

Responding to the COVID-19 Crisis: Transformative Governance in Switzerland

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Abstract

In the ongoing coronavirus disease 2019 (COVID-19) crisis, uncertain and experimental forms of governance have emerged. Administrative routines and established management techniques have dissolved amid emergency actions and management by the state of exception. We refer to these emerging governance forms as transformative governance. Discussing examples from Switzerland, we illustrate how policy responses to COVID-19 reflect transformative governance. These examples raise four issues that characterize transformative governance research and practice: (i) the evidence base of policymaking, (ii) the role of the state in transformative governance, (iii) the potential of experimental governance, and (iv) the paradigms driving policy change. Our study demonstrates that these issues imply different opportunities and risks of transformative governance, which we discuss in detail.

Key words

COVID-19 crisis, transformative governance, policy response, experimentation, federalism, Switzerland

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1. Introduction

In February 2020, just before the coronavirus disease 2019 (COVID-19) started to spread across Europe and severely hit national societies and economies, *The Economist* (2020) published an article with the headline “Diseases like COVID-19 are deadlier in non-democracies.” The journalists analyzed the International Disaster Database’s data on epidemics, such as the smallpox outbreak in Nepal in the 1960s and the more recent outbreaks of Zika and Ebola in Brazil and Western Africa, respectively. The journalists found that democratic states, defined as states with free and fair elections, performed better than authoritarian states in effectively combating and reducing such disease threats. This insight seems counter-intuitive at first, since the rather slow processes of deliberative and participatory democracies impede the fast action needed in times of crisis. However, the journalists point to another element, which is indispensable in such critical times and which authoritarian states are lacking: “the free flow of information and open dialogue between citizens and rulers” (*The Economist* 2020). While authoritarian states are able to enforce massive infrastructure projects and far-reaching social restrictions in short periods, they also prevent the free exchange of knowledge and information, thus preventing life-saving information from being spread and utilized for effective policymaking. The free flow of information seems to be an essential criterion of governing and fostering the resilience of societies and economies during substantial crises, such as the present global COVID-19 outbreak.

In the ongoing COVID-19 crisis, the uncertainties surrounding making political decisions and adopting mitigation measures are greater than ever, and the expected impacts of the crisis and the corresponding downscaling of social and economic activities are more profound. The COVID-19 crisis presents a dangerous and possibly irreversible situation that requires quick responses and significant social, economic, and political change. In such precarious times, forms of governance emerge, which are uncertain and experimental by nature. Administrative routines and established management techniques have dissolved amid emergency actions and management by the state of exception. We refer to these forms of emerging governance as transformative governance. The importance of transformational change has grown because policymakers are increasingly recognizing that incremental approaches are failing to manage global challenges (e.g., climate change). Accordingly, a shift toward more systemic or transformational change is required.

Transformation, or transformational change, has been studied in organizational theory for three decades and is related to other debates on transitions or regime changes. The terms transition and transformation both illustrate the necessity for comprehensive and large-scale changes and have become buzzwords in political and scientific discourses. These concepts differ in their conceptual roots and are used by different research communities (Hölscher *et al.* 2018). Transition research, especially the literature on sustainability transitions, provides insights into how to explore the potential for major shifts toward a more sustainable future focused on innovation niches (Geels, 2005; Grin *et al.*, 2010). As O’Neill and Gibbs (2020, p. 120) summarized, “sustainability transitions theories are concerned with the

transformation of technological regimes, and emphasize the role of innovative (technological) niches as a key means of effecting transitions.” In contrast, the term transformation refers to wider, societal, large-scale, and non-linear structural change processes. Transformations disrupt previous pathways and entail radical alteration and fundamentally different policymaking outcomes (Blythe *et al.* 2018, Hölscher *et al.* 2018).

Our paper can be situated within the transformative governance literature. Transformative governance has recently been used as an analytical framework to study many disciplines related to human geography, including social-ecological systems (e.g., Barnes *et al.* 2017), climate risks (e.g., Kates *et al.* 2012, Fazey *et al.* 2018), adaptation to climate change (e.g., O’Brien 2012, Termeer *et al.* 2017), urban climate change (e.g., Hölscher *et al.* 2019), fire management (e.g., Bosomworth 2018, Head 2020), agriculture and food systems (e.g., Buchan *et al.* 2019, Panda 2018), resilient urban water systems (e.g., Rijke *et al.* 2013), urban regeneration (e.g., Eshuis and Gerrits 2019), sustainability (e.g., Castán Broto *et al.* 2019), the green economy (e.g., Gibbs and O’Neill 2014), and the circular economy (e.g., Termeer and Metze 2019).

Termeer *et al.* (2017) question the feasibility of transformational changes that are concurrently in-depth, large scale, and quick, as well as the assumption that incremental change must be slow and can only result in superficial changes. They reconceptualize the divide between transformational change and incremental change and propose the idea of continuous transformational change. As a result, Termeer *et al.* (2017) posit that governance intervention includes (1) providing basic conditions for enabling small in-depth wins; (2) amplifying small wins through sensemaking, coupling, and integrating; and (3) unblocking stagnations by confronting social and cognitive fixations with counterintuitive interventions. Moreover, governing transformational change requires transformation of the governance systems themselves.

Transformative forms of governance are emerging around the world as most countries are adopting measures that provide immediate and tangible relief for their health systems, economies, and civil societies. Bosomworth (2018) theorizes that policy sectors need four important capacities to enable transformative governance: reflexive learning, decision-making under conditions of uncertainty, the inclusion of diverse perspectives, and experimentation. Her research on fire management considers the institutional logics that support and structure policy response. She argues that understanding a policy sector’s institutional logics enables transformative governance. We will use these four transformative governance capacities to explore COVID-19 responses in Switzerland.

This paper builds on recent research on transformative governance to understand how policy responses to COVID-19 in Switzerland reflect transformative governance. It explores the first two months of policy responses, and identifies potential opportunities and relevant risks. We cannot provide extensive empirical data as the crisis is not yet over, and it is too early to comprehensively evaluate respective policy responses. We also do not merely provide an opinion paper on policy change in Switzerland.

Instead, the paper examines current policy responses to the COVID-19 crisis through the conceptual lens of transformative governance. Specifically, we aim to answer the following three research questions:

- What are the COVID-19 policy responses in Switzerland?
- How do the COVID-19 policy responses in Switzerland reflect forms of transformative governance?
- What are the opportunities and risks of the emerging forms of transformative governance?

We answer these research questions using examples of the political and legal geography of responses to the COVID-19 crisis in Switzerland. The country's federal system, its strong civil society, the decentralized structure of its political-administrative systems, and its consociational democracy and subsidiarity make it an excellent case for studying different forms of governance in a relatively small area (Willi, Pütz and Müller 2018). The gained insights are also interesting for other European states with similar institutional structures, such as Austria, Belgium, and Germany. Throughout the paper, our focus lies on policy responses decreed by the Federal Council and how these have been implemented at subnational levels within the multi-level governance system of Switzerland. In addition to the policy responses decreed by the public authorities, additional responses to COVID-19 have been organized by private businesses and civil society, such as online shopping platforms, delivery services for all kinds of goods and services, and neighborhood assistance initiatives. However, these socio-economic responses are not part of our analysis, as we focus on policy responses administrated by public authorities.

The remainder of this paper is structured as follows. In chapter 2, we provide a comprehensive overview of the policy responses to COVID-19 in Switzerland. For this purpose, we first present a list of all of the policy responses, which were decreed one after the other by the federal authorities following the COVID-19 outbreak. Then, we chose four specific examples of policy responses to illustrate how their implementation at subnational levels led to the emergence of different forms of transformative governance. Building on this, in chapter 3, we discuss different opportunities and risks of transformative governance and propose four important issues concerning transformative governance research and practice. Finally, in chapter 4, we discuss the role of federalism and cooperative structures in Switzerland and if transformative governance actually leads to transformation.

2. Policy Responses to the COVID-19 Crisis in Switzerland

In Table 1, we provide an overview of past and present policy responses to the COVID-19 crisis in Switzerland, which have been decreed by the Swiss federal state. We listed the dates on which the policy responses came into force in chronological order and linked them to the infection and death rates in Switzerland. In addition, we assigned relevant topics to each policy (i.e., awareness raising, economy, health care, personal freedom, political rights, social innovation, and travel and traffic). We compiled the table by scouring the websites of the federal state departments and offices, such as the Federal Office

for Public Health (FOPH), the Federal Department of Home Affairs (EDI), the Federal Office of Transport (FOT), the Swiss Armed Forces, and the Federal Council. To understand how the federal policy responses were implemented at the subnational levels, we also looked at cantonal policy responses, by scouring the webpages of the 26 Swiss cantons and integrated information from the two largest subscription-based Swiss daily newspapers, the Neue Zürcher Zeitung (<https://www.nzz.ch>) and the Tagesanzeiger (<https://www.tagesanzeiger.ch>); Swiss Radio and Television (SRF) (<https://www.srf.ch>); and regional and local daily newspapers, such as the Luzerner Zeitung (<https://www.luzernerzeitung.ch>), and Die Südostschweiz (<https://www.suedostschweiz.ch/>).

Table 1: Federal policy responses to COVID-19 in Switzerland (author's compilation) Policy responses	Effective date	Number of infections	Number of deaths	Source	Topic
Compulsory registration of possible COVID-19 cases	01.02.2020	0	0	Federal Department of Home Affairs (www.edi.admin.ch)	Privacy
Declaration of a special situation, granting additional executive rights to the national government	28.02.2020	10	0	Federal Office of Public Health (www.bag.admin.ch)	Political rights
Ban on events with more than 1,000 attendees	28.02.2020	10	0	Neue Zürcher Zeitung (www.nzz.ch)	Personal freedom / Political rights
Information campaign	01.03.2020	24	0	Federal Office of Public Health (www.bag.admin.ch)	Awareness raising
Closure of nine border points to Italy	11.03.2020	642	5	Federal Customs Administration (www.ezv.admin.ch)	Travel and traffic
Ban on events with more than 100 attendants	13.03.2020	1,125	12	Federal Council (www.admin.ch)	Personal freedom / Political rights
COVID-19 financial aid to the economy	13.03.2020	1,125	12	Federal Department of Finance (www.efd.admin.ch)	Economy
Ban on classroom teaching at all educational establishments	13.03.2020	1,125	12	Federal Office of Public Health (www.bag.admin.ch)	Education
Parliamentary session cancelled	15.03.2020	2,195	21	Neue Zürcher Zeitung (www.nzz.ch)	Political rights
Declaration of an extraordinary situation, granting further executive rights to the national government	16.03.2020	2,330	30	Federal Office of Public Health (www.bag.admin.ch)	Political rights
Military mission to relieve the civilian health care system	16.03.2020	2,330	30	Swiss Armed Forces (www.vtg.admin.ch)	Health care
Hygiene and conduct rules mandated for open establishments	17.03.2020	2,650	36	Federal Office of Public Health (www.bag.admin.ch)	Economy
Employers required to protect people, especially those at high risk	17.03.2020	2,650	36	Federal Office of Public Health (www.bag.admin.ch)	Economy
Stay at home order for the population	17.03.2020	2,650	36	Federal Office of Public Health (www.bag.admin.ch)	Personal freedom

Ban on events and closure of establishments	17.03.2020	2,650	36	Federal Office of Public Health (www.bag.admin.ch)	Personal freedom / Economy
Entry restrictions at the Swiss border	17.03.2020	2,650	36	Federal Office of Public Health (www.bag.admin.ch)	Travel and traffic
Public vote cancelled	18.03.2020	3,000	48	Federal Council (www.admin.ch)	Political rights
Reduction of public transport	19.03.2020	3,860	56	Federal Office of Transport (www.bav.admin.ch)	Travel and traffic
Extension of funds committed to COVID-19 financial aid	20.03.2020	4,803	77	Federal Council (www.admin.ch)	Economy
Prohibition on gatherings of more than five people	21.03.2020	6,069	97	Federal Office of Public Health (www.bag.admin.ch)	Personal freedom / Political rights
Ban on visiting hospitals and retirement, nursing, and invalids' homes	02.04.2020	18,192	620	Federal Office of Public Health (www.bag.admin.ch)	Personal freedom / Health care
Further extension of funds committed to COVID-19 financial aid	03.04.2020	19,227	680	Neue Zürcher Zeitung (www.nzz.ch)	Economy
FOPH requests access to mobile data from Swisscom for visualization	03.04.2020	19,227	680	Federal Data Protection and Information Commissioner (www.edoeb.admin.ch)	Privacy

Table 1 shows that the Swiss public authorities decreed several policy responses following the COVID-19 outbreak in Switzerland. Their aim was to quickly reduce the spread of the virus, protect the elderly and people with health problems, decrease the burden on the health care system, and eventually flatten the curve of new infections (FOPH 2020). The policy responses were put into practice at different times, but they began as early as February 1st and increased sharply shortly after the first COVID-19 infection was reported in Switzerland on February 25th. Implementing these policy responses eventually led to reductions in the infection and fatality rates (SRF 2020a). However, economic and social life became severely restricted, unemployment rose, requests for state aid (including debt relief and short-time work) by private businesses and industries increased, and all forms of public life stood still at once.

We selected four examples of policy responses, to examine emerging forms of transformative governance. These examples illustrate how federal policies were implemented at subnational levels. The selections were made based on two criteria. First, we wanted to show a wide variety of forms of transformative governance to highlight the broad spectrum of policy responses. Second, we selected examples that illustrated a challenging situation between the federal and subnational levels and required extensive coordination and negotiations among different actors within the multi-level system of Switzerland. The four selected examples are as follows (Figure 1):

- Example 1: Closure of the Gotthard tunnel to limit traffic to the cantons of Uri and Ticino over the Easter holidays

- Example 2: Derogations for cross-border commuters in the cantons of Geneva, Basel-City, and Ticino
- Example 3: Challenge of the federal state by the cantons of Uri and Ticino and the granting of legal exemptions
- Example 4: Mobility restrictions in tourism and leisure traffic in the cantons of Appenzell Innerrhoden, Berne, Grisons, and Valais

It is striking that the canton of Ticino appears in three out of four examples. However, it is also understandable since Switzerland's southernmost canton had to develop effective policy responses more urgently than the other cantons for three reasons. First, the canton of Ticino borders the Italian region of Lombardy, one of the most affected regions in Italy, which is the European country that has been most affected by COVID-19. Second, the first COVID-19 confirmed case in Switzerland was reported in the canton of Ticino on February 25th (St. Galler Tagblatt 2020). Third, the canton of Ticino recorded the second highest number of new cases in Switzerland on April 17th, with 8.3 confirmed cases per 1,000 inhabitants. Only the canton of Geneva bordering France was more affected (9 cases per 1,000 inhabitants) (SRF 2020a).

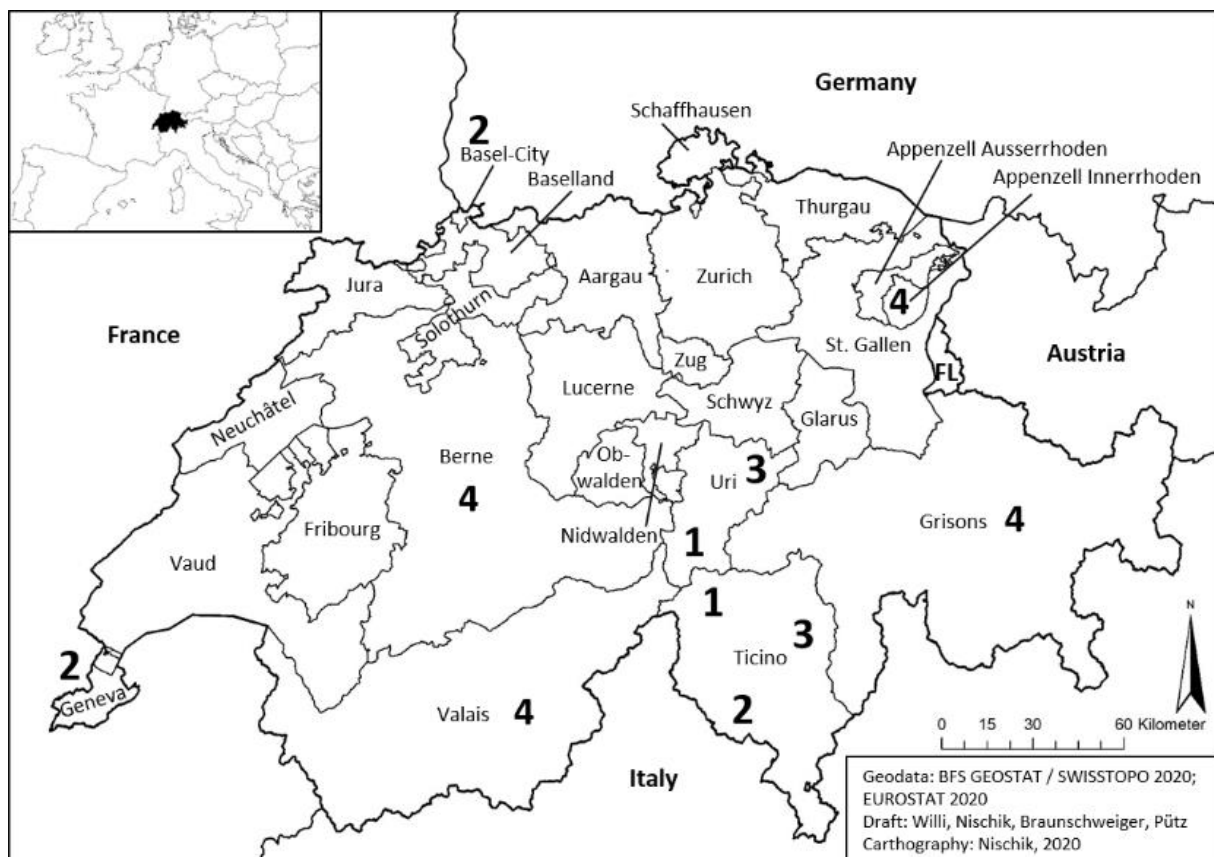


Figure 1: The cantons of Switzerland. Numbers 1–4 represent the four policy response examples presented in the text.

Example 1: Closure of the Gotthard tunnel to limit traffic to the cantons of Uri and Ticino over the Easter holidays - A few days before Easter, the cantons of Uri and Ticino called on the Federal

Council to close the Gotthard tunnel—one of the most important European tunnels and Switzerland’s main access route to Ticino—over the Easter holidays. The authorities in both cantons, which are usually heavily affected by the travel volume over Easter, wanted to prevent people who may have been infected with COVID-19 from travelling to Ticino and placing an even greater burden on the health system of the already severely affected canton. However, the Federal Council, which is normally very concerned about autonomy at the cantonal level, decided not to comply with this request—citing, among other reasons, the idea that such a measure would not have been compatible with existing law. Instead, the various authorities from the federal and cantonal levels jointly decided to position police patrols on the road to the Gotthard tunnel, stopping people traveling south in order to inform them about the COVID-19 situation and reminding them of their responsibility to help combat the spread of the virus. This soft measure was meant to get people to rethink their plans and, in the best case scenario, turn back.

This situation reflects distinctive capacities, which are characteristic of transformative governance. First, diverse perspectives had to be considered (e.g., the perspectives of the cantons, the fear of overburdening the health system, existing law). Second, decisions had to be made amid uncertainty as it was unknown a) how many people would travel to southern Switzerland over Easter, b) how many people would potentially be infected with COVID-19 and request treatment at a health facility in Ticino, and c) what the closure of the Gotthard tunnel would mean for the economy. Third, authorities had to experiment to find an alternative and unconventional solution to reduce the travel volume. Fourth, as the weekend before Easter was warm and sunny and drew crowds of people outside—despite the stay-at-home measures in force—authorities could use this opportunity for reflexive learning and for testing different solutions to address people who were potentially endangering themselves and others by flocking to the streets and into nature.

Example 2: Derogations for cross-border commuters in the cantons of Geneva, Basel-City, and Ticino - Several Swiss border cantons are highly economically dependent on the cross-border commuter labor force. This is especially the case in the Lake Geneva region, which recorded 120,608 cross-border commuters in the 4th quarter of 2019, followed by the northern Basel-City region and the southern canton of Ticino, which registered 70,166 and 67,878 cross-border workers, respectively (FSO 2020). Most of the cross-border commuters are from Germany, France, and Italy, and they work predominantly in the tertiary sector and in industries, such as the pharmaceutical, chemical, health care, and construction industries.

On March 13th, more than two weeks after the first COVID-19 infection was reported in Switzerland, the Federal Council started to tightly control the border to Italy. Three days later, on March 16th, it expanded this policy to the German, Austrian, and French borders. Since this date, only Swiss citizens, individuals holding a resident permit or travelling to Switzerland for professional reasons, or individuals in a state of absolute necessity have been allowed to enter the country. Cross-border commuters need a

valid cross-border commuter permit that certifies their cross-border status and grants them entry (INFOBEST 2020).

Although the travel regulations for cross-border commuters were clarified early on in the COVID-19 crisis, the new situation created by the partial closure of the border still presents a major challenge for the cantons and local companies that depend on the cross-border commuters. Furthermore, the increase in the number and intensity of border controls has led to extended traffic jams and dramatic increases in commuting times. Also, in the beginning of the crisis, it was unclear if the borders would remain open at all. In particular, Swiss authorities feared that France—where a sharp rise in the number of COVID-19 cases was reported in the Mulhouse region close to Switzerland—would close its borders completely.

Given the impact of this national policy and the general situation of uncertainty, local policy adaptations had to be found quickly to ensure that cross-border commuters could continue to work in Switzerland. For example, the two main hospitals in the Basel region—the University Hospital Basel and the Cantonal Hospital of Baselland—called on their cross-border commuters on March 15th to check into hotel rooms on the Swiss side of the border as soon as possible. The hotel room expenses were shared by the hospitals and the cantonal authorities (Basler Zeitung 2020).

This example of a national policy that quickly prompted local responses is also a good example of transformative governance. Although introducing border controls early into the crisis seemed to be reasonable from the national interest and well-being perspectives, it also presented a challenge for the affected border cantons. By quickly linking different perspectives (e.g., those from the local hospitals and the cantonal authorities) and integrating them into the decision-making in a situation of great uncertainty (e.g., the potential complete closure of the border), a solution was formulated that has helped keep business and services running even in these trying times. Furthermore, the implemented solution included experimenting, as it was unclear whether and how many cross-border commuters would make use of the offered hotel rooms. In addition, the fact that the border controls were introduced at the Italian border first instead of at all border crossings at once may reflect the difficulty and threat of reflexive learning processes.

Example 3: Challenge of the federal state by the cantons of Uri and Ticino and granting of legal exemptions - The search for appropriate measures to combat the spread of COVID-19 has led to some conflicts between the federal state and cantons that took more drastic measures than the state deemed reasonable. On March 19th, the canton of Uri issued a general lockdown for people older than 65 years. This decision went against the policy of the Federal Council, which had decided to stop short of a full lockdown, opting to ban gatherings of more than five people instead; the Federal Council had also decided not to take any measures that discriminated by age or other risk factors. The federal state promptly ordered the canton of Uri to take back the lockdown, citing a new decree by the Federal Council forbidding cantons from issuing cantonal lockdowns without federal approval. In the same week, on March 21st, the canton of Ticino got into a similar conflict with the federal state over its

decisions to shut down all construction sites in the canton and severely restrict the freedom of people over 65 years, making it illegal for them to go shopping or take care of young children. While Ticino stopped short of ordering a full lockdown for people older than 65 years, their measures still violated the federal principle of not taking any measures that explicitly discriminated by age. The federal state rebuked the actions of the canton of Ticino because, according to the national law on epidemics, which is the legal basis for all of the measures taken to combat the spread of COVID-19, cantons are not allowed to take more drastic measures than those taken by the federal state. However, the canton of Ticino refused to take heed, insisting on keeping construction sites shut down. Federal officials bemoaned that, while they had alerted cantonal authorities of the fact that they were acting in violation of national law, they were unable to do anything more than that, as the implementation of the measures was ultimately up to the cantons. While the canton of Ticino was first criticized for violating federal law, the conflict was eventually resolved by an adjustment to the emergency decree of the Federal Council. The decree now allows cantons to shut down entire industry branches under certain circumstances rather than only permitting cantons to shut down individual businesses, retroactively legitimizing the actions of the canton of Ticino.

This example primarily illustrates how traditional modes of governance in a federal state could be threatened during times of crisis as conflicts about appropriate political measures erupt between the federal state and its subordinate member states. It also demonstrates several of the key capacities associated with transformative governance. Specifically, it shows the capacity for reflective learning and the capacity to consult and integrate contradictory perspectives, as the federal state quickly arrived at a solution that, although satisfying the needs of the canton of Ticino—which has been particularly affected by COVID-19—did not provide all Swiss cantons with a *carte blanche* to issue stricter decrees than the federal state deems necessary. It also demonstrated the capacity to make and implement decisions under great uncertainty. From the federal state’s perspective, it was initially unclear whether the affected cantons would go along with or oppose the federal rejection. Additionally, the federal state could hardly assess the health and economic consequences of its actions. Thus, granting legal exemptions for cantons with particular needs seems to be a compromise accepted by all parties.

Example 4: Mobility restrictions in tourism and leisure traffic in the cantons of Appenzell Innerrhoden, Berne, Grisons, and Valais - Tourism is an important economic sector, especially for rural regions. When COVID-19 broke out in Switzerland at the end of February, the ski season was still underway. In a statement on March 13th, the Federal Council announced a ban on events with more than 100 people. This statement was interpreted differently by the cantonal authorities and ski resorts. While ski areas in the canton of Berne, such as in the Jungfrau, Gstaad, and Adelboden regions, initially remained open, ski areas were immediately closed in the cantons of Grisons, Uri, and Valais. The Minister of Health went so far as to accuse the ski resorts that remained open of “illegal activities” (SRF 2020b) before announcing that all the resorts had to close immediately (Neue Zürcher Zeitung 2020). This order was followed promptly, and the 2020 skiing season in Switzerland ended earlier than usual.

However, leisure and tourism traffic continued to generate headlines. For example, the sunny weekend of April 4-5th attracted many excursionists to the mountains. The Flüelenpass (canton of Grisons) and the Alpstein (canton of Appenzell Innerrhoden)—well-known and attractive excursion destinations—both registered large crowds of people, as well as many incorrectly parked cars blocking the access roads (Canton of Appenzell Innerrhoden 2020; Die Südostschweiz 2020). The affected cantons responded quickly by closing the access routes and the parking lots. These regulations remained in place until after Easter.

Again, this example illustrates transformative governance. First, the documented reactions illustrate that a variety of perspectives had to be integrated into the decision-making. Clearly, the fear of economic loss and the longing for outdoor activities led economic and civil actors to different interpretations of federal policy responses. At the same time, the cantons had to interpret the statements of the Federal Council and incorporated perceived uncertainties into their decision-making. In addition, the sudden emergence of problems (e.g., crowds of people gathering outdoors) required the authorities to learn and react quickly using unconventional measures.

3. Opportunities and Risks of Transformative Governance

Crises offer the potential for transformation. The COVID-19 crisis may primarily catalyze changes in the health system and the digitalization of the economy and general life. The sheer scale and speed of the COVID-19 crisis might result in renewed pandemic plans and other civil protection activities. Aside from these obvious transformations, the policy responses to COVID-19 refer to Bosomworth's (2018, p. 416f.) "capacities to enable transformative governance." Our findings confirm that transformational policy change requires reflexive learning, decision-making under conditions of uncertainty, the inclusion of diverse perspectives, and experimentation. However, we aim to sharpen her arguments by proposing four important issues concerning transformative governance research and practice: (i) the evidence base of policymaking, (ii) the role of the state in transformative governance, (iii) the potential of experimental governance, and (iv) the paradigms driving policy change. Each of these issues implies different opportunities and risks of transformative governance, which we discuss below in more detail.

(i) The evidence base of policymaking

Obviously, decision-making during a pandemic health crisis is heavily dependent on fast and solid data. Less obvious are which indicators are crucial in informing policymaking and who is providing the data. The quality of data can vary greatly between countries, with some governments substantially under-reporting cases. What we have learned in Switzerland during the COVID-19 crisis is that the public authorities are not the only ones providing data; besides the World Health Organization (WHO) and the Swiss FOPH, privately run websites, Johns Hopkins University, and the media are trying to monitor the crisis in real time. Furthermore, there is a wide variety of indicators available ranging from health-related figures (e.g., the number and place of infections or deaths, the speed of the disease (days/weeks of

duplication rates)) and the ratio of tests to reported cases to infrastructural figures (e.g., availability of hospital and personal protection equipment) to economic figures (e.g., the number of shops closed, the number of employees working reduced hours). The relative importance of the indicators depends on the phase of the crisis and the seriousness of the situation. Health figures dominated the discourse at the beginning of the crisis, and other figures have complemented the discourse and evidence base of the policymaking in later stages. In other words, it is not only health indicators that inform decisions in a health crisis.

Our examples clearly show that policy responses to the COVID-19 crisis are evidence based. Politicians have strongly relied on expertise from virologists, epidemiologists, and other public health experts. Public health experts have answered the important questions and decided which evidence and sources to use to answer those questions—at least in the first weeks of the response. As the crisis continues, the voices of not only economists but also psychologists and social scientists have become stronger.

Discussing the evidence base of the policy responses to the COVID-19 crisis reveals specific opportunities and risks for transformative governance. Opportunities may involve the inclusion of new perspectives. Currently, policymaking seems to be very influenced by experts, not only the usual lobbyists for economic, agricultural or environmental concerns but also new faces and voices. Future policymaking might integrate a wider range of stakeholders and knowledge sources. A greater emphasis might be placed on public health and civil protection. Risks include dependence on a limited number of information sources, the legitimacy of these sources (i.e., why are they considered and not others), the imbalance of interests (i.e., health and economy first, social issues second), data inaccuracies (e.g., origin, collection method), and the quality of the data provided by state authorities, supranational organizations (e.g., WHO), and other organizations (e.g., Johns Hopkins University, the media).

(ii) The role of the state in transformative governance

State and market forces shape transformative governance. Obviously, the state plays an essential role in formulating COVID-19 policy responses. In fact, we have limited ourselves to state-decreed policy responses and discussed only federal and subnational policy responses. It is interesting to note that the Swiss population strongly agrees with these policy responses and the role of the state in leading the coordination efforts. This shows that the state (not to be equated with politicians) enjoys great popular support and trust—at least for now. However, the state has been reduced to executive means. While the Federal Council dominates, the national parliament does not seem present. Our policy examples show that the well-established federal system of decision-making is not comprehensively in force; the cantons still can make use of their authority and successfully challenge the federal state. In the current crisis, the decision-making processes seem to be accelerated as cantons may call up the federal state directly for assistance and changes in policy.

The Swiss political system is well known in political science as one of the prime examples of a consociational democracy, a concept developed primarily by Lijphart (1969) and Lehmbruch (1968). Consociational systems are characterized by the inclusion of as many actors as possible in the political process and by their focus on developing consensual solutions, thereby improving the public support for the developed policies. Although there has been some recent debate on whether Switzerland still qualifies as a consociational democracy (Vatter 2016), the Swiss political system undeniably incorporates strong power-sharing mechanisms. For example, the possibility of forcing a public vote on any new policy by collecting a mere 50,000 signatures for a referendum has produced a custom of including a broad range of interest groups in policymaking processes. For each prospective new law, the federal state organizes a consultation process that includes the cantons; associations of cities, municipalities and mountain regions; political parties; trade associations; and other relevant interest groups depending on the exact content of the new law. Additionally, the Swiss political system strongly emphasizes the authority of the subnational levels of government. If not otherwise defined by the constitution, the first authority in any policy field is at the cantonal level. Any decisions left open by cantonal law default to the municipal authorities (Sager, Ingold and Balthasar 2017). This distribution of competences is guided by the principle of subsidiarity, which says that all political responsibilities not explicitly assigned to a higher level are to be fulfilled by the lower level (Ladner 2010). As such, the Swiss state is quite capable of consulting and integrating different perspectives in governance processes. However, the current crisis subverts this capacity in some ways; the Federal Council, based on the national law on epidemics, rules by decrees, and the regular consultation process has been completely eliminated. And yet, even federal policies are primarily implemented by cantons and municipalities. This naturally grants the subnational level a certain degree of control over exactly how federal policies are implemented or, in extreme cases, whether they are implemented at all. As demonstrated by the example of the canton of Ticino challenging the national authority, the authority of the subnational governments in Switzerland is so strong that, even during this crisis, they have been able to ensure that their interests are taken into account. This strong focus on subnational authority in the federal system of Switzerland ensures that, even during this crisis, different perspectives are considered in governance processes. Meanwhile, the case of Ticino also shows that the federal state is apparently unable to fully enforce its authority over the subnational level during an international crisis. The issue in this example involved cantons taking more extreme measures than the federal state, and the conflict was resolved within days. However, the inverse case of a canton refusing to follow federal directives for economic reasons, thereby endangering its populace, seems equally possible. Thus, the lack of authority of the federal state over the subnational levels might have easily become problematic.

While the Swiss policymaking process during the COVID-19 crisis has arguably been much less inclusive and more top-down than usual, cantons and municipalities have still exercised significant political power by virtue of being in charge of how the COVID-19 policies are implemented. Considering the fact that many of these new policies severely restrict the basic rights of Swiss citizens,

this power harbors a considerable danger of abuse. For example, generally speaking, municipalities are in charge of how policies, such as the prohibition on public gatherings and the demand to stay at home whenever possible, are implemented and enforced. While some municipalities may decide to simply close popular public spaces, others might task the local police with questioning passersby on their reasons for being outside or breaking up groups of people gathering outside. Depending on exactly how the public authorities go about implementing the federal decrees, such policies may aggravate existing social inequalities and lead to resentment among some parts of the population.

Discussing the role of the state in the policy responses to the COVID-19 crisis reveals opportunities and risks for transformative governance. Opportunities include higher trust in state authorities and political leadership. Federalism is strengthened and can be relied on in future crises. However, trust is fragile, and its misuse is a risk. If the state undermines the trust of the population, such as by enforcing policies for an unreasonably long time and with excessive rigor, the confidence of the population could be shaken and turn into distrust.

(iii) The potential of experimental governance

The scholarly literature on adaptation, sustainability, and transitions favors experimentation to facilitate or catalyze transformations in systems, practices, and institutions (Bulkeley *et al.* 2012; Gordon 2018; Laakso *et al.* 2017; Loorbach *et al.* 2017; Pahl-Wostl 2009). Experimentation explores different methods and options and regards outcomes as lessons rather than as failures. Bosomworth (2018) considers experimentation a crucial capacity to enable transformative governance. Exploring novel responses, new technologies, or new governance arrangements in open-ended ways outside existing regimes can stimulate innovation, learning, and transformations. Furthermore, experiments are subject to periodic revision and re-evaluation.

Responses to the COVID-19 crisis appear as perfect examples of experimental governance. The policy responses compiled in Table 1, as well as the four examples presented above show experimentation as an essential part of policymaking. As issues arose, the Swiss government adjusted its response. When introducing physical distancing or policy responses to reduce crowding, the government even announced that it was unsure about the impact and duration of the measures. This indicates that every policy change can be subject to change if it is proven to be insufficient.

Being so open and acting so reflexively about policy responses implies different opportunities and risks for future policymaking. One opportunity is that experimentation could move beyond pilot activities and become a new so-called standard of policymaking. Dealing with complex and wicked problems, such as climate change, loss of biodiversity, migration, or economic transformation, would certainly require experimentation. In addition, experimentation calls for open-minded, creative, flexible, and risk-taking politicians and policymakers. Obviously, experimentation includes the risk of failure, as experiments

can go wrong. When policies frequently need revisions and adjustments, trust in politicians and the continuity of policymaking can be lost.

(iv) The paradigms driving policy change

In a recent comment on bush fires in Australia, Head (2020, p. 173) points out that “transformative change requires resisting a new normal.” She is referring to the risk that our everyday life gets absorbed into a new normal because we get used to reduced public services, restricted access to public spaces, or greater responsibility for childcare and schooling. As such, there is an emerging risk that these changes will be associated with better resilience. According to Head, resilience is well documented as a governance strategy that can shift responsibility to individuals rather than governments and be used to reinforce existing poor practices (Walker and Cooper 2011). To understand these situations in detail, Williams (2020) proposes the concept of discourse inertia to reflect how a discourse may persist and resist pressures for change. Inertia represents the persistent promotion and dominance of one perception of reality, leading to the continuous reproduction of certain paradigms and narratives. Discourse inertia should be employed to investigate the COVID-19 crisis in future studies.

Transformations depend on which paradigms or narratives dominate decision-making and follow policy change. Current COVID-19 policy responses in Switzerland put a heavy weight on basic liberties and public life. In addition, they call for higher individual responsibilities, more control and enforcement. For example, restrictions on going outside demand discipline and personal responsibility, or they need to be controlled (e.g., police). At present, it is unclear whether these restrictions on individuals and public life will persist. The risks imply that monitoring the effectiveness of policies could include surveillance and tracking techniques. A neo-liberal understanding of the role of the state might become even more prominent, leading to further privatization, competition, and social injustice. Opportunities through new paradigms or narratives include a stronger sense of community and solidarity, a new appreciation of care work, the establishment of new neighborhood initiatives, and a society that is more resilient and sustainable in the future than it is today.

4. Looking forward

The pandemic is affecting all countries around the world, and some countries and regions have been more severely affected than others. As the spread of the COVID-19 is uneven, the policy responses are also uneven. This is a well-known phenomenon in regional policy studies; policy responses depend on the actual context, as good policies are place-specific and actor-sensitive (Iammarino, Rodríguez-Pose and Storper 2017). It is noticeable that border regions, urban areas, and, especially, core economic locations have been hit harder than rural areas. In Switzerland, the urbanized and border cantons of Basel-City, Ticino, and Geneva are COVID-19 hot spots that experienced the crisis earlier and more drastically. Correspondingly, these cantons issued more restrictive policy responses and thus rivalled the federal state, as illustrated above.

The COVID-19 responses in Switzerland show that even in an exceptional situation with modified governance arrangements, the federal backbone with its subsidiary and cooperative structures persist. Cooperative policymaking almost takes place as usual. Federal health and travel policies are coordinated between different federal offices, the Federal Council is arguing with the parliament and the cantons about lockdown issues, the cantons talk to each other in order to balance school policies, municipalities come up with place-specific solutions. This is interesting because under Swiss law, the emergency law permits the government to take and implement measures on its own initiative - without prior consultation of parliament. Theoretically, the emergency law could remain in place for six months, until September 13, before the parliament can decide whether to extend it. During that period, a unit in the justice ministry would then be the only authority that could remind the executive to stay within the limits of the constitution. However, the parliament had actually resumed its role much earlier, on May 4, starting a new phase in the political handling of the COVID-19 crisis. Still in mid-March, the parliament decided of its own volition to suspend work for several weeks and put many direct democratic rights, including nationwide votes and the collection of signatures for referendums or political initiatives on hold. It is generally acknowledged that the Swiss government has not abused its extra powers following the emergency declaration. However, arguing from a more critical point of view it could also be argued that the federal government simply caved to economic arguments for lockdown easing.

In our article we observed modified governance forms which clearly showed attributes of transformative governance. However, transformative governance does not necessarily result in actual transformations. Obviously, it is just too early to evaluate COVID-19 policy responses and their impacts. More importantly, however, we would like to point out that transformative governance does not automatically lead to lasting transformations of economic, social and ecological dimensions. In Switzerland, we observed differences between 'old' and 'new' governance forms, the latter of which can be classified as transformative. But actual transformation depends on a variety of factors: political will, societal preferences, power relations, or financial resources. Certain changes can already be observed today and might endure. Examples are the improved preparedness for pandemic and other crisis, the persistence of new digital forms of working and schooling, the alteration of people's sense of security in public place and transport, the restructuring of supply chains, industries and global production networks, as well as the controversial discussion about data privacy issues. In contrast to these ongoing changes, other changes which would result in an economic, social and ecological restructuring are still ignored to a large degree. It is evident, that some actors strive to go back to so-called usual business as soon as possible. But more importantly, the current crisis and the decreed policy responses could be a big opportunity to lastingly improve society by making sustainable changes to consumption patterns and resource use, promote climate change mitigation by making financial support for business conditional on fulfilling certain climate related criteria and reduce social inequalities through financial relief measures for individuals. However, it is by no means guaranteed that we will be able to make use of this opportunity.

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