



Bachelor Thesis

# Crisis Reaction Patterns in Germany Concerning Globally Occurring Virus Diseases

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## Abstract

The spread of viral diseases in epidemics and pandemics poses a serious threat to modern societies, that does not stop on manmade borders, but instead concerns many nations and people from all backgrounds, given the mobility of goods and people in a globalized world. Therefore, efficient crisis management mechanisms and cooperation methods of states with each other and further international institutions and organizations are important aspects of contemporary public administration research. The objective of this thesis is to answer the question of how international relation theories explain the behavior of nation states confronting viral disease related international health crises. To gain insights into the process of state engagement in international collaboration, a case study on the federal republic of Germany is conducted. The research design features the qualitative content analysis of official governmental documents from Germany, including the respective laws dealing with infectious diseases and international collaboration. As the theoretical base of this thesis suggests that regular collaboration leads to the institutionalization of the collaboration patterns in international organizations and networks, publications on the collaboration with them is also included in the analysis.

## List of Abbreviations

|            |   |
|------------|---|
| COVID-19   | Coronavirus Disease 2019 (Disease cause by the Coronavirus) |
| ECDC       | European Centre for Disease Prevention and Control          |
| EU         | European Union  |
| GOARN      | Global Outbreak Alert and Response Network                  |
| GVN        | Global Virus Network  |
| IfSG       | Infektionsschutzgesetz (German Infection Protection Act)    |
| IHR        | International Health Regulations (by WHO)                   |
| RKI        | Robert Koch-Institut  |
| SARS       | Severe acute respiratory syndrome                           |
| SARS-CoV-2 | Novel Corona Virus, first discovered in humans in 2019      |
| UN         | United Nations  |
| WHO        | World Health Organization                                   |

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## 1. Introduction

In a globalizing world, international cooperation between states is a concept practiced in many areas (Sanderson, 2006). With the fragmentation of supply chains, worldwide goods traffic, and the growing mobility of people, in many cases it mainly is a question of convenience to implement frameworks for the synchronization of procedures. This, often times naturally involves single state actors as well as multi state agreements and transnational operating partners from private economy and other stakeholders. However, there are also areas in which a coordinated approach to issues evolves not just based on pure convenience but is rather a question of necessity. The best example publicly known for a case in which the decisions of one actor alone are not sufficient to address a problem is climate change (Vinke-de Kruijf & Pahl-Wostl, 2016). As the actions of all countries in the world have an impact on global warming and all countries experience the negative effects from climate change only a mutual approach with counteractions can truly make a difference in the outcome and should be in the best interest of all.

Less commonly in the center of attention, but equally important, this principle of interdependence similarly applies to the spread of infectious viral diseases (Gray, 2015). While the internal management measures and preparations of a country for the case of an outbreak are one important point, also the question of cooperation can be crucial in the selection of counter-actions and ideally the following containment of the spread. It might generate clear instructions for persons living in border regions, the proceeding with imported and exported goods or for travel restrictions and guidelines for foreign persons within the country and can lastly be determining for the further spread of the virus to more regions and new countries (Lai et al, 2012; Lee & Fidler, 2007; Mounier-Jack et al., 2007).

The most prominent cases of such globally occurring viruses and diseases in the recent history are for example the HI Virus, emerging in the 1980s, regular outbreaks of Ebola, SARS in 2002/03, or Influenza viruses such as H1N1 causing the Spanish flu outbreak in 1918 and the swine flu in 2009 or the avian flu, also known as H5N1 occurring first in the early 2000s. These outbreaks, becoming more frequent, affecting large numbers of people in multiple countries set off each time huge consequences for the governments, as well as multiple sectors of the economy. Therefore, they show how globalization and the relating increase of mobility and global linkages lead to an accelerating increase of the spread of contagious viral diseases and their geographic range creating new public health needs (MacPherson & Gushulak, 2001; Findlater & Bogoch, 2018). Subsequently, the necessity for a contemporary concept of dealing with this problem becomes obvious. (McCloskey et al., 2014).

Lastly, the high relevance and pressing nature of the topic becomes visible on the current worldwide "Corona Crisis" on the Coronavirus disease 2019 (COVID-19) caused by the novel Corona Virus (SARS-CoV-2). The outbreak of the disease, presumably leading back to a zoonosis in the region of Wuhan

in China and the fast circulation of the virus, first in China and then worldwide (WHO, 2020) has urged all countries to implement measures and re-initiated the debate about international coordination, as these measures vary largely (Lee & Morling, 2020). In this exceptional situation with an unknown pathogen and little knowledge on the short- and long-term effects of the infection on the human body, states had to act fast and efficient, which sparks many questions on how to enhance efficiency in this particular situation to counteract the spread effectively.

### 1.1. Context of Research

First, it has to be acknowledged, that there is a growing understanding of the connectivity in global health. Many international organizations have specific agencies, that deal with questions concerning the often times global nature of health problems and are founded to identify and deal with the issues of competence and sovereignty and jurisdiction as well as efficiency of the counteractions in these questions, with as large and renowned ones as the World Health Organization (WHO) of the United Nations (UN) founded already in 1948, or the European Centre for Disease Prevention and Control (ECDC) as an agency of the European Union among them. Some researchers already investigate how such large agencies with an very broad field of expertise can work together as an Global Crisis Network for as specific tasks as the communication and coordination concerning virus diseases, such as the Severe Acute Respiratory Syndrome (SARS-CoV-19) outbreak in 2002 (Van Baalen & Van Fenema, 2009).

At the same time others investigate networks that have been specifically designed to deal with as narrow health related topics as the cross national spread of viral diseases, as literature on coalitions like the Global Virus Network (GVN) (Brecht, 2018) or the global outbreak alert and response network (GOARN) (Ansell et al., 2012) shows. Those networks aim to simplify the communication and cooperation between the involved governmental and non-governmental actors and the literature mainly focuses on their internal organization. On the other hand, authors like Kickbusch et al. (2017) suggest that it is not only the organizations and networks, that are responsible for a change towards coordination, but rather the countries, who engage in these institutions and networks, who lay the foundation for further collaboration in the field. Therefore, an international relations theory based approach seems to offer the right perspective for further analyses. Furthermore, it is interesting to understand the internal motivations and reasoning of the nations as main actors in this relationship for an comprehensive picture.

However, current knowledge of how exactly this relation of the respective countries to the international institutions and networks looks like it is insufficient. This also includes the question, whether the mutual agreements and contingency plans for the case of a health crisis caused by viral

disease outbreaks are harmonized with national approaches. This gap is where this thesis aims to contribute to the scientific knowledge.

## 1.2. Research Question

Given this lack of knowledge, the main objective of this thesis will be to analyse the behavior of one country to generate an insight on how this relationship between nation states and their partners and networks looks like. Therefore, a case study on the Federal Republic of Germany is conducted, asking:

***How do international relation theories explain the behavior of nation states confronting viral disease related international health crises?***

This means, that international relation theories will be used as a tool to explain the actions that are observed in the case study, from different perspectives. With this knowledge, advantages and flaws in the current system become clear and possibly give indications for improvement.

For the specific case of Germany, that leads to a set of descriptive sub questions, which aim to provide comprehensive insight to the case and structure the available information in a logical way.

1. What are the German national contingency plans and which perspective do they have on international cooperation?
2. How does Germany engage in international coordination approaches and networks?
3. Are the national and international plans synchronized and is the level of synchronization and does this mirror the behavior neoliberal institutionalism would suggest?
4. Are the observations of sub question 1, 2 and 3 aligned with the expectations of collaboration, based on the theoretical background of international relation theories?

These questions are designed to lead towards each other and give a clear structured view on the topic. While the answers of first three sub-questions should give the reader a comprehensive idea of the conditions of national involvement in international contingency plans, the fourth sub-question connects the case study to the overarching main research question.

## 1.3. Scientific Relevance

Health crises caused by the outbreak of viral diseases are exceptional situations for nations (Boin & Bynander, 2015). This means not only the government, but also the citizens seek clear guidance during fast changing and disruptive situations to experience the least possible harm and protect themselves efficiently. They might be insecure and more likely to make irrational decisions or not able to make decisions at all, as they feel overwhelmed (Brooks et al., 2020). Therefore, the availability of crisis reaction and management plans is important. In this regard, the question of whether those plans are

applicable and treat the situation appropriately, taking international linkages into account, in the case of an actual emergency is relevant. *Thus, gaining a better understanding of the decision-making processes that leads towards international coordination in health crisis management is the first step research should focus on.* As only based on the thereby achieved body of knowledge policy makers can take reliable information into their considerations concerning policy making in this field, with the long-time goal of creating efficient and reliable frameworks for this kind of crisis.

While the body of knowledge on political and administrative decision-making processes during and after crises has been growing over the past years and covering various scenarios including environmental (Caball & Malekpour, 2019) and humanitarian crises (Hampshire et al., 2009) on many competence levels, the literature on this topic concerning viral diseases and their spread has been relatively thin. While some of the previous analyses on humanitarian issues might have contact points to health crises, viral diseases were for a long not the center of the analyses. Only very recently more scientists in the research on decision-making in crises situations write about this issue, caused by the worldwide emergence of the novel Coronavirus in 2019 (Bal et al., 2020; Forman et al. 2020). As this crisis is still evolving the coverage of this case subsequently is not comprehensive yet but just evolving. Given the assumption, that globalization and mobile communities potentially lead so more similar situations in the future as discussed above, questions of decision making in the pandemic spread of virus infections are very current and important for contemporary research.

Mentioning this, the development of public administration alongside technological advancement and social changes, is another point deserving attention in this context. In order to deliver appropriate recommendations for policy makers, research must include new solutions and possibilities in their work, mirroring globalizing processes in international communication and the resulting new options for improved coordination. This thought is inherent in most literature in the topic, even when not always explicitly mentioned. As described previously, an effective engagement of states in international cooperation networks might provide guidance in such an uncertain situation and hold the potential to hasten crucial flows of information and outbreak response measures and therefore eventually protect the health and life of many. Public Administration acknowledges the importance of this topic and the necessity of observing the potential dangers concerning pandemics through the enhanced mobility not only of persons and goods, but also pathogens in a globalized society (Lai, 2012). Those findings should result in management plans for these situations which are appropriate for the modern age (McCloskey et al., 2014).

This is not only an question of ethical responsibility, but also an economic one, as the fast containment of an infectious viral disease is also the most desirable option to unburden the national health systems from the direct impact of many people in need of medical care in the same time in the case of



epidemics and pandemics, as well as potentially necessary long term follow-up care of the infected persons. The same issue applies to the economic implications that arise from high numbers of infected citizens (Lee & Warner, 2005), who are not able to work for a certain time or for problems that arise for the companies through unclear regulations and uncertainties in the case of an outbreak. Most recently, first studies on the Coronavirus measurements have shown that the effective management in pandemics with the right instruments can cushion the negative impact of the crises on the national economy (Verikios, 2020) as well as the financial markets (Zaremba et al., 2020). This finding adds another dimension to the relevance of this research field, as governments would want to avoid one crisis causing instability in other sectors, eventually leading to further crises.

#### 1.4. Societal Relevance

The most compelling argument to increase efficiency in the counteractions towards the international occurring spread of viral diseases and developing pandemics surely is an ethical one. If there is scientific or empirical evidence that a coordinated approach in the crisis management in pandemics can cushion the impact of the crisis on the citizens, it surely is within the obligation of governments to pursue this way. As the basic ethical concept of care ethics suggests, the idea of the accountability of modern nation states implementing measures protecting human health is anchored in Article 12 of the international Covenant on Economic, Social, and Cultural Rights: “ The States Parties to the present Covenant recognize the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.” (United Nations 1966, Art. 12), specifically highlighting the task of the management of epidemic diseases in subclause c. This declaration is ratified today by over 170 nations (Website UNHCR, 2020), which should subsequently result in the adherence of this maxim in their political decision making (Gruskin & Dickens, 2006).

Additional societal relevant points have been brought to the center of attention very recently during the outbreak of the novel Coronavirus in 2019/2020. Two main concerns with potential implications for the whole civil society are mental health issues of persons in affected areas, arising from restrictions and counteractions aiming to contain the spread of the virus. And the fear of a rupture in the social economic status of the society, resulting in higher levels of inequality. With new studies, reviewing the available knowledge on stressors for people in a public health crisis, insufficient communication from public authorities and inefficient management are identified as relevant causes (Brooks et al., 2020). As this management, like described previously, falls under the governmental tasks, the connection to this thesis, asking for effective cooperation is given.

Furthermore, it has been shown that the socio-economic problems of societies are unveiled under the circumstances of a pandemic and gaps in inequality potentially widen. This regards in the COVID-19 crisis several areas (Nicola et al., 2020; Verikios, 2020), while the problems arising in the educational

sector, with implications to social mobility, and domestic violence are of special urgency, as they concern children a particularly vulnerable group in society. Other groups, directly threatened by pandemics and in need for clear structured management approaches are for example elderly and chronically ill persons, being in threat of more severe cases of the diseases and persons highly influenced by the effects of crisis management, for example through job insecurity, previously shown after the SARS outbreak in 2002/2003 (Lee & Warner, 2005).

### 1.5. Structure of the Thesis

The thesis is structured as follows: First, the theoretical background of intergovernmentalism is discussed, as it is identified as the relevant international relations theory, applicable for the questions on international cooperation of nation states (section 2.1.). Subsequently, the concepts of cooperation and coordination in crisis situations are elaborated to create a groundwork on which the following analysis on the case study is based and hypotheses for the analysis are formulated (section 2.2.).

After explaining the general methodology (section 3.1.), including the reasoning for the case and material selection (section 3.2., 3.3.), the analysis of the documents is performed (section 4.). Using the insights from the analysis, the discussion of those findings will be used to assess the hypotheses, previously derived from the theory and explore the limitations to the analysis and the thesis (section 5.), the Conclusion will answer the initial research question (section 6).

## 2. Theory and Hypotheses

As stated previously, the theoretical background this thesis is relying on is international relations theories. As this field of research aims to understand the interactions of nation states in the international arena it opens the right perspective for the purpose of this thesis.

Even though, these theories have their origin mainly in the last century and are often times relatively open formulated and some might not consider contemporary developments, such as globalization and digitalization, they are not without reason still a common basis to examine and understand international political problems from different perspectives. Particularly, their generalized character can even be seen as an advantage to instrumentalizing them also on modern cases, and to take the state of the art of technology and digitalization into account.

### 2.1. Theory

The main theory used for the analysis of the engagement in international cooperation will be neoliberal institutionalism also referred to as neoliberalism. As an answer to the purely nation state focused realist concepts, that expects nations to only reluctantly cooperate in situations with relative power gains for them, neoliberal institutionalism acknowledges the interdependence between actors (Keohane & Nye, 1977) and the possible advantages of collaboration resulting in the existence of and engagement in international organizations (Keohane, 1998). This theory is opposed to the previous realist perspective also focusing on absolute power gains the states can gain through cooperation, often explained with game theory, linking the answer whether an actor collaborates with another actor to power or payoff. Realism, centering on military power, does widely reject cooperation between states unless there is a relative power gain through the interaction with other state actors. As this interaction is linked to trust and the possibility of being betrayed it happens rarely. Neoliberal institutionalism on the other side highlights the absolute gain of power and payoff through cooperation for both sides and trusts the other party in the interaction on the premise that both sides gain power through their collaboration (Petring, 2007). These processes of regular cooperation in certain fields are then institutionalized in the establishment of international organizations. Therefore, this theory mirrors the initially mentioned border-crossing interconnectivity of the issue of internationally spreading viral diseases and would assume the establishment of international organizations dealing with health-related issues and the interaction of nation states within this framework. This leads to the first Hypotheses –

*Hypothesis 1a:* Countries know that they have an advantage against global health issues through collaboration and therefore engage in collaboration.

*Hypothesis 1b:* This collaboration is institutionalized in international health organizations.

Neoliberal institutionalism, emerging from liberalism which was the first of theories in the field that considers international institutions and organizations as important units, operating in the international arena alongside nation states. Therefore, it fulfills the requirements for a proper analysis of the observations in the following case study and is more advantageous than other available main theories in the context of international relations that neglect international organizations in their theoretical frameworks.

With Keohane as central author in this school of thought, publishing theoretical work from the 1970s on, many available texts concerning the position of nation states in neoliberal institutionalism are based on his work theorizing the nation states as central actors and the institutions as institutionalized arena or framework for the interactions of the members. On the other side, some more recent authors have redefined the theory placing the institutions and organizations at the central point of observation in *New Institutionalism* (Powell & DiMaggio, 1995; March & Olsen, 2011), linking the initially in international relations based theory to organizational theory approaches. Therefore, it has been marked that the differentiation between old and new institutionalism might bring problems of discontinuity in the theory (Selznick, 1996).

New institutionalism does acknowledge international organizations as relatively autonomous and independent actors including elements of constructivism, by claiming that they are led partially by socially constructed, publicly known, anticipated, and accepted norms and rules (March & Olsen, 2011). This would lead for our case to the following assumption -

*Hypothesis 2:* International health organizations are led by the general social norms of their members but have a certain level of independence in their agenda setting and actions.

## 2.2. Concepts and Terminology

To bridge the gap between the theoretical considerations and the terms used in the analysis, some concepts have to be described and brought into relation first. This starts with an overall reflection on the term *crisis*, as it is a central object of the topic of this thesis. This then will be linked to health crises as pandemics and cooperation in crisis situations with references to these concepts in an international context.

Even though it might seem unnecessary to redefine the term of crisis, as every person has a somewhat clear idea of what a crisis is, it should be reconsidered given the fact, that the perception of different people could differ and without addressing its possible variations are not discovered in the first place potentially leading to misunderstandings or wrong assumptions. In the literature, *crises* are commonly described as situations, that occur as different from normality (Eriksson & McConnell, 2011) threatening to core values of a society, as urgent challenge for public administration, times marked by

uncertainty, and as different to a disaster, even though reaction patterns may be similar (Boin & Bynander, 2015). The definition, on those core values, that is addressed multiple of the named articles (Christensen et al., 2016 (1), Christensen et al. 2016 (2), Boin & Bynander, 2015) was initially made by Rosenthal, Charles and 't Hart in 1989 "By 'crisis' we mean situations where there is a serious threat to the basic structures or fundamental values and norms of a system and where critical decisions have to be made quickly under highly uncertain circumstances" (Rosenthal et al. 1989 in Christensen et al., 2016 (1), p. 321) and is often times extended in its definition as threat to the democratic system and possible threats to it (Christensen et al., 2016 (1)).

Articles dealing with the topic of crisis management most of the time focus on very specific situations and the possible modes of cooperation in a narrow context. However, the conceptualization made by other authors can be a useful tool for the analysis in this thesis. Boin and Bynanders article is specifically aims to develop a framework on the interactions leading to success and failure of crisis coordination by answering first the questions of how to define the concept of "successful coordination".

Building on the chaos and uncertainty as central characteristic of crisis situations, the authors identify coordination as clear core feature of the management in those situations. But how differently this term can be interpreted becomes clearer by their explanation of two different concepts. They clarify, that it can either be understood as describing the collaboration between people aiming for effective coordination of their individual work to succeed on a higher level, which can be seen as a bottom up concept or on the other side as directive action from an supervising position as example for a classical hierarchical top-down approach (Boin & Bynander, 2015). This differentiation creates the opportunity to use more specific approaches for the evaluation of the counteractions, that are performed by the involved actors. Similarly, the differentiation between coordination as hierarchy or network approach is a conceptualization made in other literature (Christensen et al. 2016 (2)). They acknowledge, that as public administration has due to globalization increasingly become a multi actor domain and crises occur more and more in transboundary situations, the conceptualization of cooperation as a network system. However, they note, that in some cases, when clear responsibility and leadership is requested, the hierarchical understanding of coordination, as explained by Boin and Bynander might be the better fit as concept.

Therefore, for the following analysis, collaboration is based on the international relations theories understood as the pure willingness of nation states engage with each other and coordinate their work in order to achieve aims and solve problems they would not be able to solve on their own to maximize the outcome of their efforts. On the other side, coordination is understood as the actual act of working on an issue together with the formulation of clear terms and conditions, assigning tasks to the involved

actors. In this regard, the coordination will be distinguished between hierarchical coordination and approaches with more network leveled interactions.

Another pair of words, in need of definition in this thesis for the purpose of clarity are *pandemic* and *international health crisis*, also referred to as *health crisis*. To understand the term pandemic, the World Health Organization suggests in their Pandemic Influenza Risk Management WHO Interim Guidance paper (WHO, 2013, p. 7) to understand an pandemic as an event that can be separated into four phases. First, the inter-pandemic phase, naming the timespan in-between pandemic outbreaks. The alert phase, starting when new pathogens are detected in humans. This phase is marked by increased caution and continuous risk assessment on local, national and international level in order to react fast when changes occur. In the ideal case, a pandemic can be stopped in this phase, preventing the third phase. The WHO calls the third phase pandemic phase, describing a period of time in which the new virus spreads globally, affecting many different countries. In this phase, local differences of the phases can occur, meaning that some places will be at the peak of new infections, while other areas might still be in the alert phase. This phase describes a situation, which is most commonly referred to as a pandemic by the general public or media. It has to be marked though that a pandemic can only be officially declared by the WHO Director-General. However, for the purpose of the main part of this thesis, there is no need to identify this difference, as it focusses on contingency planning and plans for crisis management. that Once the situation deescalates and the global risk assessments show a decrease of the threat, the last phase, named transition phase starts. During this time, the affected nations change their focus from crisis management towards recovery actions and resilience building.

Given the rupture, a pandemic causes in the everyday life of citizens in affects countries and the efforts through the shift governments have to make from their usual working mode into the management of such an extraordinary situation, this thesis regards a pandemic or in other words global outbreak of viral diseases as *health crisis*, following the previous definition of crisis by Rosenthal, Charles and 't Hart. This applies to both, the national context, and the international, as they cannot occur separately. Therefore, this thesis understands and uses the term international health crisis, or health crisis analogously to the term pandemic.

### 3. Methodology

The following chapter provides an overview of the methodological instruments used to answer the main research question as well as the second and the third sub-question. Therefore, I pay attention to the design of the research and its context, the case and document selection as well as an overview of the used concepts and terminology for the analysis.

#### 3.1. Research Design

The method followed to work on the hypotheses and subsequently answer the research question is a case study on one country. Observing the engagement of the Federal Republic of Germany in international crisis reaction management, it is expected to derive generalizable explanations on international collaboration in global health crises.

A qualitative content analysis is conducted, using the qualitative data analysis and research software Atlas.ti. The analysis systematically describes and discusses the different contexts in which collaboration is mentioned in the documents and aims to identify the aims of, mechanisms in and restrictions to the engagement with other nation states and global organizations for Germany.

#### 3.2. Case Selection

The selected population for this case consists of only one unit. The case study is based on the Federal Republic of Germany as a nation state. This decision was based on the idea to purposefully select an example for a country, which can be seen as representative and therefore be categorized as “typical case” or in other words as exemplarily to a certain extent. It is expected to be able to gain knowledge through the intensive study of one case, that can be later transferred to a larger group of cases (Seawright & Gerring, 2008). Therefore, the decision on Germany as object of observation was made on two main criteria aiming for representativeness and a third factor evaluating accessibility. Starting, the presence in international organizations was an important criterion to observe the behavior and engagement of a state. Second, a high level of development with a stable government was required and lastly, because of the advantageous position of an insider perspective of the researcher on the case was a reason for the choice.

Therefore, the decision for the Federal Republic of Germany was made deliberately because through the rise of large international organizations in the last century and ever growing connectivity inherent in globalization, the embeddedness of the country in several international organizations had to be present in the selected case. As Germany is for example member of the European Union and the United Nations as well as many further networks (Gröhe 2017; Kickbusch et al., 2017), a certain openness to the idea of international cooperation and the engagement in more specific agencies of those organization as well as in further global health networks can be assumed. Given this consideration, the

first criterion is met, and Germany might be a good case to gain insight in the level of cooperation and coordination.

The second feature, asking for an industrialized nation is important, as those are expected to have a high GNP and usually a stable government leading to the assumption that these countries should have the necessary administrative bodies and health system in place, as well as the monetary funds to be able to develop resilient contingency plans, that are accepted by the citizens and can be effectively enacted in case of a health crisis in the form of an pandemic. With Germany scoring 4<sup>th</sup> place in the United Nations Development Index 2019 (UNDP, 2019), this criterion is fulfilled.

The last reason for choosing Germany from the pool of available countries that fulfill the preconditions mentioned above was my language proficiency. As a native German speaker, I am able to read the original publications from German official governmental sources and also understand nuances in formulations, that a non-native speaker might not be able to detect. While this means, that I as a native German speaker have the best preconditions to analyze Germany as a case, it also means that Germany is the best case for me to analyze for comprehensive insights and preferable over countries with for instance English as official language.

However, I am aware of the particular problems a case study of only one case involves. It is clear, that even though Germany is in this work expected to pose as typical example for the actions of a country concerning viral disease related international health crises, some of the generated insights might be connected to specific German preconditions and be therefore non-generalizable. But this will be included in the final conclusion of case study, when talking about the limitations of the project.

### 3.3. Selection of the Documents

The documents, included in the analysis were from different sources, but all were legal texts or official publications from governmental agencies and official international organizations. Their selection was based on cross-referencing, including documents that were mentioned and highlighted by previously included documents, starting with the “Gesetz zur Verhütung und Bekämpfung von Infektionskrankheiten beim Menschen” (“Infektionsschutzgesetz” – short IfSG)(Bundesministerium für Justiz und Verbraucherschutz, 2020), which is the German act on the protection from infectious diseases. Based on this, also the national pandemic contingency plan featuring national recommendations made by the Robert Koch-Institut was referenced and subsequently included. Additionally, the international health regulations as regime featuring recommendations made by the World Health Organization were frequently mentioned in the infection protection act. And based on the full enforcement through the Federal Republic of Germany included in the analysis, alongside the official legal act on their implementation.



#### 4. Analysis

The focus of this analysis lies on the premise of international cooperation, as described in the theoretical groundwork earlier presented. Therefore, the main aspect searched for in the following texts were signs for cooperation and the context in which it is addressed in the official documents from the German perspective. Derived from the theory, codes were used in the documents with atlas.ti, designed to group parts from the documents in a way that helps understanding the national stance on international cooperation on health related issues as well as possible mentions of requirements and restrictions for the cooperation in the occasion of international health crises. Starting with certain buzzwords used as codes to identify relevant parts connected to the conceptualization and theory, further codes were added through in vivo coding, whenever new patterns or aspects were observed which relating to the previous codes designed to sum up the observed behavior.

From the conceptualization, we knew that there are certain actors involved in the crisis management, which occur in varying positions with different levels of authority. The aim here is to identify the actors for those scenarios in Germany and to understand the relation between the involved parties as well as the different options for interaction between them.

Therefore, the first Group of codes identifies actors within the response system as well as some of their characteristics while the second group aims to identify the tasks or responsibilities they are assigned with. This includes national, as well as international actors. The third group of codes can be understood as additional markers, describing the reoccurring aspects of the relations between the actors and their tasks. The pairing in which they occur gives further insight into the relation between the actors internally as well as the additional information about their outreach (Table 1). This contributes to the assessment of the international relation strategy of Germany compared to the background of new institutionalism.

| <b>Group 1 - Actors</b> | <b>Group 2 - Tasks</b>    | <b>Group 3 - Describers</b> |
|-------------------------|---------------------------|-----------------------------|
| actor_academic          | collaboration             | actor-interaction           |
| actor_public            | communication             | autonomy                    |
| actor_organization      | consultation              | competence_transfer         |
| actor_other             | coordination_hierarchical | goal                        |
| EU                      | coordination_network      | interdependence             |
| Health-Ministry         | decision-making_process   | international_level         |
| RKI                     | harmonysation             | national_level              |
| WHO                     | report                    | norm_transfer               |

*Table 1 – Grouping of codes used in the qualitative content analysis*

### *German Infection Protection Act - Infektionsschutzgesetz*

The main document which the German contingency planning relies on, featuring regulations for many different areas of public and private life that can be influenced by viral disease outbreaks, is the German infection protection act (ger. Infektionsschutzgesetz). It determines the competences and respective agencies and actors to take action in case of the occurrence of viral diseases within Germany. Divided into 16 sections, it first features regulations that are implemented in everyday life on monitoring, prevention and combating of infectious diseases, measurements for institutions, companies and individuals, water and sewage, restrictions and requirements for persons working in the food industry and requirements for scientific work on pathogenic agents. Meanwhile the sections at the end focus more on the administrative and legal aspects of the topic, for example the competences of the acting national agencies, the harmonization with European law and compensation payments.

As the main part of the law focuses on national management processes, international cooperation is only mentioned in some of the sections. Overall, only 18 short text passages in the 58 page document can be found. Among them, the Robert Koch-Institut (RKI) is clearly referenced as the national focal Point, overseeing and executing many of the policies laid out in the German infection protection act, as well as central actor reaching out internationally (IfSG, 2020, p. 6) and working together with external actors in the regard to manage issues related to viral diseases (IfSG, 2020, p. 7). This becomes evident, as the RKI is prominently featured in §4, (1) and §4, (1a) in the infection protection act, as main institution providing support for other national institutions if needed, while the national health ministry is expected to develop a strategy to support the work of the institute through infrastructural improvements for the RKI (IfSG, 2020, p. 6). Interesting here is that the RKI though being integrated in the German health ministry and therefore part of a governmental body understands itself first and foremost as a scientific institution designated to research and knowledge generation in public health related to viral diseases (RKI, 2017a). This is relevant, as it clearly states its guiding principles to be shaped by the values of evidence based, independent, transparent research. As institution following these principles, they aim to work together with other institutions honoring their values to gain further insights through information-sharing and collaboration in order to be able to provide political institutions and the general public with educated insights and information.

The national tasks of the RKI can be divided into first, knowledge generation and information sharing in other words communication, secondly consultation for institutions that are involved in decision-making and thirdly international outreach to other public health institutions (IfSG, 2020, p.6, p. 9). This

indicates in the national context a hierarchical structure of information sharing, coordinated by the RKI at top of the management chain. There is however little actual power in the institution shaping regulations as they are not involved in the external political decision - making or in direct contact with the places where the regulations are established. Instead they function as advisor for the decision-makers, being able to recommend certain options and advocate in argumentations using evidence-based knowledge for their advice, while the implementation and enforcement is left to the Health Ministry and the government. This principle therefore applies for citizens, private organizations and the general public on the national level as well as for areas and organizations operating in an international context on and beyond the German border, such as airports, harbors and the businesses operating there (IfSG, 2020, p.7).

On the other side, in the international context, the German phrase “arbeitet [...] zusammen” is used to describe the task of the RKI of engaging with transnational public and scientific actors, which can be translated to the English word of collaboration (IfSG, 2020, p. 7). However, the context at this point in the document, indicating the wish for a strong bond between the RKI and international public health institutions, aiming for full integration and engagement of the RKI in international networks and potentially the strive for aligned or even joint management strategies for virus outbreaks and containment rather suggests a network coordination approach as described in the terminology.

For instance, the RKI is mentioned to function as coordinating institution collecting information on specific contagious diseases and pathogens from the respective registration offices in the federal states within Germany. When these or novel pathogens are detected, they report the cases according to the guidelines of the international health regulations set by the World Health Organization (WHO) and make their collected data available to the WHO, enabling them to internationally monitor the occurrence of these pathogens and to determine potential threats worldwide at any time (IfSG, 2020, p. 18; RKI, 2017c, p. 17). Though referring mainly to well-known pathogens, continuously further researched, this communication and monitoring is not limited to the scientifically described pathogens, but includes explicitly the notion to report new or unknown viruses to partner organizations, which is an important marker for contingency planning towards newly emerging threats.

So, even though the notions of international outreach in the infection protection act are few, they present an overall positive attitude towards transnational cooperation and encourage cooperation in different ways, including but not limited to constant communication, information sharing, and monitoring concepts. This means there is not necessarily the explicit mentioning of the wish for cooperation as such, but rather that in all the points where coordination or cooperation is mentioned, it is described as worth to emphasize in it, in order to achieve an overall added value to the national approach. This pictures a very functional dealing with the issues, accepting a certain implicitness of the

will for transnational cooperation given the nature of the topic, as well as the clear trust in institutions designated to state of the art scientific insights, evidence based research and following the in science commonly acknowledged ethical concepts of transparency and ongoing discussion and reviewing of all findings to function as international “ambassador” for Germany in the respective international public health institutions. Also recognizable as an understanding of the interconnectedness and interdependence of humankind in the 21<sup>st</sup> century, blurring borders between national societies through rapid development of unifying technologies, as well as the possible of advantages through cooperation in the communal approach to contingency planning towards local viral disease outbreaks or their eventual pandemic spread.

Additional to this undertone emphasizing the transnational cooperation with public health institutions and partner organizations through the RKI, one short and little elaborated paragraph within the infection protection act is important to note. Section eleven, paragraph 55 (IfSG, 2020, p.47) relates to the harmonization of the German regulations with European law, making the alignment of the virus-related health crises management of the European member states potentially easier and allowing to adapt to drafted EU regulations in this policy field. As elaborating the peculiarities of the European Union as organization striving for harmonization of policies between the member states and the drafting and enforcement of EU regulations would go beyond the scope of this paper and is not of central interest, it will not be further discussed. Instead, the existence of this particular paragraph in the infection protection act is solely regarded as additional point indicating the general openness of Germany in European integration including the collaboration in public health management exceeding the national borders.

#### *National Pandemic Contingency Plan - Pandemieplan*

The document specifically designed to give instructions for the worst case, in the form of an internationally emerging pandemic is the German pandemic contingency plan “Pandemieplan”. It consists of one main part featuring regulations for such an emergency proposed by the RKI (RKI, 2017b), which is supported by an second part, presenting scientific evidence on which the propositions in the first part are based (RKI, 2017c). This plan is similarly to the infection protection act mainly focused on national solutions to problems occurring for citizens and other affected parties in Germany but also includes notions for international cooperation. Those however are to be further investigated, as the plan was designed with the WHO in mind and therefore opens a new perspective on cooperation. The contingency plan was initially developed in 2001, based on the idea of creating an general contingency plan all German federal states could agree on and that was also up to date to the international alignment through coordination of the WHO (RKI, 2017b, p. 5-6).

It has to be acknowledged, from the very beginning, that this contingency plan specifically lays out the strategy for a pandemic outbreak of the influenza virus, which tends to reproduce and mutate very fast, resulting in the frequent occurrence of new strains. Nevertheless, this document can be used for this case study as it exemplarily documents the German willingness for engagement in the field and mutual agreement for strategies in the case of an international health crisis.

Highlighted early in the document is the notion that a certain independence of national management approaches from the international actions is needed, as in a pandemic the actual situation might vary in the different affected areas (RKI, 2017b, p. 7). This aligns with the WHO definition of the main phase in a pandemic, when a virus starts to spread globally. This argument is interesting as it underlines the reasons for limitations to the competence transfer towards external institutions, while acknowledging the positive aspects of individual monitoring combined into global risk assessment. It is presented as measured decision, including the positive features from both sides.

The contingency plan also explains, how the German Health Ministry is charged with building an crisis management unit when an pandemic occurs (RKI, 2017b, p. 10). This unit is staffed with politicians and therefore holding a certain level of legitimation, while an advisory board staffed with Experts from the RKI, the Paul Ehrlich-Institut, and the federal Ministry for Drugs and Medical Devices (ger. BfArM) is installed to provide the crisis management unit with all the information they need and educated recommendations. The crisis management unit is here clearly described as responsible for the political decision-making processes on the international level within the EU and WHO, while the RKI is, as previously observed in the IfSG, entrusted with the information-sharing towards more specific institutions that are more technical oriented. Such as the European Centre for Disease Control (ECDC), the European agency responsible for infectious diseases or the Global Health Security Initiative (GHSI), which focusses mainly on preparedness for the case of an emergency (RKI, 2017b, p. 10-11, 13; RKI 2017c, p. 30, 58). This shows a clear division in competences of the German actors in order to remain legitimate and use knowledge to generate additional value in different outreach areas during the same time. One interesting addition to the point of communication is made later in the contingency plan, introducing the option for the German federal states to directly cooperate with neighboring countries to coordinate their actions in border regions. This differs from the earlier proposed options of one crisis management unit organizing the international outreach and cooperation or the RKI as national focal point of information sharing toward external institutions. This notion opens up possibilities for further harmonization, making the lives of persons in border regions considerably easier but also granting those regions a relatively high level in autonomy, possibly leading to a confusing fragmentation of the crisis management strategies, making good communication even more crucial.

When presenting hygienic measures for infection protection designed to reduce the spread of viral diseases, the contingency plan introduces direct measures, including changes in behavior patterns, protective clothing, contact restrictions, and disinfection measures, as well as measures preventing an infection such as vaccination or antiviral medication if available for the national use (RKI, 2017b, p. 24). Following this, they remark that the measures established for travelers might differ from the national ones, as they have to be established in accordance with the international health regulations from the WHO. Independent from more direct measures it is noted though that one of the most used measure to protect travelers and other persons crossing the national border are provided with extensive information, especially within the alert phase of a pandemic as the situation might change fast. This practice indicates that though mentioning the responsible institution at this point there seems to be no general common ground between the states engaging in the WHO, which is interesting as at least the direct measures seem rather unproblematic in their nature.

Following the topic of vaccinations however, the contingency plan references the WHO as institution responsible for the necessary coordination between the actors involved in the development for new influenza vaccinations (RKI, 2017b, p. 35), presenting this practice as potentially beneficial for the development of other similar products. Following the plan mentions that Germany decided to cooperate with the other EU member states in a joint procurement when buying the final product from the producers. This is explained as strategy to have a stronger basis for negotiations with the companies. This is very interesting, as it is the first time, that coordination with international partners is mentioned, indicating an equal position in working together towards a mutual goal. Also, this notion is unique, as it is purely fuelled by an economic interest of all the involved partners. Strategies presenting an economic advantage for the participating actors without giving up further competences, therefore seems to be a strong incentive for international coordination in the field.

#### *International Health Regulations*

Frequently mentioned in the German “Pandemieplan” and “Infektionsschutzgesetz”, the International Health Regulations (IHR), published by the WHO in 2005 take the perspective on international coordination and collaboration to the next level. Written to directly address the need for collaboration and eventually coordination they emphasize the connectiveness and interdependence within people in the global community. Exceeding the national perspective on the issue, they formulate approaches from a mainly functional perspective, aiming for the best possible international health crisis management, always bearing in mind the principles of human rights and an overarching aim to protect humanit from pandemics as efficiently as possible. Sharing this understanding, the federal republic of Germany decided to the fully agree to the regulations in 2007 (Bundesgesetzblatt, 2007), only supplementing them with six articles structuring the general implementation and assigning tasks

emerging from the regulations to national institutions. This includes the assignment of the RKI as national focal point for IHR regulation related issues, as required in article 4 of the IHRs (WHO, 2005, p. 11), managing the communication towards the WHO (Bundesgesetzblatt, 2007, p. 930), as previously similarly laid out in the IfSG and the national contingency plan. Also, along these paragraphs, there is a notion for special restrictions for travelers, in order to minimize the threat of viral diseases being brought by them to countries causing local outbreaks. Here we can see, that the German Government is very considerate about this point and filling the gap left in the national contingency plan, while reserving a certain autonomy in this specific issue.

The IHR themselves were the largest source to notions concerning the management of international public health, being published by an international organization working with 192 countries. As already described in the foreword, the member states of the WHO agree with their participation to confer authority upon the WHO, enabling them to adopt regulations, binding for the member states, if they do not intentionally opt out or make reservations (WHO, 2005, p. 1, 35). This does not only show a great trust in the institution but rather it is a remarkable sign for sovereign nations to give up a part of their autonomy. The opt out clause is often used in documents designed by the United Nations and its bodies, leaving the transfer of sovereign power incomplete. Nevertheless, the agreement to consider propositions made for mutual approach is the first step on the way to international cooperation.

Regarding the scope of the regulations, it is mentioned, that they were designed to establish certain minimum core public health regulations, the member states can agree on (WHO, 2005, p. 1). Which can also be explained with the purpose to find common ground, while not urging the members too strongly into a transfer of their sovereign power. Therefore, it becomes clear that while the regulations could theoretically be more comprehensive, little common ground is regarded as more beneficial towards the overall purpose of a mutual approach and leaves room for further individual arrangement for risk and crisis management as declared latter in the document (WHO, 2005, p. 28). Through the German enforcement of the IHR this indicates that Germany intends to establish international cooperation at least on this minimal level, if not further. Additionally, the foreword among many other things urges of member states of supporting each other in the establishment of the regulations when needed and to strengthen the WHO through continuous support from the members in the WHO (WHO, 2005, p. 4, 30) strengthening this urge later in the document by including designated articles in the eight part.

The IHRs consist of ten separate sections, featuring different topics. From these 10 parts, the second, third, fourth, and eight contain the most information interesting for the assessment of the engagement of a particular member state.

Part two is separated into the headers featuring *Surveillance, Notification, Information-Sharing, Consultation, Reporting, Verification, Provision of Information by the WHO, Determination of a public health emergency of international concern, Public health response, and cooperation from the WHO in further organizations and networks* (WHO, 2005, p.11-15). This sequence of actions mirrors both, the emergence of pandemics, from their first local occurrence to their global spread, to their eventual decline, as well as the proposed way of crisis management, starting with the surveillance at the local focal points, going through the more and more international institutions. This approach could be describes as quite linear, though not automatically hierarchical as the WHO might be very international and well respected, the nation states still hold the majority of sovereignty.

In part three, the regulations specifically deal with the different varieties of regulations, potentially imposed through the WHO. This includes the possibility for the Director General to issue temporal regulations in the case of a local public health emergency of international concern, which might be declared during the alert phase of a pandemic event (WHO, 2005, p. 16). Then again, standing recommendations for the specific issue of goods and persons crossing national borders and the necessary criteria for them are listed, in order to treat them with standardized procedures. Part four of the IHRs, then specifies the different proposed strategies and necessities for the different points of entry for goods and people of a country. This can be understood however as purely procedural strategy, making the surveillance easier. This field is different from the previous ones, as these regulations deal with an international problematic, but instead of governmental partners, the other party involved here is a private person or company. Subsequently, they are not subject to foreign policy or international relations.

Lastly included in the analysis is the official German act on the national enforcement of the national health regulations. Though not providing genuinely new insights, it suitably supports the argument made in the conceptualization claiming that an public health emergency of international concern poses an exceptional event for national governments, also describable as health crisis. Accompanied by the notion of the beneficial effects of international coordination to manage the border crossing nature of a health crisis adequately (Bundesministerium der Justiz und für Verbraucherschutz, 2020, p. 3).



## 5. Discussion

Summing up the findings from the analysis, the next step of this thesis will be to answer the hypotheses formulated in section two of this thesis.

We learned from the German infection protection act that Germany strongly emphasizes the parallel work of the Robert Koch-Institut as scientific institution focusing on practical management aspects such as monitoring, communication and information-sharing during an pandemic event, additionally functioning as consulting body for political decision makers. From balancing these two poles in their international outreach, Germany aims for a research-based approach which is also politically legitimated.

Though not holding much competence, the RKI is however featured in all of the analysed documents as highly relevant institution within the global health network, combatting the spread of viral diseases. Through the reappearing notion of the RKI as national focal point for collaboration with the WHO and other international pandemic management organizations and networks, it becomes more and more clear how the tasks performed by the RKI lay the absolute groundwork for any further engagement or coordination. This can be evaluated as Germany building its stance on the international crisis management in the 21<sup>st</sup> century with a backbone of the largest body of evidence based scientific findings.

Also, functionality occurs to be a factor pushing for collaboration. As presented in the additional recommendations for travelers in the supporting articles added to the German enforcement of the international health regulations or the close collaborations between EU member states, when presented with the option to save money for vaccinations through working together, described in the national pandemic contingency plan.

In conclusion, this supports Hypothesis 1a, showing that Germany seems to be motivated to engage in the international management of pandemic health crises induced by viral disease outbreaks, when advantages are generated through coordination and therefore pose as incentives.

Overall, we could observe the German willingness to engage in international coordination with other states as well as organizations and networking structures, even showing the beginning of competence transfer in some areas, as long there is the option for reservations.

Given the strong encouragement from the WHO to understand the IHRs as beneficial asset for all involved countries that are designed to be self-sustaining and establishing a minimal common ground to prepare further engagement in the future, Hypothesis 1b can be verified too.

Lastly, Hypothesis 2 is the closest connected to our findings of the German dual approach including the discussion of evidence based medical science in the political decision-making process. Similarly, to the WHO mirroring those values in their comprehensive information sharing agenda between the involved member states in order to generate knowledge. On the other side we see the WHO as only being entrusted with little actual competences to enforce their recommendations and clearly restricted independence in agenda setting. This occurs to be the most democratic solution, given that the WHO itself has no political legitimization through the general public. Therefore, we see hypothesis 2 only partly supported.

Though having be able to mainly support the initial hypotheses derived from the theoretical background of new institutionalism, it has to be acknowledged that this thesis only gives a very limited insight. As mentioned previously the positive aspect of IR theory, being easily generalizable and open in the formulation also is main part of the limits, this analysis has. The findings from the analysis of the documents appear to be still very rich in interesting information, especially for the further

investigation of the whole network of relations between the actors and institutions, which the new institutionalism fails to include. Newer theories in public administration, featuring not only national public actors in their models but rather diving into new governance patterns and decision-making processes like the Network Governance theory (Ansell & Gash, 2008) might be the next step in this research field. Though initially designed to understand the emergence of new local or national governance patterns, this Theory applied to the international health crisis management might be able to make more use of this information.

Additionally, independent from the theoretical background, there are also limitations arising from the choice of the federal Republic of Germany as representative case comes with problems. Given the high level of autonomy of the 16 federal states of Germany hold, they have to agree on every aspect of a joint international outreach first, adding another level of coordination. This was entirely neglected in this analysis and would be worth of further investigation when given the option for a more intensive study.

## 6. Conclusion

### ***How do international relation theories explain the behavior of nation states confronting viral disease related international health crises?***

Concluding, it can be remarked that international relation Theories can generally analyze how strongly a country engages in the international arena and to which extent the national government is willing to give up competences traditionally bound to the sovereignty of his country. In this analysis it has been shown how the behavior of the federal republic of Germany fairly aligns with the expectations neoliberal institutionalism would suggest.

The national contingency plans are mainly designed to suggest solutions on a national level, keeping most of their sovereignty, just slowly opening up to new possibilities though investing more and more in international information sharing, connecting to the engagement in international networks in this field mainly through the RKI.

Due to the time, in which this thesis has been written, it has to end with a remark to the current global situation. With the world experiencing the first global pandemic of the 21<sup>st</sup> century, induced by the novel corona virus, we face a reality in which countries rarely mirror the behavior as it would have been expected in this analysis.

This only shows the limitations of theoretical scientific work unable to predict clear scenarios for such extraordinary situations as a global pandemic. Therefore it perfectly sums up the need for further research, using better techniques and going further into the details.

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