

Bordering Processes: The evolution of social borders at the time of the Covid-19 pandemic

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Abstract

The global pandemic outbreak, due to its nature of being transmitted through physical proximity, has created an immediate need for physical distancing and reinforcement of private and personal spaces of individuals. This need has caused a gigantic 'kinopolitical' event that has resulted in a drastic change in social, spatial and virtual borders. However, due to the sudden nature of this re-bordering of space, there has been a movement to virtual spaces to meet the social, emotional, cognitive and economic needs that were left unfulfilled. This has forced a greater permeability to virtual spaces of interaction - a kind of de-bordering of virtual spaces.

In this paper, we examine the emerging consequences of changing social order in India and Bahrain from the lens of the border theory. In the contexts of both countries, border theory has been used to offer insights into the following questions:

- *How can we use border theory to analyse and evaluate pandemic response strategies employed so far?*
- *Who are the re-bordering and de-bordering processes serving and who are they excluding?*
- *What needs to change with individual strategies that can make pandemic planning more inclusive?*

A qualitative approach has been used to analyse the newspaper coverage and the official announcements during the ongoing pandemic in India and Bahrain dating from March 2020 to September 2020. Through the examples of insights derived from the analysis of 3 case studies or instances, we conclude with a discussion on the different kinds of insights that analysis of pandemic response strategies through the lens of border theory can generate in order to facilitate restructuring pandemic response strategies to be more inclusive and holistic in both their planning & execution.

Keywords: Border Theory, Physical Distancing, Inequalities, Exclusion, Pandemic Response

Introduction

“Billions of people are in lockdown, unable to visit one another, unable to go to work, unable to attend school, unable to meet one another in public places. People around the world are in desperate straits, struggling at home, in care homes and intensive care units, dying of the same cause, separated from their loved ones in their hours of need. At times of existential danger, we instinctively desire to be close to our family and friends, hold their hands and embrace them – but now we are forbidden to do so, for every act of physical contact – every expression of physical loving-kindness and compassion – could bring illness and death”.

(Snower, 2020)

The COVID-19 pandemic due to its highly communicable nature, brought with it the need for physical distancing in order to prevent the spread of the disease. This has transformed the way societies operate today. Individuals, societies and nations have changed the conditions of entry into their physical spaces. They have become more introverted and wary of interactions with others. Those who don't hold certain privileges of belonging within various borders and boundaries (citizenship, residency etc.) have found themselves at the brink of exclusion. This restriction to access or freely inhabit various spaces has been facilitated by the changing rules of the borders in these physical spaces. For example, in India and in Bahrain, during March to September 2020, many residential apartment complexes continually or intermittently restricted the entry of food or e-commerce delivery people to the gates and also intermittently prevented visitors (guests, friends, relatives etc.) of the residents from entering the apartment gates (Mohfw, 2020).

This shift to more introverted spaces has created both new physical borders that didn't exist before and also has strengthened many existing physical borders. Cities are political spaces that are formed due to the authoritarian and top-down models (Nawratek, 2014). In the pandemic, these authoritarian decisions have hugely impacted the spatial borders that we live with. This process of re-defining and changing existing border conditions by making them more exclusive/restricted and of creating new borders within previously borderless physical spaces is what we shall henceforth refer to in this paper as Physical Re-Bordering.

Due to these physical re-bordering processes and restricted physical movement, there has been an unprecedented kino-political shift to online/virtual modes of interactions and socio-economic exchange. The social and economic processes that occurred in society in the physical space moved online (Fig. 3). Applications, programs and websites that were previously used as a matter of convenience began being used for necessity. Many of these websites and applications have also sprouted new uses and functionalities to satisfy demand and customer expectations. Some applications that were sparsely used by the society before such as Zoom found exponential increase in their usage (Iqbal, 2020). However, this process did come with many disadvantages such as data privacy issues, exclusion of many who couldn't afford or have access to the internet and devices to access the internet. This process of the global kino-political shift towards virtual modes of interaction and the increase in the permeability of virtual borders is what shall be referred to as virtual de-bordering in this paper.

Literature Review: Border Theory as a Framework for Discourse

The borders discussed in this paper are not merely static physical boundaries - they are fluid, changing and permeable (Nail 2016). In “Theory of The Border”, Nail outlines three core

concepts of social motion/kinopolitics - flow, junctions and circulation. While “flow” refers to the movement of people, the junction is the point of decision where the determination of whether a flow can be expelled or recirculated within the border occurs. It is the resultant circulation that defines or re-emphasizes the border. (Nail 2016, p. 07-35)

“...the process of circulation and recirculation performed by borders is not under the sole control of anyone, like the sovereign. The power of the border to allow in and out is profoundly overdetermined by a host of social forces: the daily management of the border technology (the motor), the social acceptance or refusal of the border (the drivers of the border vehicle), and the subjective whims of those who enforce the borders (to accept bribes, and so on). The techniques of border circulation only have the strength that society gives them.”

(Nail, 2016:08)

Further to Thomas Nail’s explanation of junctions, through this analysis, we propose two core aspects of these junctions:

1. **Border Conditions:** The parameters/conditions that dictate circulation i.e. how the Junctions expel and redirect flows. The border conditions also determine who passes through the border and who is sent back in. Therefore, they dictate the permeability of the border.
2. **Border Mechanisms:** The mechanisms i.e. the technologies, drivers of the border vehicle, their subjective whims and practices used in the junctions to execute the border conditions i.e. to maintain and reinforce borders. Border mechanisms determine the extent to which the border conditions are enforced.

In order to understand junctions and their bordering processes, it becomes crucial to examine the persons or organisations responsible for allocating either or both the border conditions and mechanisms to various junctions. As Nail explains, “The techniques of border circulation only have the strength that society gives them” (Nail, 2016). As borders are primarily designed as mechanisms of inclusion and exclusion, another crucial aspect of examination is the identification of those excluded by the border in discussion and the nature of this exclusion. As Michaelsen & Johnson elucidate in their text -

“We begin with an understanding that for all of border studies’ attempts to produce a cultural politics of diversity and inclusion, this work literally can be produced only by means of— can be founded only upon — exclusions.”

(Michaelsen & Johnson 1997:3)

Therefore, through this analysis, we aim to shine light on persons/organisations who are reinforcing these conditions and the persons/organisations who are most vulnerable to both the border conditions and the methods & technologies of their reinforcement (Fig. 4). While discussing exclusions, it also becomes crucial to examine the role of those who benefit from the processes causing the exclusion. In order to understand this better, the concept map (as seen in Fig. 4) was then layered with questions about relationships between components which were not strictly hierarchical in order to investigate the relationship between the beneficiaries of the bordering process with those who created the bordering mechanisms and with those who created the border conditions (Fig. 5).

An examination of processes that came into picture during the pandemic outbreak, through the lens of the border theory, prompts the following questions:

- 1) What were the nature of the junctions in the spatial re-bordering & virtual de-bordering process i.e. what were the conditions of these junctions and the mechanisms through which the new borders were reinforced?
- 2) Who instrumented these bordering processes? What were their drivers and key motivators?
- 3) Who did these borders exclude and what was the nature of this exclusion?
- 4) What are the interrelationships between the nature of the junctions and the resultant exclusion?

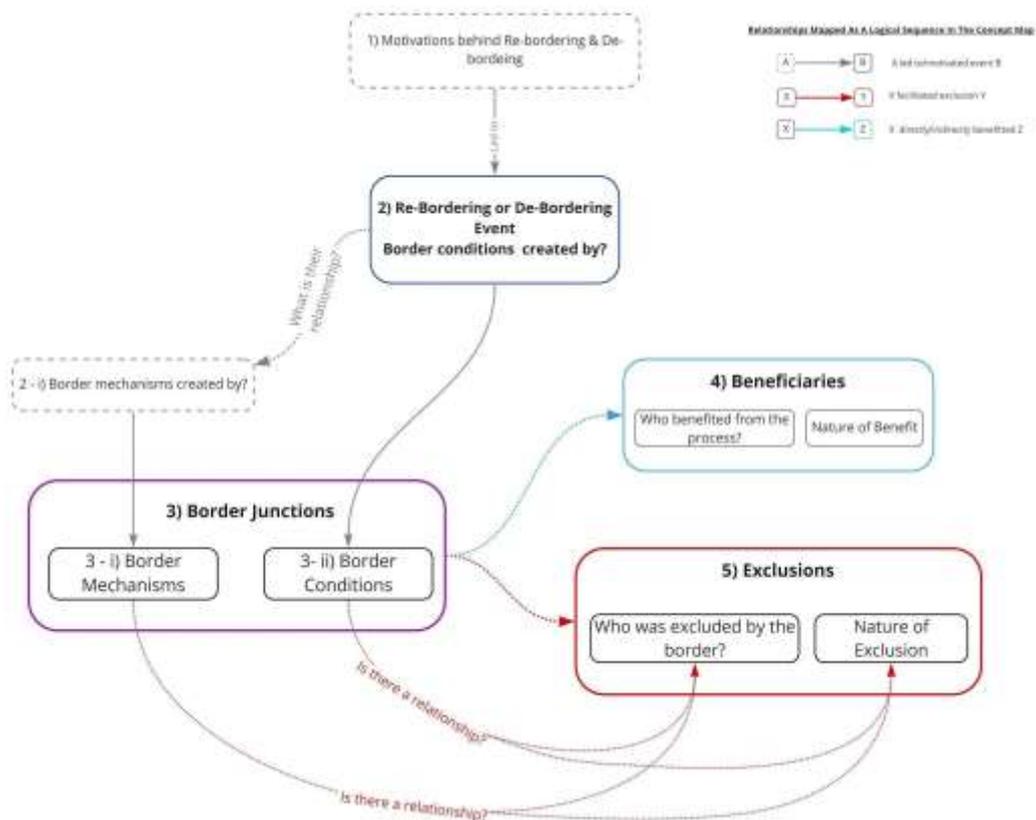


Fig. 4: Image depicting the concept map framework created to examine bordering processes based on “Theory of The Border” (Nail, 2016).
Source: Authors

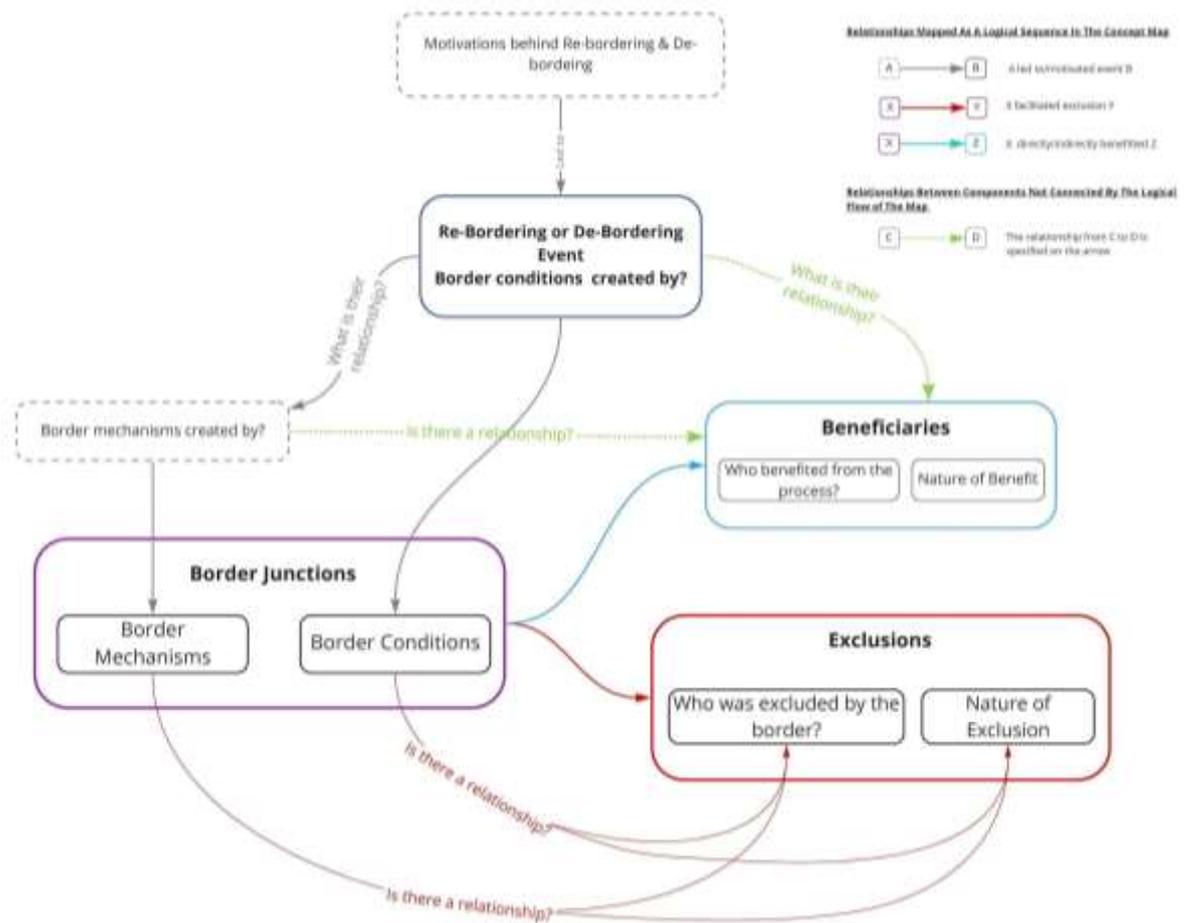


Fig. 5: Image depicting the concept map in Fig 4 expanded to include investigations of relationships not covered in the previous framework (depicted through green arrows).

Source: Authors

Methodology: Observations

“Explanation of natural behavior began to be rooted in rational constructions rather than in mythical ones”

(Groat & Wang, 2001:73)

This paper employs border theory as constructed in Thomas Nail’s “Theory of The Border” (Nail, 2016) as a lens or a rational construction, in the contexts of India and Bahrain to “seek to develop a description, explanations, and predictions that hold true in all cases of a behavior under study” (Groat & Wang, 2001).

In later sections, this paper will perform correlational research that will tie the two contexts of Bahrain and India, through clarification of bordering patterns found in both contexts as two different variables in a causal comparative study (Groat & Wang, 2001). In a causal comparative study, the physical environments and the kino-political shifts to virtual modes of operation between March 2020 and August 2020, in both India and Bahrain will be compared through collected data that are relevant for each of these contexts. These variables (bordering

patterns) will be generated as the discourse that will become the base of this causal comparative study. The intention of this study is not merely or primarily the comparison itself, although the name implies so. This study aims to examine the exclusions caused by the physical, social and virtual changes in the environment that were a consequence of the COVID-19 pandemic, by employing the lens of border theory.

This study is based on a comprehensive analysis of both the newspaper coverage by various news media organisations and the official announcements, advisories and circulars issued by the Government ministries on the happenings around the ongoing pandemic in India and Bahrain in the time-duration of March 2020 to September 2020. The initial observation was done through observations of a number of articles that showed within their titles an indication of the state of change in the borders, whether it was re-bordering or de-bordering in order to contain and prevent the spread of the virus. After the initial observations were made, three instances were selected to be analysed in greater detail. The number of articles referred to varied for each country. To understand the Indian context, a number of news articles were referred to (n=53) followed by circulars and advisories issued by the Ministry of Health and Family Welfare (MoHFW) & Ministry of Education (MoE) (n=15). In Bahrain, the sources came from two main streams, newspaper articles (n=34) and the website of the Ministry of Health, news section. The search algorithm “covid-19 or pandemic or new corona virus” was applied (Fig.1)

Using qualitative methods and interpretation is mostly subjected to limitations. The articles sourced from newspapers were limited to what was found using the search algorithm. There might be many articles that might have been left out due to the date of their publication not falling within the period set at the beginning. Relying on news media coverage and the Ministry of Health in Bahrain, and the Ministry of Health and Family Welfare & Ministry of Education in India may have set the tone of voice of what has been represented in this research.

Another tactic employed in this paper which is also commonly used in correlational research, is the observation in practice. The fields of observation for this study are the borders between public physical spaces, private intimate physical spaces and virtual spaces. The observations of the authors/researchers happen in these three fields according to the discourses of the study generated from the data collected from the newspapers.

Discourse as an approach for the analysis is mostly related to linguistics. The language is the most known way for communication and making meanings (Machin & Mayr, 2012). Yet, language is not the only way to do that; visuals can communicate meanings more profoundly. Visuals are expressive and make communication easier in contexts where large amounts of data is being processed and presented. The research contained in this paper is dependent on both the literature obtained from various sources and on the observations of the researchers. The methods of observation chosen by the researchers in this paper are in the form of visuals and maps (Fig.2)

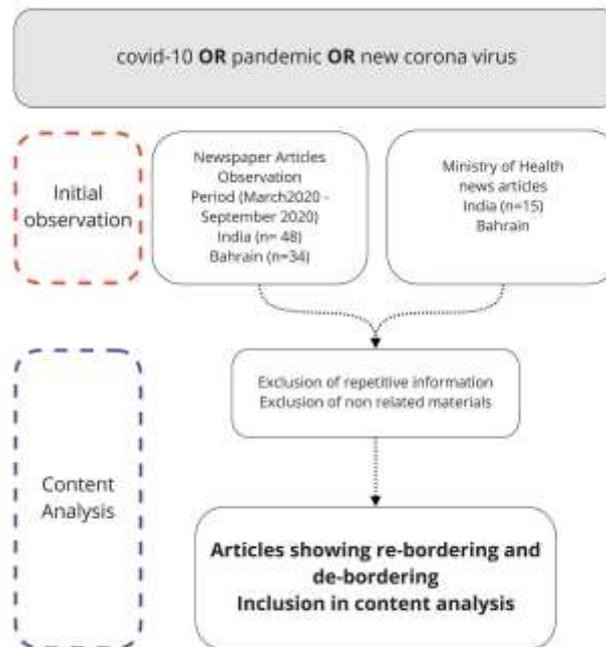


Fig. 1: The diagram reflects the search algorithm used for the sources of initial observation and how the exclusion was done to the articles to use their content is the analysis.

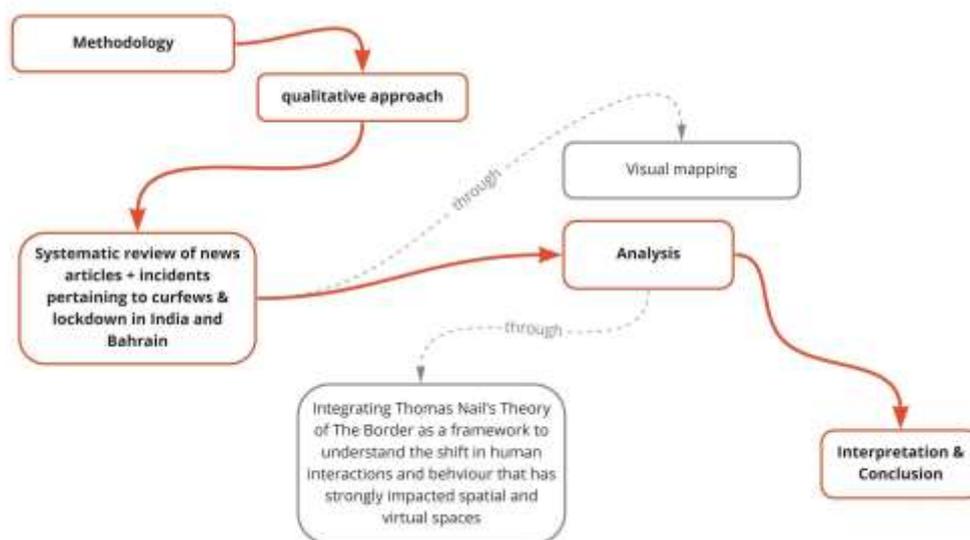


Fig. 2: Image depicting the attempt at virtual de-bordering : transferring functionalities of physical spaces to virtual modes, in India and Bahrain

Methodology: Analysis

Concept maps are a tool widely used as a data visualization technique to define problem statements in design thinking in order to “unpack and synthesize findings into needs and insights, scope a meaningful and actionable problem statement” (Kernbach and Nabergoj, 2018). Santiago

refers to concept mapping as a subset of visual mapping where visual mapping is defined as a tool “to explicitly explore, analyze, synthesize and share ideas” (Santiago, 2011). The two significant features of concept maps are that they are hierarchical in nature and that they specifically define the relationships between various concepts by the use of signifiers (as seen in Fig 4). Therefore, a concept map is a structured relational tool used for analysis (Eppler and Burkhard, 2007).

In this paper, we present concepts from the Border Theory as elucidated in Theory of The Border (Nail, 2016) as the structural framework for our concept maps (Fig. 4) in order to understand exclusions, new pandemic-related policies and mechanisms of their implementation around the bordering processes that prevailed in India and Bahrain from March 2020 to September 2020. This visual framework (of the concept map) is used as a visual analytical tool to process information extracted & conclusions drawn from a detailed review of various news sources in order to generate insights about the bordering processes initiated in India and Bahrain as a direct/indirect consequence of the pandemic.

Another data visualisation tool that is more commonly used in qualitative research to map the large amount of data collected visually for the best understanding is the mind map. A mind-map is used as a method “to brainstorm and summarize information” (Santiago, 2011). In Fig. 3, a mind-map has been used to process initial observations made and specifically map out the virtual applications that people found as alternatives to the physical spaces or services.

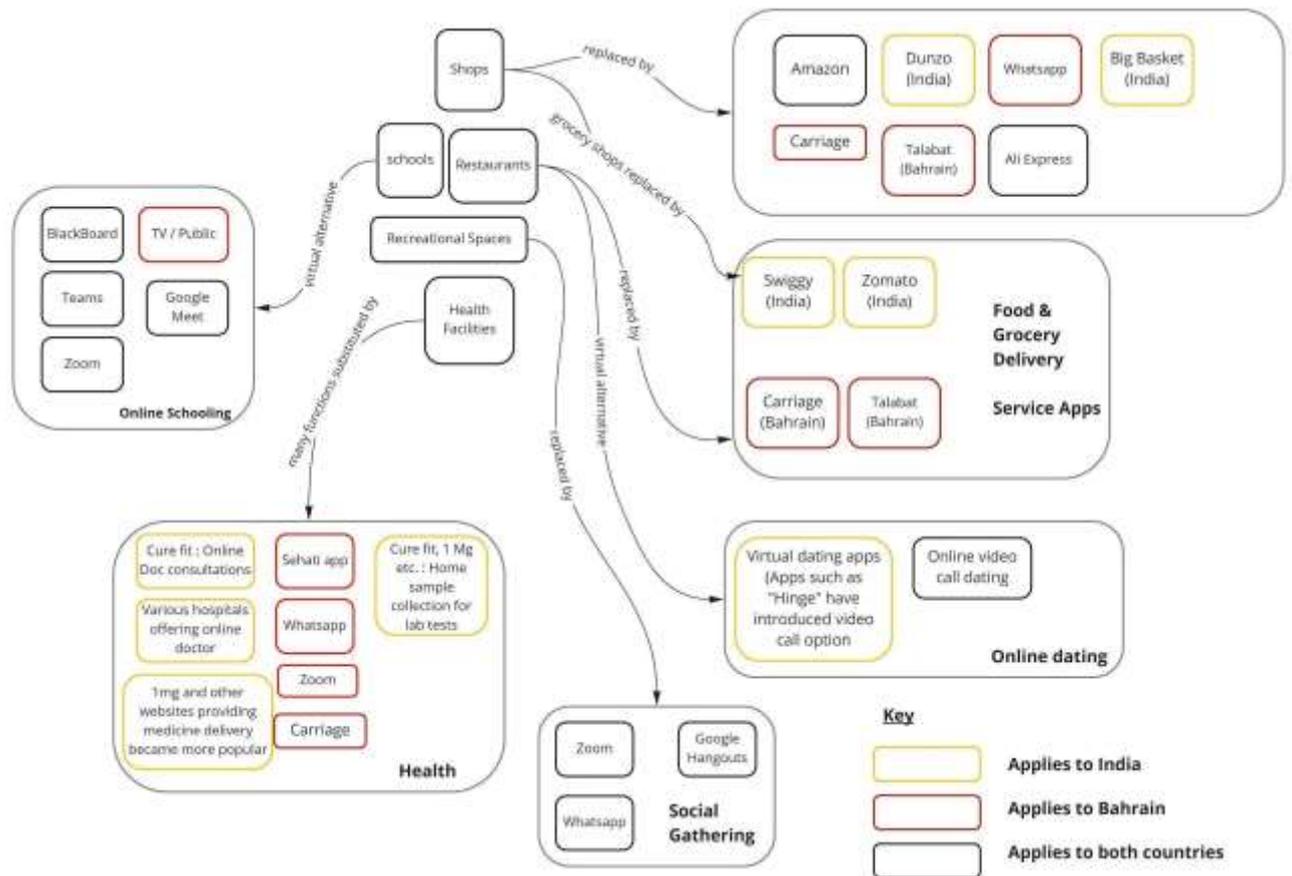


Fig. 3: Image depicting the attempt at virtual de-bordering: transferring functionalities of physical spaces to virtual modes, in India and Bahrain, Source: Authors

The Context: India and Bahrain

Bahrain and India are two developing countries that weren't in the mainstream global narrative of the pandemic between March and September 2020. The global narrative of the COVID-19 pandemic was focused on the UK, European countries and the United States of America although during this period, India had the 2nd highest number of cases globally. Bahrain, on the other hand, was 54th on the scale of active cases. The population of Bahrain is comparable to the population of a non-metro tier 1 city in India. The total area of Bahrain is approximately 765 sq.km whereas the area of India is approximately 3,287,590 sq.km (Largest Countries, 2021). The area of Bahrain is comparable to that of a metro tier 1 city in India such as Bangalore (741 sq. km). Therefore the lessons learnt from Bahrain as a country can be useful for discussing Indian cities and vice versa.

The first positive case of COVID-19 in Bahrain was detected in the community of school bus drivers. Hence, educational institutions were shut down for two weeks from 24th February owing to concerns about the possibility of large-scale transmissions. This was the first instance of spatial re-bordering in Bahrain. This closure period for institutions was further extended as the outbreak grew bigger. A form of re-bordering that attempted to limit human-to-human contact, came into effect when a remote work policy which was stated on the Ministry of Health News (22 March 2020) was enforced from the 22nd March in Bahrain. The policy stated that at any given time, only 50% of the office workforce would be physically present in the workplaces and the rest should work remotely. Working mothers were exempted from working in offices and were allowed to work from home as of the day after the policy was announced. Simultaneously, the borders of the country were closed for tourists and travellers coming in from other countries. This closure caused many travellers who had homes and jobs in Bahrain, to be stranded in their countries of visit. Students studying in foreign universities also faced difficulties in their attempts to reach their homes in Bahrain. On the 26th March, the Ministry of Industry, Commerce and Tourism issued a notice that all businesses would close except essential businesses e.g. supermarkets, fueling stations, and hospitals as stated in the (Ministry of Health, 2020) News (26 March 2020). Thus, as a consequence of these methods of re-bordering the physical spaces of movement and social contact, the majority of the country's population had been made to stay at home and limit physical contact for long periods of time.

This physical re-bordering process created a division of the society in Bahrain based on two dominant attitudes & behaviours in response to the process: one of compliance to this re-bordering and another that attempted to resist it. Certain groups of people who did not believe the hazard to be real (or believed that it was exaggerated by the government), either secretly or publicly defied the new policies and advice of authorities. There were other groups of people who, frightened of the virus spreading, acted defensively and created thick socio-spatial borders around them to prevent the virus from reaching them.

In India, the inception of large-scale, nation-wide spatial re-bordering began with the enforcement of a curfew from March 22nd to April 14th in response to the COVID-19 pandemic. Later, this curfew came to be known as lockdown 1.0. The curfew decreed that all forms of transport - road, air and rail would be disallowed except for the movement of "essential goods and services" (The Times of India, 2020). The curfew tightened the borders of various states within the country and prevented free inter-state movement of citizens (Modi, 2020). These were the two significant border conditions that reinforced various political (state boundaries), social (public gathering spaces closed) and domestic (residential apartments closed their gates) borders in space. These border conditions were enforced through various means: police forces monitoring streets for "unessential" movement and punishing people flouting the curfew, public gathering spaces such as parks were closed indefinitely etc. This significantly affected everyday functionality of the society; offices & educational institutions were temporarily closed, public transport options

were significantly reduced, public entertainment zones such as movie theatres, malls etc. were indefinitely shut down etc. Lockdown 1.0 was followed by a series of such curfews (lockdown 2.0, 3.0, 4.0 and Unlock 1.0, 2.0, 3.0) that varied their bordering conditions, making some of the borders more porous (freer movement was allowed through state borders and there was relaxation of some of the rules) over time (“COVID-19 Pandemic Lockdown in India,” 2020). However, all of their border conditions had measures to ensure social distancing and restrict social contact in order to avoid disease spread. As many new borders were constructed and reinforced by the central and state governments, the fear of viral transmission also began creating internal borders in the society in the form of socially initiated measures to minimize physical contact. For instance, residential apartment complexes closed their gates to any visitors/guests and required residents to have their temperature checked and hands sanitized when they returned from grocery shops. These apartments also restricted access of delivery persons to the gate.

In both countries, this re-bordering of physical space and its restrictive nature, instigated attempts to move functionalities that weren't possible or were perceived to now be risky in physical space, to virtual or online modes.

Fig. 3 depicts the virtual de-bordering that happened in India and Bahrain. These alternatives were not created as a status quo of the pandemic, most of these applications were used initially but not as widely or consistently as during the pandemic (Iqbal, 2021).

The virtual de-bordering that began in India and Bahrain during the lockdown, extended even after the lockdowns were relaxed. This was particularly true for shops, restaurants, schools and education facilities and recreational spaces. For example, people found platforms such as Zoom meetings, Whatsapp and Google Hangouts for social gathering when restaurants and recreational spaces shut down (Tech Desk, 2020). Online dating apps such as “Hinge” in India, introduced new features such as video calling to facilitate greater interactions among their users in order to replace physical meetings/dates (Link, 2021). In academia and workplaces, Zoom was used as well to provide a virtual alternative to more formal gatherings like study and research groups (Tech Desk, 2020).

Bordering Processes and their Consequences

As witnessed in various phases of the lockdown in India and in the various policies enforced in Bahrain, spatial experiments effected by changing spatial border conditions, have been instrumented from February or March 2020 by the governments in order to identify the most effective strategies for preventing disease spread while balancing the economic impact. On many occasions, the consequences of these spatial re-bordering processes on the populace of the countries have been sudden and drastic.

There were various virtual de-bordering experiments conducted by companies, governments and institutions that were prompted by the processes of spatial re-bordering. These processes began soon after the lockdown to solve the problems created by the latter.

Instance 1 : Food & Grocery Delivery : Harmful Border Mechanisms

In India, the process of virtual de-bordering prompted “a capitalistic re-model of functionalities and structure of some service providers and companies, in order to ensure capital gains” (Tyagi, 2020). Despite a deep depression in demand for food delivery apps (caused by both people's safety concerns and governmental curfews), the two major food-delivery apps in India, Swiggy and Zomato, stayed afloat financially through various means of de-bordering the virtual space. They were experimenting with delivery models and including delivery of groceries as a part of their functions (Chakravarti, 2020), along with cutting costs by significant downsizing (Poojary, 2020). The aspects that dictated the de-bordering process by Swiggy and Zomato were

- to create more market demand and to prioritise the profitability of the companies. In the case of companies like Zomato, this de-bordering helped the company retain control on costs and profitability (Dash, 2020) but caused many people previously employed in the organisation to lose their jobs or take significant salary cuts (Poojary, 2020) (Bharathi, 2020). Many of those who lost their jobs were delivery persons employed by these companies (Vaidyanathan, 2020). Therefore, in the process of de-bordering despite the change of border conditions to permit transfer of more goods to customers, the delivery persons were vulnerable to losing their jobs.

This de-bordering process that ensured the safety of those who could afford to spend on delivery apps and own smartphones, exposed delivery personnel (those who remained employed) to the increased risk of the pandemic spread (Vaidyanathan, 2020). They also had to navigate the spatial re-bordering that had begun to occur due to nationwide lockdown. The junctions in this re-bordering process relied on the mechanism of strict policing by the government. Many of the delivery persons who remained employed, suffered violence in the hands of police forces (who mistook them for people who were trying to flout the curfew) during the initial stages of the lockdown 1.0 (Kumar, 2020, Raman, 2020). The method of police surveillance through which the border condition of spatial re-bordering was enforced in the initial stages and the virtual de-bordering that was constructed solely to focus on adapting the company structure to maintain control on costs & profitability and to respond to market demand, led to one of the primary stakeholders of these service apps - the delivery persons, to become the most vulnerable to police violence, to risk of disease spread and to financial distress (Fig. 5)

In Bahrain, virtual de-bordering occurred through the surge in demand for service apps like Carriage and Talabat that delivered both food and essentials. Many supermarkets, retail shops, large and small businesses partnered with these apps to keep their businesses running while their physical retail spaces remained closed (bizbahrain, 2020). This virtual de-bordering was further enhanced by the introduction of contactless payments and deliveries to customers. Similar to the processes in India, this de-bordering was capitalistically motivated and put the delivery persons at risk.

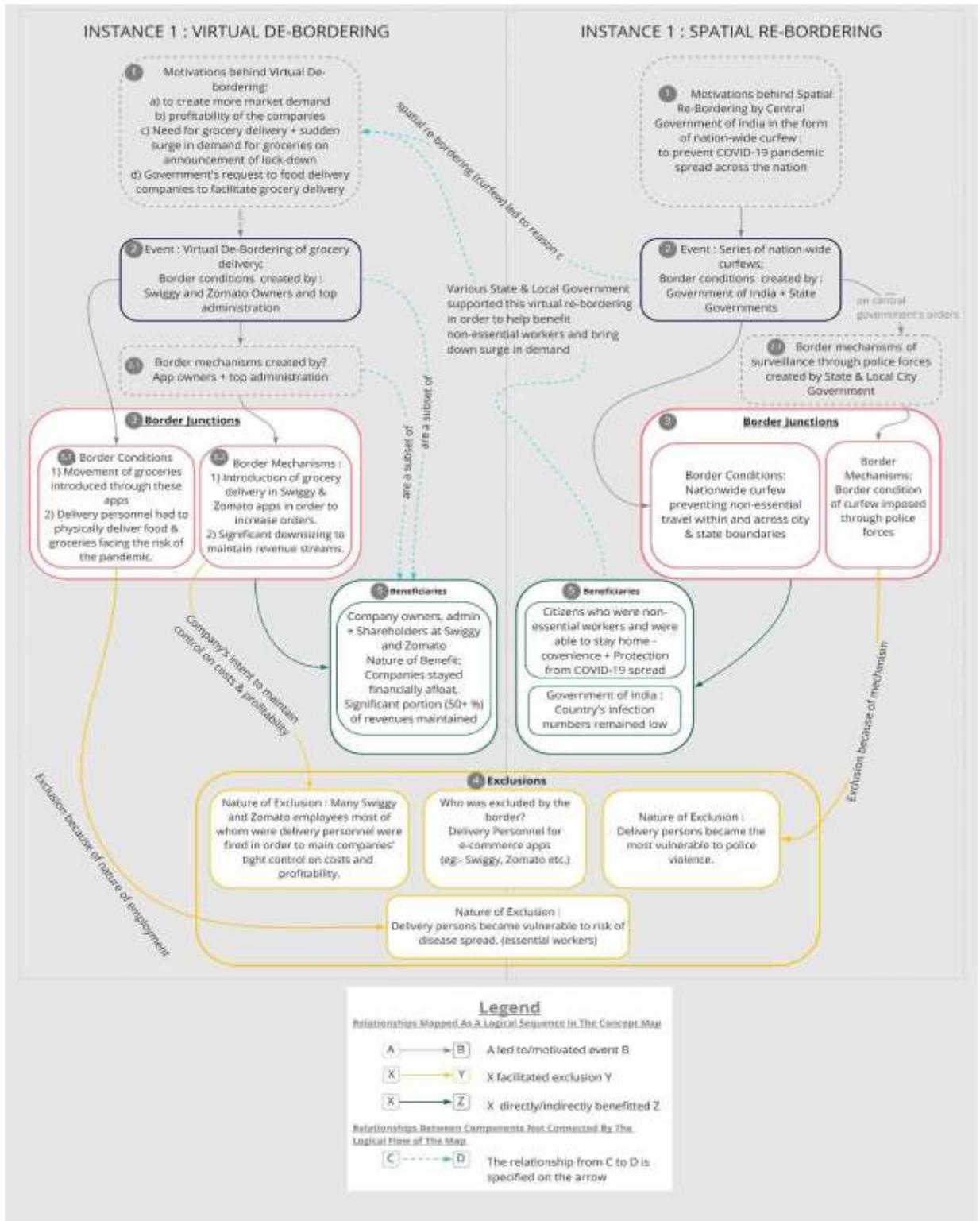


Fig. 6: Image depicting the various kinds of exclusion of delivery personnel due to the intersections of different bordering mechanisms in India, during March 2020 to September 2020.

Source: Authors

Instance 2: Migrants : Rigid Border Conditions

“The third major consequence of a border theory defined by the social process of division is that the border cannot be properly understood in terms of inclusion and exclusion, but only by circulation.”

(Nail, 2016, p.7)

As a country that has 29 state boundaries within it, India was witness to regular movement and migration across state boundaries before the pandemic began. The imposition of lockdown in India was sudden and without warning. Two significant features of the border conditions of the junctions in this re-bordering process were:

- a) this curfew prevented any “non-essential” movement over inter-state borders (Hebbar 2020)
- b) the conditions took immediate effect within a few hours of announcement. (Chakravarty, 2020)

These border conditions caused the previously very permeable state borders to become more rigid with respect to who they allowed through them. Many migrant daily-wage workers from states other than the ones they were working in, were faced with no daily wage jobs and no transportation to return home as their needs weren’t included in “essential travel” (What Constitutes Essential, 2020). The rigidity of the border conditions implied that there would be a greater amount of re-circulation within the state; the migrant workers returning to their cities of employment but without the jobs and financial means to support themselves. The government was quick to respond to this crisis and announced relief packages for the workers (Mohfw, 2020). However, in a detailed article on “the Wire”, Jawahar Sircar highlights the insufficiency of the relief packages, a lack of a unified, robust distribution system, the delay in relief packages reaching the migrants and lack of social protection for the “informal” sector resulted in many migrant workers taking to travelling hundreds of kilometres on foot (Sircar, 2020). The processes of spatial re-bordering that created these curfews failed to include border conditions that would allow and facilitate movement for migrant workers across these borders in a safe manner (Chakravarty, 2020). During the process of initial re-bordering, there were no gradations in the impermeability of the border over time i.e. concessions for crossing the border for non-essential or non-emergency travel through public transport weren’t made (Mohfw, 2020). During the second phase of the lockdown (15th April to 3rd May 2020), “Shramik trains” were introduced to transport stranded labourers home and from 24th May, non-essential travel began to be allowed (Mohfw, 2020). However, Chakravarty states that despite this relaxation in the border conditions, the mechanisms that facilitated this relaxation weren’t robust—the irregularity of the train service along with its insufficiency resulted in not completely curbing the travel by foot. She also discusses and illustrates in detail the distress caused to migrant workers by travelling on foot to their homes (Chakravarty, 2020).

In Bahrain, due to similar instances of re-circulation by the border, low wage migrant workers of other nationalities suffered living conditions in the workers' camps which denied them from the basic safe physical separation distance in order to keep them safe (*COVID-19 Cases Rising among Migrants in Bahrain | Migrant-Rights.Org*, 2020). Not being covered under the Bahraini government’s promise to cover the nation’s wages and as the most economically under-privileged in the country because of their low income, their financial condition suffered. Some international migrants also suffered loss of their jobs due to the lockdown, which meant the shutting down of businesses (O’Brien, 2020). To address this, the government of the Kingdom of

Bahrain planned to relocate the migrants to other spaces such as empty schools and hotels to ensure their safety (Cornwell, 2020). This step was taken after the increase of the positive tests among migrants and the high percentage between the contacts of the persons tested positive to coronavirus.

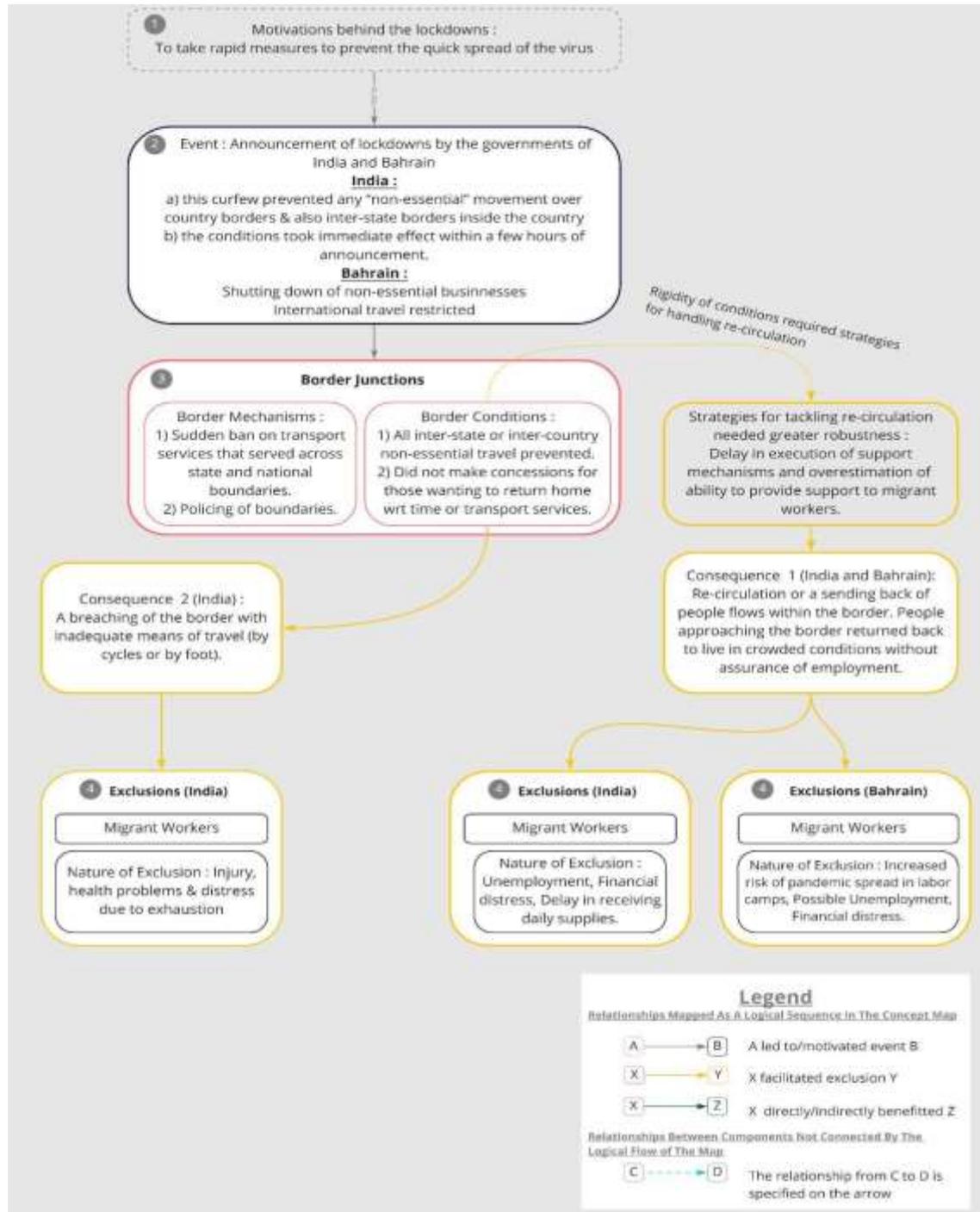


Fig. 7: Image depicting the impact of border conditions of lockdown on migrant workers.
Source: Authors.

Instance 3: Virtual Education : Infrastructure Inequality

In school education, in both countries, virtual de-bordering occurred by switching to online modes of learning (MoE, 2020). In Bahrain, the virtual de-bordering of education and the remote work policy required internet connections and devices for working or studying from home. Lack of sufficient devices at home meant that children had to take turns in order to fulfil their duties for schools. The Ministry of Education addressed this issue by collaborating with the Ministry of Information Affairs, which allowed the latter to create lessons, which could be broadcast through the television to make sure that the students do not miss their education because of the lack of devices (BNA, 2020).

The infrastructure for internet connections, and online and other virtual platforms that faced high demand at all times faced problems with the connections and created many frustrations among people who wanted to do their jobs. The telecommunication companies (Batelco, 2020) as a part of their social responsibility tried to provide more reliable connections through the day in Bahrain by increasing the speed and providing unlimited data usage for the educational and collaborative platforms such as Teams, Google classrooms and Blackboard. Though driven by capitalist interests, this de-bordering attempted to provide temporary relief to families with multiple learners.

In India, some companies operating in Ed-Tech hugely benefited financially from this process of de-bordering education (Correspondent, 2020). Most of the norms for operating online were dictated by individual educational institutions that switched to virtual classes over applications such as Zoom and MS teams (Times of India, 2020). In April 2020, India accounted for the most downloads of the Zoom app worldwide (Iqbal, 2021; Tech Desk T., 2020). However, due to this de-bordering process being initiated by independent institutions or individuals opting to learn online, it benefitted only those who could afford devices to access the internet and the Ed-tech/Video-conferencing companies themselves. In India, the land area of various provinces is sub divided into rural, urban, taluk headquarters, district headquarters, metropolitan city etc., based on the area and population (Naik et. al, 2021). The access to internet connections and related infrastructure vary based on the type of region the students and faculty are resident in. Those without access to technology who comprised more than 70% of the country's population were left with few or no means of access to education (ThePrint, 2020). The issues of internet access in rural India are not only dependent on internet bandwidth but also on the regularity of electricity supply. In some parts of India, frequent power cuts also disrupted online learning (Naik et. al, 2021). One existing government initiative (SWAYAM Prabha) that broadcast education channels for school education on TV was amplified. The government of India also provides a free e-education platform for school students, which saw an increase in usage during the pandemic (MoE, 2020). However, the latter is also dependent on electricity and internet access. Similarly, access to internet infrastructure is highly dependent on the financial capacity of the family funding the student's education. Therefore, students studying in subsidised or free government schools were impacted by this virtual de-bordering than students who had access to more expensive private schools (Karyala and Kamat, 2021). However, there were no measures taken to enrol those without access to the internet, in the virtual de-bordering of education, through subsidies for internet access or for electronic devices.

Naik et al. note that 70% of the illiterate population in India comprises women. They chalk this up to gender inequality and discrimination with regard to access to higher education which is further intensified by issues of poverty, caste discrimination and geographical location/access (Naik et al. 2021). Based on a survey of over 700 class VII and VIII (grade 7 & 8) from government

schools in Bihar, “The Wire” reported that in most households i.e. in 95% of the households surveyed that had access to phones, male members of the household were the owners of the phones. A number of female students reported to not have access to the device. In about 10 cases, the surveyors were denied the opportunity to talk to the female students over phone by the owners of the phones (Jha and Ghatak, 2020). Due to gender stereotypes which are more prevalent in rural areas, the girls who had to access education virtually from home were burdened with participating in household chores more than the male students. This also prevents girls from having control over their time, which can also deny them timely access to viewing the educational programs broadcast even through Televisions as the TV is also a shared household device.

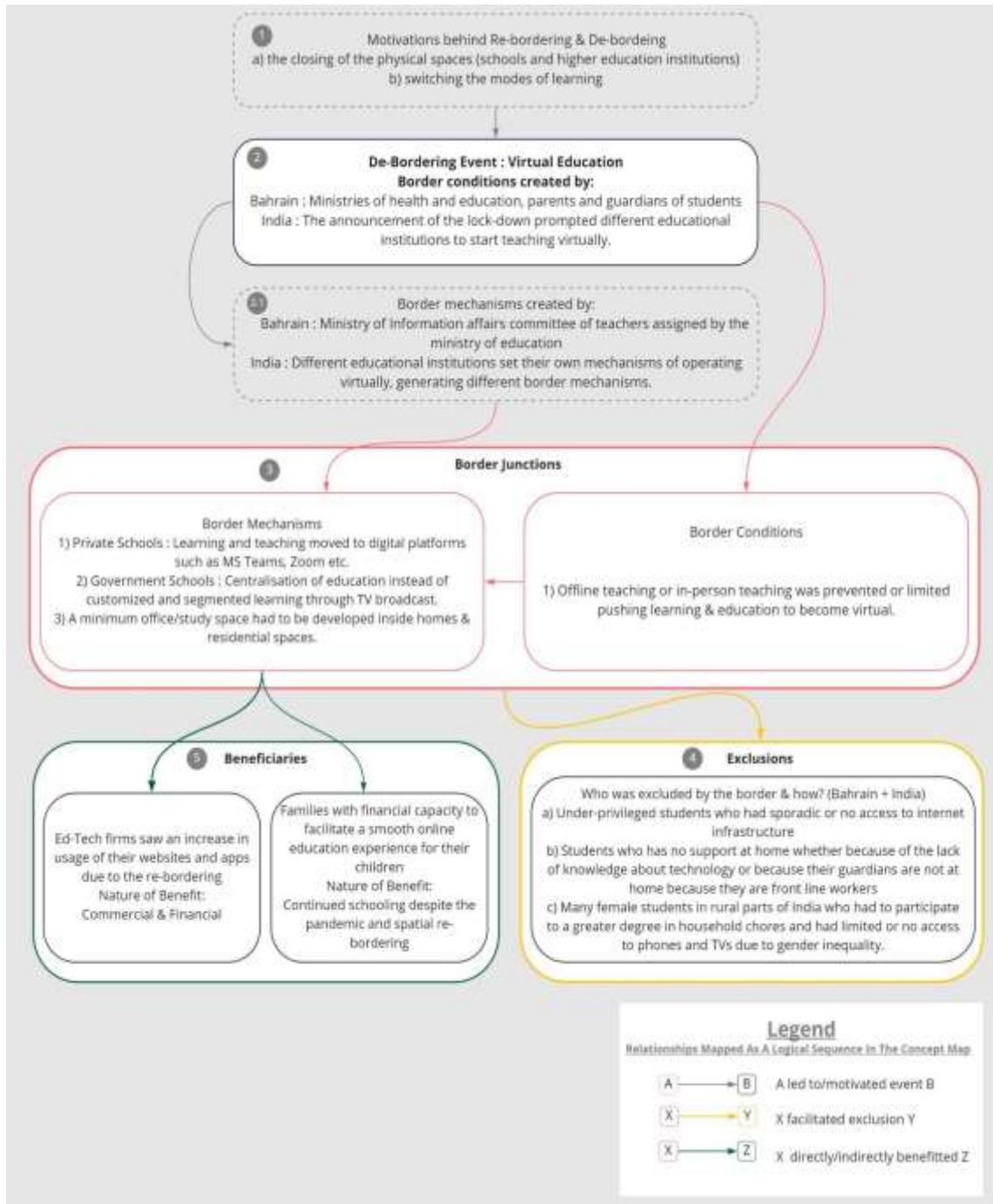


Fig. 8: Image depicting the impact of virtual de-bordering of education on school students in India & Bahrain
 Source: Authors

Discussion and Conclusions

Investigating pandemic response strategies through the lens of border theory, allows us to address exclusions created by these strategies. Utilising a tool such as this could make visible

various shortcomings of a proposed strategy and potential exclusions it could cause, before the strategy is implemented.

- 1) Mapping how different bordering systems affecting the same stakeholder group could provide foresight to prevent multiple kinds of exclusions as witnessed in the case of Instance 1 (Fig. 6).
- 2) Another important learning outcome witnessed through instance 1 is the need to consciously investigate the nature of mechanisms used to execute bordering processes i.e. to pay attention to the specific mechanisms of policing through which a strategy is implemented. The same applies to instance 3 with regard to the mechanisms for implementation of virtual education (Fig. 8).
- 3) While it is evident in instance 1 that there is a need to offer socio-economic protection to those essential delivery workers forced to pass through the junctions of borders during a pandemic, in the case of instance 2, the need for tweaking the border conditions to allow for a degree of permeability for “non-essential” movement of migrant workers through the junction is evident. The potential consequences of the junction causing a re-circulation within the border into the same country or state need to be anticipated and the support required to support the re-circulation needs to be planned. Another useful dimension that becomes evident through observing the border mechanism is the need to allow for time between the announcement of a lockdown and its implementation i.e. a time gap between laying out border conditions and actually implementing the border mechanisms (Fig. 7).
- 4) Instance 3 highlights the criticality of examining the infrastructure requirements built into junctions in order for them to permit de-bordering (Fig. 8). In a sense, the virtual de-bordering was not a true removal of a border as much as an increase in the permeability of the border. Therefore, the knowledge of who are limited and excluded by the junctions of this border and to provide them the required support, is crucial to ensuring equity while responding to a pandemic outbreak.
- 5) The analysis of the three instances presented here of various instances across India and Bahrain indicate that those affected most by both re-bordering and de-bordering processes are the economically underprivileged in the society. As illuminated in instances 1 and 3, the various bordering processes that originated during the pandemic were either commercially driven or served the middle and upper classes of the society well. Therefore, it is essential to involve persons and organisations who have the interests of the economically underprivileged at heart, to be integrated into both spatial re-bordering and virtual de-bordering processes.

There are lessons for Bahrain and India to be learned from each other. As evidenced in instance 1, both countries could benefit from government involvement in various private sector operations and ensure that there are certain policies in place to protect the financially vulnerable. Instance 3 illuminates the need for creating financial subsidies for internet access for all through collaboration with private service providers in India.

In Bahrain, the system of allowing people to work from home was implemented earlier in March 2020. The Civil Service Bureau (CSB) (*CSB: Remote working at public entities to begin on March 22, 2020*), approves and regulates the working from home with many professions under its umbrella. In terms of learning and teaching however, the Ministry of Education does not accept certificates of Bahrainis who took degrees online (Alzeny, 2015). Inevitably, this is likely to be modified as the Bahraini institutions have started to provide their services online. Bahrain’s success when it comes to online education has two lessons for Indian cities: one is to work with smaller scales of populations such as cities or village panchayats in facilitating & ensuring online education and another is to partner with private organisations to subsidize internet access and

facilitate access to devices/infrastructure that can help underprivileged students access education. As online education is easily accessible and affordable, once the infrastructure of internet availability and electronic devices are in place, it is a trend that can be expected to continue beyond the era of the pandemic. Therefore, steps must be taken to make the internet an essential commodity.

There are several borders that have been established in the world before the pandemic, ranging from the political borders of countries to the fences people build around their homes. However, with this pandemic, more borders are on the rise, borders that are not simply physical barriers. Some of them are predicted to last even after the threat of the virus is long gone. Therefore, it is crucial to understand the underlying mechanisms behind the creation or removal of these borders to understand interests they serve and the people they oppress.

Lastly, examining existing and proposed strategies for pandemic preparedness, through the lens of border theory, can help to understand or foresee the impact of these policies on various sections of the society. Therefore, this method of analysis could be employed to create robust strategies and policies that are more inclusive and address the needs of all members of the society.

Future Research Scope

This paper is still an ongoing research as many more investigations regarding the de-bordering and re-bordering process can be carried out especially in light of the re-bordering processes triggered by the roll-out of vaccinations. Hence, this paper is an initial investigation that has potential to be taken forward with research scope both in depth and breadth. It also serves as a reference point to reflect on the following question: To what extent can we expect the de-bordering and re-bordering processes to continue post-pandemic? What are the exclusions and deepening of inequalities we can prevent by acquiring this foresight?

Note: The authors want it to be noted that all the analyses in this paper have been made primarily to understand exclusions in the bordering processes around the pandemic. The authors, by means of this paper, do not criticise or support any political views or political parties. The paper is also by no means a commentary on any of the governing bodies or political parties present anywhere in India or Bahrain. The paper is written purely from the perspective of how the theory of the border can be used as an analytical tool to understand exclusions and take forward lessons to create policies and mechanisms of operation that are more inclusive and beneficial to the masses.

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