on 'perpetual peace' (1795). In Kant, he finds the view that a global law beyond the state is to emerge from the inter-relations naturally occurring between humans all over the world. Whereas political philosophers usually adopt the Kantian premises for justifying the existence of cosmopolitan law, Foucault turns this normative position upside down by reading Kant archaeologically as a governmental script. A closer look at Kant might, therefore, illuminate Foucault's unusual, but innovative argument about the relation between the liberal government of global circulation and global law.

Kant (1991: 322) bases his elaborations on the 'postulate' that 'all men who can mutually affect one another must belong to some civil constitution'. In the German original, this intercourse is couched in terms of a natural 'flow' or 'in-fluence' (Kant 1977: 203) that traverses the borders of state territories.[1] It establishes a form of interrelatedness that is always already transcending the space of international law into a cosmopolitan order. Kant deduces the latter from the spatial properties of the Earth. Because of its spherical shape — its *Kugelgestalt* — the Earth's surface forms a limited space in which human beings 'cannot disperse infinitely but must finally put up with being near one another' (Kant 1991: 329). The cosmopolitan right 'to present oneself for society' (*ibid.*) is thus rooted in the empirical features of global space (Eberl and Niesen 2011: 262–65). The Earth places humans irrevocably in a proximity to one another and it generates relations of communication and exchange across the world. The means of transport — such as ships or camels, the latter figuring in Kant's (1991) view as 'ships of the desert' (329) — support men in their commerce and facilitate mutual contact. They offer the technical basis for worldwide circulatory processes that follow 'naturally' from the Earth's spherical shape. In this way, the cosmopolitan right is derived from those natural circulations that it has to protect. It allows individuals to get in touch with each other irrespective of their national affiliation. It stabilises the capability to connect globally, a potential that is grounded in the spatial qualities of the Earth.

Reading Kant's famous text as an instance of governmental thought fundamentally alters the role attributed to global law.[2] From such a perspective, cosmopolitan law appears as a means to enable exchanges across the world. It secures transnational traffic and communication, thereby constituting an infrastructure for circulatory movements. In this sense, law appears as a governmental technology. Again, it is worthwhile to underline the analytical twist at work here. Whereas a more traditional normative reading of Kant proceeds from a particular state of the world to a cosmopolitan juridical framework, the governmental reading observes how cosmopolitan law is devised as a tool to stabilise a liberal view of worldly processes. In one case, humanity's natural use of the perfectly rounded globe grounds an equally universal law. In the other case, law functions as a particular device for fostering specific modes of global movements. This difference matters strongly, since only the latter angle allows for investigating the practical work of establishing 'nomospheres'. Only the second of the two viewpoints prompts empirical research to analyse how contemporary forms of global law are operative in developing governmental cartographies: How do legal textures configure movement-spaces? In which way do they specify how circulations are to be monitored, channelled and held in check in order to be maintained? How do legal regulations discriminate between what is supposed to circulate and what not?

Writing a full genealogy of how law becomes part and parcel of a governmental rendering of global space is beyond the scope of this article. As indicated above, the following sections concentrate on one current instance of such liberal governmentality. They excavate the spatial calculus for ensuring global health security as it is encoded in the IHR. In order to explore the intimate relationship between epidemic crisis and political space further, Foucault's elaboration of governmental space serves as an analytic foil. It helps to determine the ways in which the IHR still perpetuate the rationality of liberal circulation as well as those respects in which they modify it.

Regulating global traffic: the post-humanism of the IHR

Historically, the IHR stand in continuity with the attempts at international health governance that reach back to the beginning of the nineteenth century. The system of diplomacy inaugurated at the Congress of Vienna (1815) constituted the framework in which the European nations began to achieve sanitary cooperation (Harrison 2006). The main aim was to make quarantine the object of international agreements in order to minimise impediments of commerce during a period sometimes referred to as a 'second wave of globalisation' (Robertson 2003).[3] This concern led to the first International Sanitary Conference in 1851. Although the participants failed to agree on quarantine regulations at the first meeting in Paris, ten further conferences were to follow until 1903, most of them seeking to balance measures to prevent the spread of

yellow fever and cholera against restrictions on travel, the disruption of trade and especially the costly immobilisation of ships (Howard-Jones 1975: 11).

In the early twentieth century, the first intergovernmental organisations grew out of the conference system: the Pan-American Sanitary Bureau of 1902 in Washington DC, the Office International d'Hygiène Publique of 1907 in Paris, and the League of Nations' Health Organisation of 1923 in Geneva. The emergence of these institutions marked the beginning of a transition from international towards global juridical structures to be continued after the Second World War by the United Nations and the WHO. According to Alison Bashford (2006b), a particular rendering of the population question as a 'world issue' (79) was decisive for this shift. In contrast to the national focus on matters of sexuality and reproduction, population management on a global scale was introduced primarily within an economic framework concerned with population density, spatial distribution and 'world human movement' (*ibid.*: 80). 'In this way, […] 'world space' was imagined and problematized […] through 'world health', its predecessor 'international hygiene', and the problem of origin: quarantine.' (Bashford 2006b: 82)

Against this historical background, the 'post-Westphalian' contours of the IHR do not appear as an absolute novelty. According to the principles set out in Article 3, their implementation 'shall be guided by the goal of their universal application for the protection of all people of the world from the international spread of disease'. The IHR thus follow earlier attempts at global health by situating themselves within a planetary horizon, putting forward a trans-border vision of the Earth. And like earlier forms of 'germ governance' (Fidler 2004), which already began to exceed the demarcations of the international system about a century ago, the IHR do not simply bypass the state. They seek to realign the organisational capacities of states, integrating their institutions into a globally networked governance structure (cf. Sassen 2008).

Most importantly, the key passages of the IHR read like a clear-cut manifestation of the liberal government of circulation: 'The purpose and scope of these Regulations are to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade.' (IHR, Article 2) The mobility of disease and the mobility of goods and people are conjoined in this problem space. Measures against the first should not be achieved by stifling the second. The IHR thus exhibit the liberal concern about governing too much. Echoing the main gist of international trade law under the WTO, they aim at circumscribing a mode of intervention that seeks to minimise potential interferences with economic circulation.

If the continuity of the IHR with the basic presuppositions of liberal govern-mentality can be established easily, what about their specificity? What is the 'historic individuality' of the current attempt at dealing with pandemics as globally collective phenomena? To answer this question, it is necessary to understand how the IHR

contain a remarkable modification of the biopolitics of liberal governmentality (Lemke 2011). The IHR untie the complementary relation between the individual and the population outlined in the last section. On the one hand, they almost completely remove the question of individual health care from the preoccupation with circulatory matters. This is highly significant, since during the twentieth century a right to health became implemented not only in national jurisdictions, but also in key documents of international law such as the Universal Declaration of Human Rights (Article 25) and the Preamble to the WHO's constitution. Yet, the IHR contain no substantial allusion to individual health, the figure of the individual person who is sick and needs care is, for the most part, absent. On the other hand, and even more curiously, the IHR also refrain from concerning themselves with the health of the population. While the figure of the population still featured prominently in the global health politics in the second half of the twentieth century, the IHR do not make a prominent reference to it. The IHR appear as an example of what Niamh Stephenson (2011: 621) or Andrew Lakoff (2008) have observed as a more general political trend: that the population ceases, increasingly, to be the main object of public health. Although not being completely absent, it appears only marginally in the IHR. This raises the question of what has come to substitute the dual structure of the individual body and the population in public health: What is put at risk by epidemic disease?

Within the IHR, the concern for global circulation is expressed mostly with regard to the spatialities of global traffic. The IHR demand special attention for those 'public health risks existing in areas in which the international traffic originates, or through which it passes' (IHR, Article 21.1). They specify 'core capacity requirements for designated airports, ports and ground crossings' (IHR, Annex 1.B). And they include specific standard forms for controlling ship sanitation (IHR, Annex 3) as well as a model of a Maritime Declaration of Health (IHR, Annex 8). In this way, traffic designates the particular kind of movement that is both *a* risk and *at* risk. Pathogens circulate through global traffic, and the control of the spread of disease may, therefore, lead to interferences or even interruptions that are to be avoided.

This problematisation resonates with accounts of Emerging Infectious Disease (EID) that became influential at the end of the twentieth century (Lakoff 2012: 53–5). Most notably, the epidemiologist and virologist Stephen S. Morse has described topologies of contagion in terms of 'viral traffic' (1990) and 'global microbial traffic' (1992). Since viral traffic — broadly defined as 'movements of viruses to new species or new individuals' (Morse 1990: 82) — is always bound up with patterns of human traffic, Morse calls for 'viral traffic planning' (*ibid*.: 83): 'Basically, people are creating much […] of the traffic […]. We need to recognise this and learn how to be better "traffic engineers".' (Morse 1992: 1327) Especially ecological changes in land use and demographic changes in population density produce a new quality of biosocial interrelatedness: 'No one is truly isolated and therefore impervious to microbial traffic.' (*Ibid*.: 1327) As to the IHR, the WHO seems to share this vision of global transportability: traffic appears as an almost universal frame for planetary

circulation. Microbial traffic is intertwined firmly with the world traffic in trade and travel, since the latter constitutes a vehicle for the former. In turn, the IHR circumscribe a liberal regime of para-medical policing. They do not concentrate on healing bodies, but rather on regulating free movement.

Within the spatial logic of governing global microbial traffic, processes of transmission are of key concern. This focus displaces the medical concern for individual symptoms of disease. The individual symptom becomes only relevant in so far as it may refer to potential 'routes of transmission' (IHR, Annex 2). Whereas the symptom is a hermeneutical concept, based on the idea of interpreting signs of illness, transmission is a media concept with a postal structure that is both spatial and operative (Krämer 2008: 12–9, 138–47). In its simplest form, transmission involves a carrier that transfers a pathogen from one point to another (Wald 2008: 71–9). The IHR present a broad inventory of physical bodies that may act as potential carriers, covering the whole spectrum of humans, animals and inanimate matter. Disinfection, for example, is defined as the 'procedure whereby health measures are taken to control or kill infectious agents on a human or animal body surface or in or on baggage, cargo, containers, conveyances, goods and postal parcel' (Article 1). Everything that circulates can function as a carrier of transmission: faeces, food, water are mentioned in the same manner as human remains (IHR, Articles 18.2 and 22.1). If anything, not the human, but animals feature as crucial carriers of transmission. Especially insects are seen as 'vectors' of epidemics, since they 'transport an infectious agent that constitutes a public health risk' (IHR, Article 1).

These bodies of transmission belong to a governmental vision that pictures the world as a space of universal traffic and that focuses on routes and material means of global circulation. In order to grasp the peculiarity of this governmental view, it may be instructive to recall that issues of public health have been traditionally tied to what Robert Castel calls 'the social question'. According to Castel (2003), the social question highlights the way in which a society 'experiences the enigma of its own cohesion' and the 'dangers of disintegration' (xix–xx). The social question proble-matises the capacity 'to exist as a collectivity linked by relations of interdependency' (*ibid.*: xx). Reading the IHR, one might say that, the social question becomes less social and more transactional. The globe is imagined as a transactional sphere in which relations of interdependency are established through modes of transportation that involve organic and inorganic matters. While the danger of disintegration remains related to the threat of an international health emergency, the referent of this threat takes on a novel form. As outlined above, the threatened object is neither the body of the individual nor the collective body of a population. It is instead the very global movement of animate and inanimate entities across boundaries, which has to be protected against immanent threats. The management of public health risks is therefore concerned primarily with what Collier and Lakoff (2014) have identified as 'vital systems'. It is attentive to those infrastructures, hubs and nodal points that 'operate' world traffic and realise global connectivities (Tellmann *et al.* 2012).

Within this framework, the individual tends to be seen, at least in principle, only as one risky body among others. It appears as one potential carrier, moving along routes of transmission together with other potential carriers. Global health has thus turned into a thoroughly post-humanist affair. In an uncanny resonance with the vocabulary of current social theory, the IHR focus on the 'vibrant matters' (Jane Bennett) and 'insect media' (Jussi Parikka) that are vectors of transmission. What actually matters are the multiple connections established by all kinds of substances in motion, no matter if they are fluid or solid, organic or inorganic, animate or inanimate (Clark 2013). Taking into account the 'ecologies of pathogenicity' (Collier and Lakoff 2008: 9), the IHR extend the concept of global public health to all the materialities involved in the planetary movements that they seek to secure.

Controlling matters: screening and quarantine as territorial rhythm-technologies

In conjunction with a shifting problematisation of the governmental object towards the 'vital systems' of post-humanist traffic, the technologies of control become recalibrated. While the liberal maxim of '*laissez faire, laissez passer*' can still be seen to capture the professed aims of the IHR, it does not tell about the territorial technologies that mark out its nomosphere. In fact, the current preoccupation with circulatory processes in the field of global health security does not amount to a 'de-territorialized smooth space' of 'uncoded flows' (Deleuze and Guattari 1987: 352–423). Rather, letting the planetary traffic pass securely involves accompanying spatial measures that control the passage of subjects and objects within 'molecular geographies' (Braun 2007: 15). Accordingly, the IHR formulate a set of 'recommendations with respect to persons, baggage, cargo, containers, goods and postal parcels' (IHR, Article 18). Two of them in particular are designed for managing the risk of disease transmission: screening and quarantine. As will be elaborated in the following, both screening and quarantine implement spatial thresholds of 'social sorting' (Bowker and Star 2000) at which carriers of disease can be singled out. They form peculiar strategies of division and enclosure that rely on classifications of risky bodies. As such, they supplement the government of global circulation. They re-territorialise the flow of subjects and objects and, at the same time, correspond with the governmental post-humanism just elaborated.

The year before the adoption of the IHR, the UN High-level Panel on Threats, Challenges and Change expressed great concern about the epidemiological vulnerabilities generated by civilian air traffic: 'any one of 700 million international airline passengers every year can be an unwitting global disease carrier' (UN 2004: 19). In order to control this potential for pathogen transport, airports in Hong Kong, China or Singapore had already installed cameras for infrared thermal screening during the SARS outbreak (Ong 2004). These apparatuses hold the promise of visualising

threats within circulatory flux. They aim at the identification of sick bodies by scanning the temperature of travellers for fever in a supposedly non-invasive manner. Actually, the attempt to use infrared thermography to govern disease involves a range of problems. Leaving aside the flaws in camera instalment, the true body core temperature always differs from the cutaneous temperature, the latter depending on the body parts selected for measurement or the outdoor temperature; moreover, persons may also be infectious without developing any increase in body temperature (Mercer and Ring 2009; Nishiura and Kamiya 2011). Nonetheless, the absence of thermal screening devices at Canadian airports has, apparently, been a decisive factor, when the WHO issued a travel advisory for Toronto and other affected areas during the SARS outbreak (Van Wagner 2008: 1655). Since 2005, the IHR authorise the WHO to 'recommend' the application of mass screening devices in case of a 'public-health emergency of international concern' (IHR, Article 12). When the WHO declared the Influenza A H1N1 (the 'swine flu') virus a pandemic in 2009, entry and exit thermal screening measures were adopted at airports worldwide.

The spatial logic enshrined in technologies of thermal screening corresponds with the main goal laid out in the IHR: providing security against epidemic disease while reducing the interferences with traffic and trade to a minimum. As a checkpoint technology, thermal screening controls bodies in passing. It fits the liberal imaginary of flows running through space (Sutherland 2013). Airport architectures, form choreographies of pathways and lanes that order the movement of travellers (Adey 2003). Metaphorically speaking, they create canals and conduits for traffic flows into which checkpoints are interpolated. Through thermal screening devices, the governmental function of securing global circulation gets embedded in the nodes of transportation networks.

However, as a checkpoint technology, thermal screening also differs from traditional forms of border control. To begin with, thermal screening operates beyond the hermeneutics of confession (Salter 2007: 57–9). It does not want to know what the traveller has just bought or how long she will stay at her destination; the apparatus for temperature detection is neither interested in intentions nor does it test the narratives for credibility. It circumvents the moment of interrogation in its desire to 'know the fleshy body' (Amoore and Hall 2009: 448) as it moves within world traffic. If one were to speak about confession at all, thermal screening does not elicit confessions of the flesh but 'confessions by the flesh' (Adey 2009: 287). Amoore and Hall (2009) have recently described the use of backscatter X-ray devices at airports in terms of 'somatic probing […] at the border' (457), and this characterisation clearly applies to the practice of thermal screening as well. At the same time, and in contrast to passports or biometric control, thermal screening does not seek to authenticate a person. Instead of verifying a social identity, it addresses the body simply as a physical object (Schillmeier 2008: 183). By focussing on the bareness of biological life, the social person reverts to an organic entity. Social markers such as gender, religion or nationality do not matter for deciding if someone is eligible to move on or

not. Of course, those forms of border control that operate through interrogation and authentication do not disappear. Rather, thermal screening works in tandem with them, enhancing the regime of 'vigilant visualities' (Amoore 2007) at the border through its medical design.

Screening technologies allow for modes of classificatory sorting. As such, they generate causes for further action. They serve the strategic goal of identifying sick bodies that may be isolated subsequently. The IHR define isolation as the 'separation of ill or contaminated persons or affected baggage, containers, conveyances, goods or postal parcels' (IHR, Article 1). Quarantine differs from isolation by its specific preventive stance: it aims at 'the separation from others of *suspect* persons who are *not ill* or of *suspect* baggage, containers, conveyances or goods in such a manner as to *prevent* the *possible* spread of infections or contamination.' (IHR, Article 1, author's own emphasis) As such, quarantine uses the spatial measure of separation to insert a delay into the movements of indeterminate bodies.

This practice follows, in principle, its historical predecessors (Gensini *et al.* 2004). In 1377, the Rector of the seaport of Ragusa issued the *trentina*: ships originating from areas with plague had to stay at anchor for 30 days before disembarking. This period was soon to be extended to 40 days, which explains the etymological roots of quarantine. Even though originally quarantine had been introduced as an alternative to simply deterring ships from landing, it was soon to be regarded as deleterious to commerce and travel. As outlined above, the International Sanitary Conferences from the nineteenth century were motivated by the aim of regulating quarantine in Europe. Yet, in 1966, when the WHO implemented the original version of the IHR, the term 'quarantining diseases' disappeared. At that time, public health experts began diagnosing an 'epidemiological transition' that would eliminate the need for border quarantine with infectious disease altogether (cf. King 2004: 62; Hinchliffe *et al.* 2013: 2).

But during the SARS crisis, quarantine had its great global revival before it re-entered the new IHR (Cetron *et al.* 2004). In Hong Kong, the authorities quarantined large parts of the Amoy Gardens Apartments; in Toronto, up to 30,000 people have been subjected to temporary arrest (Van Wagner 2008: 1650–53). In parallel with the implementation of the IHR, national jurisdictions amended existing quarantine laws or issued new ones. Until today, most international airports have established quarantine stations, the coordination of quarantine with screening procedures being one main issue in pandemic preparedness planning (Gaber *et al.* 2009). Additionally, the UN (2004) has attributed the responsibility for quarantine to the Security Council, turning quarantine into a matter of world politics: in 'the event that a State is unable to adequately quarantine large numbers of potential carriers, the Security Council should be prepared to support international action to assist in cordon operations.' (45)

In the social imaginary of quarantine, the spatial aspect of enclosure prevails. Quarantine is associated with the fixation of bodies in an inner outside. Yet, in order to understand quarantine's role in the government of global circulation envisioned by

the IHR, one has to consider how quarantine conjoins the spatial measure of containment with a temporal calculus. Quarantine reckons with the temporal lag that exists between infection and the visibility of symptoms. It operates on the indeterminacy of the body during the incubation period, that is, its potential for being a vector of contagion. Quarantine is, therefore, not so much about predicting what a body can become (Dillon 2007: 18), but simply about waiting for a determinable status to emerge. If biosecurity 'today names a set of political responses within globalisation that take the unpredictability of molecular life […] as their justification' (Braun 2007: 15), then quarantine constitutes a biosecurity technology that seeks to control the dynamism inherent in life (Hinchliffe and Bingham 2008: 1537) by containing mobile bodies. It takes bodies out of circulation temporarily and puts them at a distance to other bodies in order to see if they are actually contagious entities or not.

But how can one identify the risky body that shows no symptoms at all? The IHR give a hint about how to answer this question by referring to the 'tracing of contacts of suspected or affected persons' (IHR, Article 18). It was again within the governmental laboratory of the SARS crisis that decisions over quarantine were relegated to 'contact tracing centres'. As a study of the procedure established by the Singapore ministry of health in 2003 details, the 'components of contact tracing included the following: obtaining all patient movements during the symptomatic stage; identifying the persons who had contact with the patient during these movements; and instituting follow-up action on the contacts for a 10-day period.' (Ooi *et al.* 2005: 252) Starting from a map of movements, contact lists were to be created and a quarantine board had to decide on the basis of these lists about whom to quarantine.

According to this procedure, physical contact generates 'suspicion'. It turns a person into a 'suspect person', baggage into 'suspect baggage', or containers into 'suspect containers' (IHR, Article 1). Quarantine thus implies a thoroughly post-liberal concept of suspicion based on spatial proximity. Instead of referring to a voluntarily committed deed, the suspicion relates to a potential bodily state derived from physical contacts. Quarantine, in response, seeks to 'reduce transmission by increasing the "social distance" ' (Cetron *et al.* 2004: 73). In this governmental logic, the attribute of the 'social' has become tantamount to nothing more than material connections. Quarantine, is applied to potential carriers of contagious disease who have been in contact with actual carriers and whose potential for establishing connections with other bodies shall be interrupted. It provides for moments of dis-connectivity by means of spatial separation until bodies can, again, be securely released into circulation.

Both quarantine and thermal screening are central elements that mark out the nomosphere of global health. They are technologies of governing which entail a re-territorialisation of planetary circulation (Bach 2011; Opitz and Tellmann 2012). According to the famous definition put forward by the human geographer

Robert D.Sack (1986: 1–23), territorial practices control relationships by configuring different degrees of access to people and things. Hence, territorial practices cannot be reduced to the historically specific mode of territorialisation at work in the formation of modern state territories. Instead, territorial practices have to be conceived of in a broader sense: by 'carving the environment through boundary-drawing activities' (Brighenti 2010a: 60), they 'enable the production of functions, the management of distances and the setting of thresholds between events' (Brighenti 2010b: 223). This operative control of spatio-temporal relationships and accessibilities lies at the very core of both quarantine and screening. As territorial practices designed to administer circulatory movements, they do not establish habitats, but *mobilitats*.

Despite their differences, screening and quarantine share two territorial functions. First, within the contemporary context of the 'new virologies of globalisation' (Galloway and Thacker 2007: 90), they introduce practices of division into circulation. Both technologies implement mechanisms for identifying risky bodies, and they do so for the purpose of differentiating the safe against the potentially dangerous elements. Since these modes of classificatory sorting distinguish bodies that can pass from those that cannot, one might portray them in terms of territorial exclusion. However, it is important to note that they do not seek to secure a territory against threats coming from outside. Rather, according to the rationality of the IHR, they intend to moderate circulatory flows in their immanence. The notion of 'differential inclusion' (Mezzadra and Neilson 2013: 157), therefore, seems preferable for characterising the role screening and quarantine play in the current regime of global health security. It avoids the idea of an outside in favour of picturing a continuum of discriminating thresholds.

Furthermore, both screening and quarantine configure different degrees of mobility and immobility (Salter 2013). Borrowing from Lefebvre (2004), they can be qualified as rhythmtechnologies: by producing flexible boundaries and temporal halts within circulatory processes, they structure the velocity of movements and the intervals of connectivities. Measures such as quarantine and screening thus deploy spatial means for temporal ends. They act on infection rates in order to slow down or delay the spread of disease (cf. Schlaich *et al.* 2012). Such efforts at manipulating circulation take into account both social and biological rhythms. In fact, the latter distinction loses its significance in favour of those material relations that produce frequencies of connectivity. Each body may be a point of contact and contagion is the prime mechanism to be reckoned with.

In a thick description of the emergency government during the SARS outbreak, Wang Min'an (2004) has noted that sociological models have failed to make sense of this situation: 'What is needed is an antisociological account, an antisignifying account […].' (589) Min'an has observed a decreased impact of symbols and meanings as soon as the bare physicality of bodies in divided spaces takes precedence. 'In general, then, only two types of bodies exist: virus-carrying bodies and non-virus-carrying-bodies.' (*Ibid.*) This corpo-realism that is born out of a

situation of emergency seems to have captured the imaginary of global health governance. The technologies of screening and quarantine correspond with the IHR's overall concern for the materialities of human and non-human traffic. While thermal screening addresses organic life in its physical properties, quarantine seeks to control any entity — animals, humans, conveyances or even buildings — that has been exposed to a contagious agent. As territorial strategies, they modulate the capacities of bodies to connect both by configuring their distance and their rhythm.

Conclusion: the 'nomadic nomos' of global governance

The findings presented in this article may inform the wider theoretical debate about how to conceive of contemporary political spaces. Within the last decade, spatial theorists have, to a large extent, relied on a binary matrix that opposes absolute to relational spaces, topographies to topologies, and territories to networks (Amin *et al.* 2003: 6). In order to evade the 'territorial trap' so famously identified by John Agnew (1994), one had to side conceptually with the relational topologies of networks, privileging the fluid over the fixed. Only recently inverse warnings about a 'non-territorial trap' (Jones 2009: 494) have re-emerged together with the efforts to integrate the different registers. The analysis presented here offers a contribution to this problematic. The nomosphere of global health security delineates a 'movement-space' (Thrift 2004) composed of mobile bodies that act as relational transmission media. Potential patterns of contagion emerge from the patterns of world traffic. On the one hand, this amounts to a 'topological landscape of embeddings and disembeddings' (Hinchliffe *et al.* 2013: 538) in which relations are conceived of in terms of intensities. Topographic distances matter less than the potential of a body to affect other bodies. At the same time, however, the extensive properties of relations remain salient. The bodily potential to affect and be affected is intertwined with topographical processes of diffusion and dissemination. Distances matter strongly. Yet, rather than being seen as fixed, they are conceived of as highly malleable. Territorial strategies seek to re-configure distances along with permeabilities, velocities and rhythms. The nomospheric investigation of global health security thus helps us understand how territorial strategies become imbricated in global topologies. Instead of opposing the territorial and the topological, it prompts the sociology of political space to think of territorial practices topologically.

But how does such topological territoriality challenge the national political territory as the basic unit of the modern international order? This article started with the suggestion that the diagnosis of SARS being the 'first post-Westphalian pathogen' belongs to a particular problematisation of governmental space. As Jean-François Lyotard (1997: 1–17) has pointed out memorably, the suffix 'post' does not claim an absolute caesura. It much more indicates a transformation that remains indebted and tied to that which it transcends. Accordingly, this article has not

presented a diagnosis about a neat transition from international politics to world politics (Walker 2010). In a way, one just has to look at the cartographic lines on world maps in order to register the persistence of the modern state form. Accordingly, the IHR do not simply bypass the state. They rather mobilise intergovernmental institutional backup for realigning the organisational capacities of states, thereby assembling a globally networked governance structure designed to control circulatory processes that harbour the potential for universal viral traffic.

However, the IHR do so by changing and challenging the function of territoriality. Within the framework of the modern *nomos* of the Earth, law and territory were coupled to achieve both *Ordnung* (order) and *Ortung* (location) for a defined political nation. This coupling seems to dissolve as soon as globalisation can be equated with 'global mobilisation' (Galli 2010: 114). The IHR as a global juridical document establish a different conjunction between law and territory: territory turns primarily into an ordering mechanism for bodies in movement. The *nomos* of global circulation enshrined in the IHR, therefore, resembles what legal theorist Cornelia Vismann (2012: 37), in a different context, has termed a 'nomadic nomos'. Seen from the modernist angle, a nomadic *nomos* can certainly only be perceived as a paradox: a *nomos* without the localisation of order. Nonetheless, *nomodicity* might in fact be the political-juridical signature of the global age, in which 'global space forms itself through a *universal immediacy of mediations*' (Galli 2010: 113). But what happens to the political qualities formerly associated with the act of *Ortung*? The juridical-political laboratory of epidemic communicability simultaneously contains and hides how contemporary political collectivity is constituted spatially. Yet, as long as a life in communities of traffic does not count as a proper mode of political existence, the question about the location of a polity under conditions of intense globalisation remains to be answered.

Notes

1 'Alle Menschen, die aufeinander wechselseitig einfließen können, müssen zu irgendeiner bürgerlichen Verfassung gehören.' (Kant 1977: 203) I would like to thank Peter Niesen for discussing with me Kant's argument about the relation between cosmopolitan law and the empirical properties of the Earth.

2 This is an aspect mostly neglected in analyses inspired by Foucault (Golder and Fitzpatrick 2009: 11–25). Foucault's famous critique of a juridical understanding of power has led to a regrettable disregard for the juridical by scholars working with his concepts — in addition to ignoring the reference to Kant in this decisive passage on international relations.

3 Until the end of the nineteenth century, debates on public health were heavily influenced by the questions of whether diseases transmission occurred through contagion or not. However, it is beyond the scope of the current argument to trace the lines of the multifaceted disagreement between 'contagionists' and 'anti-contagionists' (Ackerknecht 2009). The disagreement was resolved by the discoveries of bacteriology and has no direct bearing on the contemporary cartography of global health security. Nonetheless, it holds an important lesson for investigating the spatiality of political interventions. At the risk of oversimplifying, it can be said that measures of quarantine relied on an at least rudimentary notion of contagion, whereas those who stressed the importance of miasmatic

pollution favoured social reforms to improve the sanitary environment. This constellation thus exemplifies the mutual entanglement of scientific doctrines, epidemiological paradigms and political agendas. As will be demonstrated below, it is today the epistemology of the 'emerging infectious disease worldview' (King 2002: 767) that implies a particular spatial conception of global interrelatedness and corresponding modes of governmental intervention. The government of pandemics always already involves a 'politics of nature' (Latour 2004) that turns 'matters of fact' into 'matters of concern'.

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