

A global and/or national crisis

Cartographic imagery during the COVID-19 pandemic in Mexico

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About the Special Issue: Discourse Studies Essays on the Corona Crisis

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This special issue seeks to collect ideas, reflections and discussions on the multiple aspects of the ongoing corona crisis from a discourse analytical and discourse theoretical point of view. We publish short work-in-progress papers (approx. 1000–3000 words) that take empirical, ethical, psychoanalytical, economic, political and everyday aspects as starting point for developing discourse analytical research ideas and reflections which can be further developed into full research papers at a later time.

A global and/or national crisis

A global and/or national crisis: Cartographic imagery during the COVID-19 pandemic in Mexico

Giulia Montanari

Since it became obvious that the new Coronavirus would come to be dispersed worldwide, the number of cartographic materials published exploded. Archives such as the US-American Library of Congress had to deal with an enormous number of new acquisitions (Bliss 2020), while the general public is confronted on a daily basis with journalistic maps that illustrate the current dispersion of the COVID-19 disease – on a national and global level. Those maps are informing our visual knowledge of the pandemic and present it as a global crisis that is at the same time being dealt with nationally. Aim of this contribution is to discuss from the point of view of sociology of knowledge and critical cartography the way in which these maps communicate an understanding of the pandemic as a crisis that affects national territories as well as the world in different ways spatially and therefore contribute to a broadly shared knowledge of uneven territories (within countries and internationally). At the same time, they are reproducing a visual interpretative pattern that sees nations as the ones hit by the virus and the institutional unity to act. Empirical examples for the discussion are maps published in Mexican newspapers.

Keywords: visual discourse, critical cartography, pandemic maps, territorial nation state

1. Cartographic negotiations of the COVID-19 pandemic

Apart from maps that are used in scientific publications, there has been a long history of cartographic depictions in newspapers. Just as infographics, they have been around almost since the beginning of newspapers as mass outlets in the 19th century (Klein 2016, Monmonier 1989). Disease maps specifically accompanying not only scientific investigations but also media reports have a long history (Koch 2017), so it was nothing surprising that the reports on the new Coronavirus were accompanied by maps since its global spread began. Maps of the pandemic are by now an integral part to the daily news just as weather maps.

The inclusion of maps depicting the current spread of the new coronavirus in news reporting was also supported by institutions such as Johns Hopkins University which made available a graphic panel through an online platform. It is an interactive map panel which allows you to access the most current data on COVID-19.¹ The design of the panel as provided by the firm ESRI, a provider of Geographic Information Science applications, with its black background and the red dots that represent the number of cases in the respective country, and has often been used without changes by different news outlets (image 1).

Considering the immense number of cartographic imagery that is now integral part of many daily newsblogs on the COVID-19 pandemic, it is not an exaggeration to say that the public debate of the crisis is strongly characterized also by this kind of cartographic imagery. These maps are in-

1 <https://coronavirus.jhu.edu/map.html>

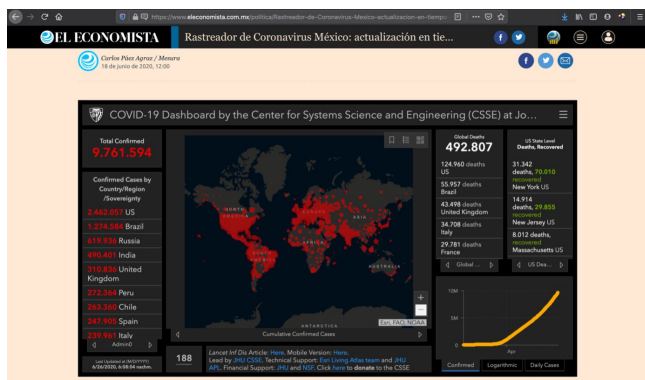


Image 1: Online article on COVID-19 by the newspaper El Economista (June 18, 2020).

forming the collective memory of this historic event. At the same time, the public negotiation of it happens in a differentiated way across societal groups. Some milieus are consuming maps of specific news media with specific styles that emphasize different aspects of the data and influence how the data is read. Just as the numbers themselves, maps are therefore an element within the societal knowledge about the pandemic that enforce or occult specific narratives, imaginaries or affective atmospheres. The fact that numbers and data can be interpreted differently has also been part of a global meta-discussion on science and data, under the name ‘infodemic’. In this sense, a societal learning process is taking place which might change the way in which also maps are integrated into public discourses.

2. Maps reproducing the dispositive of the territorial nation state

Maps are understood here as a cultural artefact that summarizes societal knowledge about a specific field, and at the same time make it available to social negotiation. Following Berger and Luckmann, they are objectifications (Knoblauch 2013, 29), sedimented meaning, which produce a social reality which always needs interpretation and therefore always is a preliminary reality never fully closed and fixed. Similar to text or language, the logic of visual media such as maps follow specific structures typical for their time and/or the knowledge context (Knoblauch 2013, 40). That means for maps: “the ‘rules of the social order’ appear to insert themselves into the smaller codes and spaces of cartographic transcription” (Harley 1989, 6).

Since the European Enlightenment, maps are used as a communicative form that follows a rational idea of science and ought to present ‘facts’: “the scientific Renaissance in Europe gave modern cartography coordinate systems, Euclid, scale maps, and accurate measurement” (Harley 1989, 6). That implicates also a power claim: “The topogra-

phy as shown in maps, increasingly detailed and planimetrically accurate, has become a metaphor for a utilitarian philosophy and its will to power” (ebd. 10). This Euclidian space can be observed and therefore be controlled. Within this positivist approach of cartography, a scientific visualization regime was established in the 1960s that is based on the assumed evidence of vision (Michel 2017, 695). Maps as well as other visual forms such as graphics or tables intend to make quantitative knowledge visually comprehensible (Wintzer 2015, Michel 2016, Pickles 2004, 77). Thematic maps visualizing and localizing topics such as population density or election results are a specific form of an infographic. They transform abstract, mathematical knowledge into a visual form that suggests we can see from a bird’s perspective what ‘really’ happens in a bounded territorial space – thanks to the positivist cartographic gaze (see Pickles 2004, 80).

This territorial space is organized through national states. In the map, the national state is presented as a territorial sovereign that can be mapped in Cartesian space and has discrete boundaries. Branch (2011, 1) even proposes that it became only possible to think of modern national states thanks to advanced cartographic technologies: “mapping was fundamental to three key characteristics of the medieval-to-modern shift: the homogenization of territorial authority, the linearization of political boundaries, and the elimination of nonterritorial forms of organization“. As a “power container” (Vujaković) the state is presented in modern maps as a discrete object in a linear space, which contains also discrete sub-terrains. Seen from a discursive approach, most maps – independently from the topic they are presenting – refer to the meta-dispositive of the territorial nation state (see Diaz-Bone 2013, 95; you can find a critique of the “territorial trap” in the context of COVID-19 in Wang et al. 2020). Part of this cartographic knowledge are also all the thematic maps in classic school atlases which visualize for example the economic factors of a country, natural characteristics, or the spatial distribution of a specific phenomenon such as cities of different sizes or the like.

Pandemic maps as a specific form of thematic map present a topic as expert knowledge that ought to explain a phenomenon spatially – or rather, that proposes that its spatial distribution is relevant. Pandemic maps are a map genre in which the spatial distribution of a negative phenomenon such as a disease is visualized, that spreads by the existence of co-present situations from human to human. While in other thematic maps spatial explanations follow a logic of physical nearness between stationary objects (big city – high population density, the sea – ports), in the case of viruses we see a mobile phenomenon that also follows mobility paths. This high mobility is emphasized in animated maps visualizing the temporal development of the disease. The dangerous virus spreads parting from single ‘hotspots’ – or retracts. Potentially, the virus can spread across the whole territory – but this happens in some spaces more

easily than in others, depending on the population density and its mobility flows (which include airplane paths). Pandemic maps therefore help find relationships between the virus, its carriers and spatial-ecological aspects (Koch 2017, 1). Maps depict territorial disparities that supposedly need explanations and interpretations in the text part of news articles. One important aspect up to discussion is oftentimes the locally implemented measures that helped/disabled the spread of the virus. While space is homogenized (potentially, the virus can spread evenly throughout the space), there are many disparities at display.

Pandemic maps carry with them not only visually thematic frames and rational-spatial logics (territorial nation state, homogenic space, differences between distinct sub-spaces due to their characteristics (for example density or policy measures taken), spreading due to physical co-presence), but also activate associations that are emotionally charged. That might in this case be the danger of potentially disease that limits the capability to breathe, and which comes dangerously close (or retreats when it is successfully combated). In the sense of visual framing as “a latent structure of meaning, constructed through a semantic unit of specific informational visual cues, all presented simultaneously” (Geise 2017, 1), maps connect several knowledge reservoirs and patterns (such as territorial battles in wars in which ‘the enemy’ gains or loses terrain).

3. Example: The cartographic depiction of the COVID-19 crisis in Mexico

In the beginning of the epidemic, when fears of a global pandemic began to arise, global maps were a very common feature in reports on COVID-19 (see for example image 2). They located the countries in which cases of the new coronavirus have been documented. The global maps alone were at the same time enforcing the idea that this was a global, transnational problem, while still referring to national states as power containers and the individual unities that were affected by the virus. Practically, this translated into local policy measures as for example travel bans.

As soon as the virus hit Mexico, just as in other countries, national maps depicting the spread became more common, up to the point where it is a lasting infographic on many in-

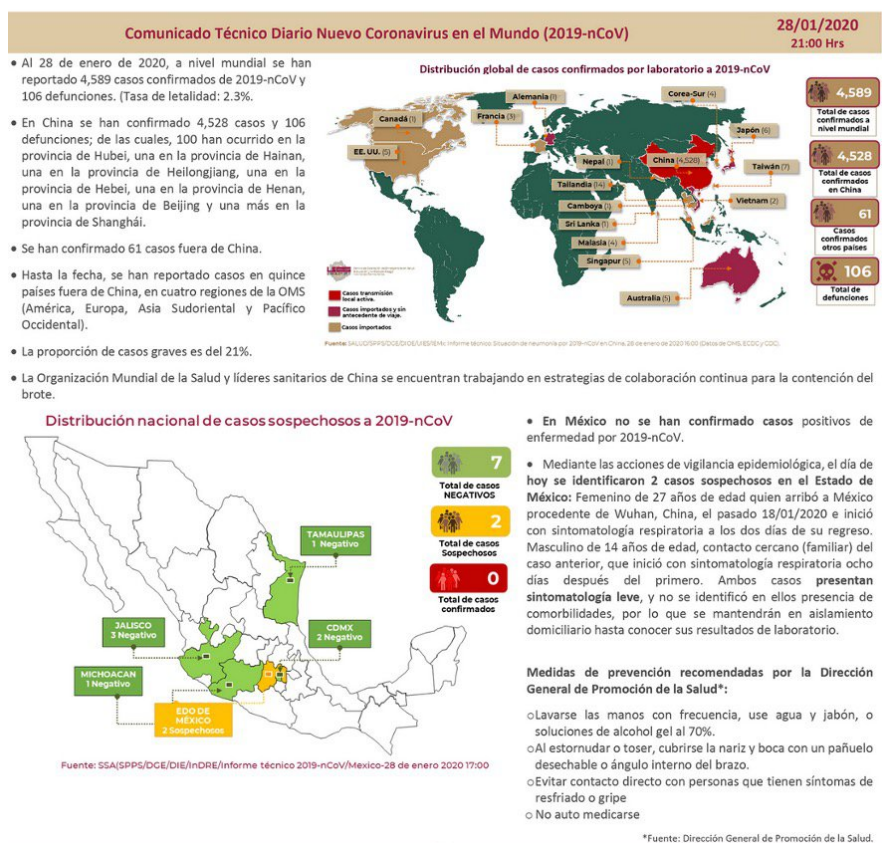


Image 2: First page of Mexico’s Secretary of Health daily reports on the new coronavirus, February 28, 2020

troductory pages on COVID-19. The thematic information that is depicted in these maps is broad. They visualize for example the number of cases per 100.000 inhabitants, the epidemiological state the federal states are in (in Mexico similar to a traffic light: red, orange, yellow and green), absolute numbers, or the dynamic of the spread (increase, decrease). In some cases, maps are also used to localize only some federal states that are characterized in more detail (such as in the second map in the collage of image 3).

And as the global maps before, they depict an antagonistic tension: The virus can be found throughout the country, but it hits the federal states in different ways. It refers to territorial entities as the ones where health policies are aimed at. This territorial trap comes with several problems, as it does not meet the everyday lives of many people moving within these territories, as Wang et al. explain for the example of migrants: “since international travelers and migrants are not fixed in a single territory and may have multiple citizenships, they cannot be precisely placed in territorialized governance” (Wang et al. 2020, 155), and “territorial traps can still be found among the thousands of stranded migrants all over the world due to border closures and travel restrictions” (Wang et al. 2020, 155 f.; the stricter border

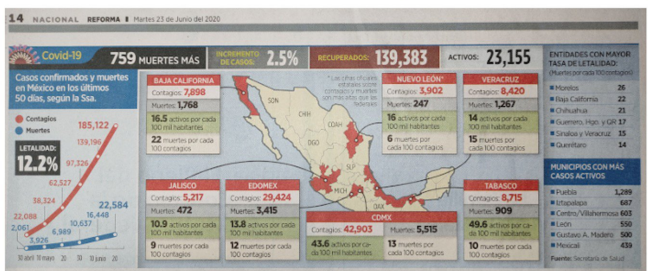


Image 3: COVID-19 maps in Mexican newspapers on June 23, 2020

4. Conclusion: Re-negotiating the nation state through maps

Maps can visually frame an event such as the COVID-19 crisis, and activate associative emotions and affects. To the reader, that can have several cognitive effects: “It can activate existing schemata in the recipients’ minds (i. e., have an activation effect), change them in the direction of the visual media frame (i. e., have a transforming effect), develop new schemata (i. e., have an establishing effect), or change attitudes and opinions (i. e., have an attitudinal effect). Additionally, it can trigger emotional responses toward the communicated content; such affective effects can also mediate and amplify the cognitive effects” (Geise 2017, 2).

The maps which form part of the visual imaginary of the pandemic are representing scientific truths, while at the same time the public perception of numbers as fixed truths has been questioned. Already at the beginning of the pandemic it was noted, discussed and instrumentalized that absolute numbers such as those used for maps are not easily interpreted and for example, represent more the test capacities than actual COVID-19 cases. This has led to a social learning process that even goes so far to question the integrity of infographic makers (for a scientific critique on COVID-19 maps see Mooney/Juhász 2020), preparing also the ground for “alternative mathematics” (Amin 2020) in so-called sceptic circles.

Disease maps are a visual communication form within a multi-modal discourse (Egbert 2019). In it, social power relations are negotiated – and in the case of maps, the territorial nation state as a power container is visually framed and unquestioned referred to as a relevant action entity – and therefore continues to be an important reference in public discourses.

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