

Yearbook 2020 The Quality of the Media Study 1/2020

The quality of the media coverage during the coronavirus pandemic



Research Center for the Public Sphere and Society (fög) / University of Zurich

The quality of media coverage of the coronavirus pandemic

Mark Eisenegger, Franziska Oehmer, Linards Udris, Daniel Vogler

Summary

The media coverage of the coronavirus pandemic has often been heavily criticised. Considering the enormous amount of coverage of the pandemic (up to 70% of total coverage in the period studied), it was indeed easy to find specific examples of poor reporting. However, if one abstracts from such individual cases, the performance of the Swiss media during the pandemic can be viewed positively. This is shown by the results of a manual and an automated content analysis of Swiss news media between January and June 2020. The diversity of topics and experts from different sectors of society is comparatively high. The relevance of the coverage is relatively high as well, as the media often focus on the consequences of the coronavirus pandemic as a whole and depict the threat based on the development of cases (incident rates). Nevertheless, our analysis also points to obvious shortcomings. The news media does not offer enough contextualisation. Furthermore, the diversity of the scientists cited in the media is particularly limited. Although there is a wide variety of voices from medicine, barely any attention is paid to other scientific disciplines - despite the fact that the crisis affects almost all areas of society. In addition, among scientists visible in coverage on COVID-19, men are strongly over-represented and women are strongly under-represented. The media critically discuss the government and authorities as well as their prescribed measures, and they maintain a critical distance. However, especially in the sensitive phase before the lockdown, the media prove to be relatively uncritical and provide insufficient context for possible developments. There is also – with exceptions – a problematic handling of numbers and statistics, which are generally (too) poorly contextualised. Explanations of what the numbers say and justifications for why they are used are by no means always provided. The contextualisation differs between media types and media outlets. Some subscription media and public broadcasting stand out positively, with a particularly high diversity of topics and sources, more relevance and better contextualisation. Sunday papers and weekly media as well as public broadcasting maintain the greatest critical distance from authorities and the government. The tabloid press and commuter media are less diverse in their reporting and tend to convey mere figures without contextualisation, but they, too, refrain from an alarmist, dramatising and overly threat-focused reporting.

1 Introduction

The media has a major influence on the develop-▲ ment of social crises, even if , a crisis such as the COVID-19 pandemic was not caused by humans (Sandhu 2013; Jarren 2020). The media greatly affects how society perceives the threat stemming from the crisis, how severe the political pressure to act is and to what extent citizens are prepared to follow certain measures. The media influences the perception of a crisis in two ways: First, they produce and offer their own interpretations. They ascribe greater or lesser importance to the crisis - for example in comments or editorials - and take an active position on possible causes, measures and their consequences. Second, the media establishes a forum for the statements of actors, particularly of authorities and experts. How

the media evaluates events and for which actors and statements they provide a platform during the crisis defines the implications the public ascribes to the crisis.

As the media has a fundamental impact on the definition and perception of a crisis, the question of the quality of crisis reporting arises. This question was also posed during the coronavirus pandemic, especially shortly after the first peak of the crisis – the lockdown. Communication science researchers tended to paint a critical picture of media coverage and pointed out the flaws of journalism (for an overview, see Russ-Mohl, 2020). Criticisms included the inadequate contextualisation by the media and the "gasping" journalism (Brost & Pörksen, 2020), the excessive focus on just a few experts (Jarren, 2020), the thoughtless handling of numbers and statistics

and the insufficient critical inquiry during the phase when the government and authorities decided to take increasingly drastic measures (Meier & Wyss, 2020; Silini, 2020). We are joining this discussion and examining the question of media quality on the empirical basis of quantitative content analyses. More specifically, we are examining the quality of media coverage of COVID-19 in the period from 1 January 2020 to 30 April 2020 for a media sample of 22 leading media outlets from German and French-speaking Switzerland and supplementing this with an automated content analysis of 34 leading media outlets from 1 January 2020 to 30 June 2020. In this study, media quality is conceptualized along three quality dimensions: diversity, relevance and deliberation quality.

In the dimension of diversity, high-quality coverage means dealing with the crisis from different thematic perspectives. In the context of the COVID-19 crisis, this means events should not be covered purely from a virological, epidemiological or medical perspective; instead, the economic impact and consequences for democracy of certain measures, for example, should also be put on the agenda at an early stage. Substantial, diverse reporting also depends on the spectrum of actors who are given a platform. The media should open up to a wide range of experts and sources, particularly those with opposing views. Exploring different expert positions is an essential prerequisite for reporting that allows the most factually convincing argument to prevail. It is not enough for certain media outlets to provide a forum for only one group of experts and other outlets to do so for a different group. Reporting that focuses on the ideal of objectivity must deal with opposing statements within one outlet.

Relevance is another dimension of the quality of crisis reporting. News media should be ethical not just in terms of convictions, i.e., be oriented towards the professional quality standards of their own journalistic profession, but also in terms of responsibility (Meier and Wyss, 2020). News media can act with ethical responsibility by anticipating the social consequences of their reporting. Social relevance and responsibility are established when media reports are neither alarmist nor downplaying. Whenever media convey threat during a crisis, this should be comprehensibly justified and, where applicable, be put in perspective depending on the changing circumstances. Relevance should also be determined by how strongly the media illuminates events from an overall social perspective (macro level). Individual fates and specific cases can help to explain what has occurred. The main task of the media, however, is to abstract from individual cases and raise awareness of aspects relating to society as a whole, such as the consequences of certain measures, as early as possible, i.e., before official decisions are made.

Ultimately, the deliberation quality is measured by the quality of the debate about the crisis and by how the media deal with actors who raise their voice. Crises are always associated with considerable uncertainty, as society's need for answers is great. Public discourse in crises is thus reduced to a few actors or sources who have privileged access to knowledge. In the case of a social crisis such as the coronavirus pandemic, these include, in particular, authorities and experts who have the power to define, and on whom a great sense of dependency can arise at the same time. The media naturally needs to provide a platform for authorities and experts, but also maintain a critical distance from them. This means questioning their positions at all times on the basis of factual arguments. The less the media keeps such a critical distance and the more certain actors remain unchallenged, the greater the risk of unwanted future side effects. Critical distance does not mean being in opposition to the actors. However, it does mean dealing critically with their statements and carefully weighing up different positions in order to follow or not follow their arguments. In this study, we are interested in the extent to which the media correspond to the criterion of distance from authorities. Deliberation quality can also be linked to objective, appropriate reporting. In the case of the COVID-19 issue, this includes an informed use of numbers and statistics. Inappropriate comparisons e.g., of coronavirus and influenza infection case numbers - should be avoided. This presupposes critical and distanced handling of key figures. Numbers should not simply be reported as mere figures, but rather be critically interpreted and contextualised. Ultimately, deliberation quality does mean that the media should provide up-to-date information about new events. However, they should first and foremost explain the background and explore possible causes and (side) effects of measures such as the lockdown.

Criterion	Manual content analysis	Automated content analysis				
Analysis period	01/01/2020 - 30/04/2020	01/01/2020 - 30/06/2020				
Analysed media sample	Representative sample from 28,695 news items on the topic of COVID-19	Full investigation of the COVID-19 topic in 34 German, French and Italian language Swiss news media outlets (n = 100,612)				
	 a) from 22 German and French-speaking Swiss news media outlets (n = 1,448) (systematised according to media type) Online subscription: nzz.ch, tagesanzeiger.ch, 24heures. ch, Aargauerzeitung.ch, bernerzeitung.ch, lenouvelliste.ch, letemps.ch (n = 551) Tabloid press/online commuter media: lematin.ch, Blick. ch, 2ominuten.ch, 20minutes.ch, Watson.ch, SonntagsBlick, LeMatin Dimanche (n = 423) Sunday paper/magazine: SonntagsZeitung, Weltwoche, NZZaS (n = 176) Public broadcasting: 10vor10, Tagesschau, srf.ch, Le Journal, rts.ch (n = 298) b) in four deductively determined phases: Phase 1: 01/01 to 27/02, i.e., before the "special situation" was imposed (28/02) (n = 154) Phase 2: 28/02 to 15/03, i.e., before the "exceptional situation" was imposed (16/03) (n = 255) Phase 3: 16/03 to 07/04 (lockdown), i.e., before the decision (08/04) to extend the emergency situation to 26/04 and before the announcement of easing restrictions (n = 604) Phase 4: 08/04 until the end of April: lockdown with easing in sight (n = 435) 	 (systematised according to media type) Online subscription: nzz.ch, tagesanzeiger.ch,24heures.ch, aargauerzeitung.ch, baslerzeitung.ch, bernerzeitung.ch, cdt. ch, luzernerzeitung.ch, lenouvelliste.ch, letemps.ch, tagblatt.ch, suedostschweiz.ch, tdg.ch (n = 56,499) Tabloid press/commuter media: lematin.ch, blick.ch, 20minuten. ch, 20minutes.ch, watson.ch, SonntagsBlick, LeMatin Dimanche, tio.ch, bluewin.ch (n = 28 795) Sunday paper/magazine: SonntagsZeitung, Weltwoche, NZZaS, Wochenzeitung (WoZ) (n = 2528) Public broadcasting media: 10vorio, Echo der Zeit, Rendez-Vous, Tagesschau, srf.ch, Le Journal, rts.ch, rsi.ch, (n = 9834). Transcribed leads for radio and TV shows. 				
Search term combination Database research	("*corona*" OR "*covid*") within the first 500 characters (Title incl. main text)	("*corona*" OR "*covid*") AND NOT ("coronan*" OR "coro- nat*"OR "alla corona" OR "sulla corona" OR "nella corona" OR "della corona" OR "dalla corona" OR "la corona" OR "coronarien*" OR "coronaire*" OR "koronar*" OR "coronar*" OR "coronado*" OR "coronament*" OR "corona events" OR "fabriziocorona" OR "mauro corona" OR "sacra corona" OR "corona difiori" OR "corona di spine" OR "corona di alloro" OR "coronareale" OR ("corona" AND "porto")				
Recorded constructs / variables (in manual	Diversity • Societal sphere (1.0) • Topic (0.81) • Experts (sources) (0.91)	Scope of reportingContributing scientists				
content analysis: Reliability value accord- ing to Krippendorff's alpha)	Relevance Threat of the coronavirus (0.65) Topic: Macro/whole of society (0.81)					
	 Deliberation quality: Government criticism/critical distance to government and authorities (national) (0.93) Dealing with figures (0.62) Reporting style (0.89) 					
	In order to contextualize and build types, media type variables (recoded from the outlet variable), time phases (recoded from the date variable) and geographic scope (1.0) were also coded.					
Analysis level	Complete news item as a whole (no multiple coding)					

3

3.1

The reporting of breaking news regarding, for example, the number of infection cases or deaths at short intervals is not one of the core tasks of journalistic media because such episodic reporting does not create any added value. This information is unrestrictedly available online. In the digital age, users can obtain it from a wide variety of (e.g., official) sources without journalistic involvement. This study therefore also examines the contextualisation of the media by coding the reporting style.

2 Methodology

We conducted an automated, computer-based analysis and a manual quantitative content analysis to examine the diversity, relevance and deliberation quality on the coronavirus issue (see Table 1). This dual approach enables an examination of larger amounts of text as well as complex content that requires interpretation, thus allowing us to benefit from the respective advantages of both approaches (see Grimmer & Stewart, 2013).

Using an automated content analysis, the full coverage of the coronavirus/COVID-19 over time in 34 Swiss news media outlets was determined. In addition, all scientific actors which were mentioned in the news items were recorded. Information about content features such as the dominant topic, the affected social sphere, the cited expert (source) and the geographical reference area was collected via a manual content analysis for a representative sample of 22 news media outlets from German-speaking Switzerland and French-speaking Switzerland. In addition, quality criteria such as the media's dealing with figures or statistics, reporting style and contextualisation, the extent to which the coronavirus -was presented as a threat, and the criticism of the government/authorities were coded. The exact variable descriptions and coding instructions can be found in the codebook (Oehmer et al., 2020).

Results

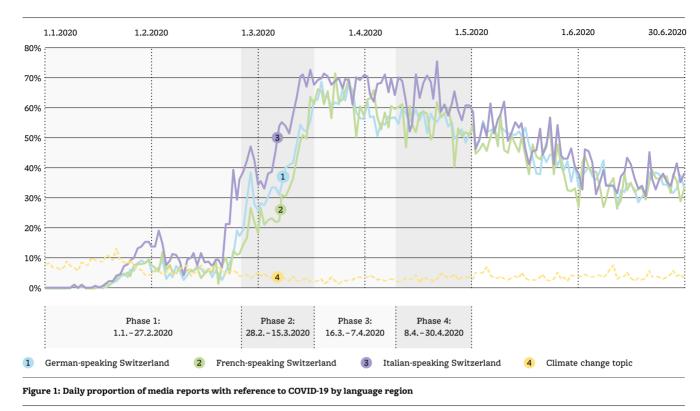
Diversity	

3.1.1 Trend and intensity of media coverage

The automated analysis of the extended media L sample shows that COVID-19 has been given an absolutely central position within all three language regions. Despite the diversity of reporting on COVID-19, the dominance of this topic leads to a narrow focus of the overall media agenda. This is shown by the proportion with at least one mention of COVID-19 in the overall media coverage, broken down according to language regions (see Figure 1). During the peak phase, up to 70% of all news items which are published make a reference COVID-19. A comparison of the language regions shows a similar trend. In Italian-speaking Switzerland, however, the topic becomes relevant a little earlier and is discussed more intensely by the media, especially during the first two phases. It is also evident that the discussion of the pandemic is subject to fluctuations. Following the announcement of the lockdown, the significance of the topic decreased, but plateaued at a very high level.

The media coverage seems to be sensitive to the development of the case numbers in Switzerland. This is shown by comparing the media coverage to the daily reported case numbers from the Federal Office of Public Health (FOPH, 2020) in Figure 2. The figure takes into account the period from the first recorded case in Switzerland (24 February 2020) to the end of June. The more cases that are reported, the more intensive the reporting. According to the Pearson correlation coefficient, this link is highly significant throughout the entire period (r = 0.67), but not equally strong in all phases. During the first three phases before the first easing of coronavirus measures on 27 April, the correlation between reporting intensity and case counts is very strong (r = 0.73). After the lockdown, the link is much less pronounced (r = 0.32) as the reporting focus shifts to the consequences of the lockdown.

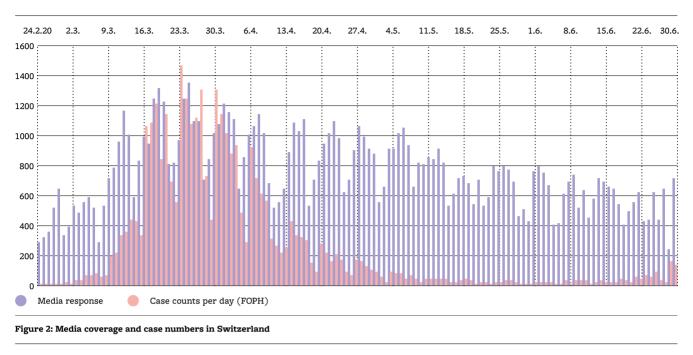
The extreme concentration of attention given to the COVID-19 pandemic is accompanied by an effect when the pandemic pushes other topics from



The figure shows the proportion of news items with at least one reference to COVID-19/coronavirus (n = 100,612) in the overall reporting of the examined media (n = 308,616) by language region (media sample for the automated content analysis). The proportion of reporting related to climate discourse in overall reporting was used as the reference value (n = 14,334).

Reading example: In Italian-speaking Switzerland, the proportion of news items related to COVID-19 in the overall reporting was highest at 75% on 21 April 2020.

the media agenda. One topic that was very dominant before the outbreak of the pandemic is climate change. To enable a comparison, the development of the climate change topic was examined using the same process as for the COVID-19 topic. A comparison of the two topics establishes two clear findings: Although climate change was a dominant issue before the outbreak of the pandemic, its proportion rarely exceeds 10% of the overall reporting volume on COVID-19, even at peak times. This demonstrates the extraordinarily high reporting intensity on COVID-19. Secondly, it is evident that the importance of the topic of climate change decreases in Swiss media from the moment reporting on the pandemic increases. Reporting on COVID-19 therefore pushes other important topics from the media agenda, i.e., it goes hand in hand with a significant loss of diversity in overall coverage. It is also clear that the volume of overall reporting has been decreasing during the pandemic. From the beginning of the year until the lockdown on 16 March, an average of 1804 news items were published every day across all media outlets. During the lockdown, this number was 1590 per day, and then 1638 after the easing of measures from 27 April until the end of June 2020. Although the coronavirus was and remains an absolutely dominant topic, the output of media reports is decreasing. This is where the consequences of the pandemic for journalism become apparent. Media companies were also amongst those to introduce short-time working, and doing journalistic work was at times possible only to a limited extent. For example, barely any sports coverage was needed. Journalistic resources were heavily or exclusively focused on



The figure shows the daily number of news items published in the media sample for the automated content analysis and the officially newly reported COVID-19 cases per day in Switzerland (source: Federal Office of Public Health). The figure shows the period from the first case in Switzerland (24 February 2020) to 30 June 2020.

Reading example: The highest number of new cases was reported on 23 March (1464 cases). The highest amount of media news items on COVID-19 was recorded two days later on 25 March (1347 news items).

covering the COVID-19 topic. This makes it all the more important to investigate the extent of topic diversity within the broad COVID-19 topic.

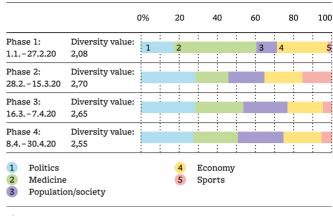
3.1.2 Diversity of topics

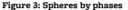
The diversity of topics within the COVID-19 coverage was assessed on the basis of two criteria. First, we determined which public (politics, economy, culture) or community-private spheres (sports, population/human interest) were the focus of the news item. We then identified the central topic of the news item. A distinction was made between the following topics: "basic knowledge about the coronavirus and the pandemic", "dealing with the pandemic", "measures against the coronavirus/pandemic on an individual (micro), organisational (meso) or societal (macro) level", "damage (micro, meso, macro)", "benefits (micro, meso, macro)", "help to cope with the coronavirus consequences" and "exit (strategies) from the lockdown and easing of measures". It was therefore possible to record, for example, whether and from when (potential) damage to the spheres of the economy or of art directly or indirectly caused by the coronavirus was discussed in reporting.

We used "Shannon's H" diversity index as an indicator for the diversity of reporting. The fundamental rule for interpretation is: the higher the value, the more diverse the reporting. The maximum value possible for each criterion corresponds to the ideal value achieved if all topic options were considered to the same extent in the reporting.

Overall, coronavirus reporting reaches a diversity value of 2.62, which is comparatively close to the ideal value of 3.30. When it comes to the social spheres, politics (25.9%), economy (18.4%) and medicine (21.7%) are all given attention, and the diversity of pandemic coverage can be rated as high. Sunday and weekly newspapers as a whole reporte with the greatest degree of diversity, and comparatively also dedicate much more coverage to topics from the fields of science (6.3%) and art (4%). The tabloid press and free media (2.57) evidently explore the coronavirus issue primarily from the perspective of the public. In comparison to the other types of media, they address the political sphere less frequently. TV reports have a slightly lower level of diversity with 2.46. By taking into account not only diversity among all outlets of a media type, but rather the performance of individual media outlets, we can see that Weltwoche (1.38) and SonntagsBlick (1.38) report with comparatively little diversity with regard to the focused spheres: in Weltwoche, news items from the political sphere are particularly dominant with a proportion of 46.4%. SonntagsBlick focuses on topics related to sports (21.8%) and the general public (23.6%). Aargauerzeitung.ch (2.59) and lenouvelliste. *ch* (2.63) achieve the highest diversity values.

Over time, considerably greater differences can be observed. The first phase in January and February 2020 shows the least diversity. During this period, almost 70% of reporting is presented from the perspective of medicine (42.2%) and the economy (26%) (see Figure 3). The focus is primarily on news items that convey basic facts about the coronavirus (infection rate, modes of transmission, symptoms) and potential effects on the stock markets and the export economy. The geographical reference area of these reports is primarily abroad (focus: China), i.e., the danger has not yet reached the immediate vicinity of Switzerland. The second phase before the lockdown, i.e., the phase of the "special situation", has the highest degree of diversity (2.70). During this phase, the (possible) effects of the coronavirus and the measures to combat it for all areas of society, particularly in Switzerland, increasingly become the focus of reporting. As an example, discussions about the postponement and cancellation of (major) sporting events and thus the sphere of sports receive their highest media coverage level during this period, with a 13.7% share in reporting. Topics in the arts are also discussed comparatively more frequently during this phase, with a 5.1% share. With the increasing importance of the political and social spheres, other spheres recede into the background. As a result, diversity levels during the third phase (lockdown) and fourth phase (announcement of easing) slightly de-





The figure shows the respective proportion of the reported spheres (including diversity value) for the various phases. Only the spheres that account for at least around 5% of the overall reporting are shown. The data is based on all news items that were examined via the manual content analysis (n = 1448).

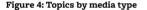
Reading example: 29.4% of news items published in the fourth phase focus on the sphere of politics.

crease with values of 2.65 and 2.55 respectively. Formal decisions and how to deal with the coronavirus, as well as considerations about the exit strategy of foreign governments, receive increasing levels of attention – other countries are once again gaining importance as geographical references during the third and fourth phases.

In addition to the general spheres, the specific sub-topics were also examined. A distinction was made between 20 topic categories (with seven main categories), questions and problem formulations such as general "information about the coronavirus", as well as specific "measures to combat the coronavirus", "auxiliary measures to alleviate the consequences of the coronavirus" and also the "damage" or "benefits" of implemented measures.

As with the spheres, a total diversity value that is comparatively close to the ideal of 4.32 (3.55) can be seen here too: thus, media strive to achieve thematic diversity. The greatest thematic diversity and balance is achieved by news items from public broadcasting (3.60), which, compared to the other types of media, more thoroughly explore the exit strategies negotiated in the political sphere and the easing of measures (see Figure 4). The tabloid press and

		0%		20		40		60		80	100
Public broadcasting	Diversity value: 3,60	0 1	:	2	3				4	5	67
Sunday paper/ magazine	Diversity value: 3,4	1	:	:	:	:	:	:		:	
Tabloid press/online commuter media	Diversity value: 3,3	в	:	:							
Online subscription	Diversity value: 3,5	7	:	:		:	:	:		:	
 Coronavirus/pandemic Handling Measures Damage 				5 6 7	Aid Beı Exi	nefit				·	



The figure shows the respective proportion of the aggregated topic areas (including diversity value) for the recorded media types. The data is based on all news items that were examined via a manual content analysis (n = 1,448).

Reading example: 30.3% of news items published in the tabloid press and commuter media report on the measures taken to combat the coronavirus.

commuter media demonstrate a comparatively lower diversity of topics (3.38), as they not only focus strongly on political and medical measures (30.3%), but also on the handling of the coronavirus and the crisis (27.9%) and thus mainly on lifeworld aspects of the pandemic (see Figure 4). In the overall assessment, Sunday and weekly newspapers also achieve a lower topic diversity score (3.41) due to their strong focus on issues relating to macrosocial measures (30.1%).

During the first two phases, the diversity of main topics is still limited, but increases steadily over the four analysis periods. The discussion and communication of basic knowledge about the coronavirus, other viruses and the pandemic take up a large proportion of media attention during the first phase (40.3%), leaving little room for other topics. A diversity value of just 2.72 is therefore achieved during the first phase. During the second phase (diversity value: 3.22), when Switzerland was in the "special situation" and conditions were worsening, almost every other news item focuses on the discussed or already implemented measures (44.3%), such as the closure of public spaces or borders. The geographical focus in the majority of these news

items is Switzerland as a whole (45.1%) or regional or cantonal reference areas (20.4%). Measures presented solely from an international perspective (27.4%) or discussed in combination with the context of Switzerland (7.1%) make up a third of reporting. Not only the measures themselves, but also the damage to be expected due to the coronavirus pandemic, already make up a topic with a 21.4% share, albeit less marked than during a subsequent phase. 29.5% of these news items reporte on foreign countries such as China or Italy, as some were already at an advanced stage of the pandemic and could therefore serve as a benchmark. However, most of the (possible) damage is discussed in the context of Switzerland as a whole (40.7%) or individual cantons or regions (25.1%). In addition, during the second phase, descriptions of how to deal with the crisis at work and in everyday life take centre stage for the first time (17.3%). During the third phase, the lockdown, diversity increases again (diversity value: 3.51). One of the increasingly salient topics is the handling of the crisis, such as situation descriptions from hospitals (21.0%). During the third phase, the most common central topic of the news items consists of auxiliary measures (10.3%). Damage is still discussed in around every fifth news item (21.1%). For the fourth phase, during which the prospect of possible easing was presented, a value of 3.69 and thus a significantly more balanced selection of topics becomes clear. During this period, reporting continues to focus on implemented and discussed measures (28.7%) as well as dealing with the coronavirus and measures implemented at work and in everyday life (20.0%). Attention to the damage caused by the coronavirus and the associated "exit" or easing discussions increases (26.9% in total).

In sum, reporting largely meets the changing information needs of the population during the course of a crisis cycle. Basic knowledge is conveyed to start, then the measures to combat the crisis clearly take centre stage, followed by an overall focus on the measures for and handling of the crisis, and finally the account of the handling, measures and damage caused.

3.1.3 Diversity of experts and sources

Due to the large number and heterogeneity of events to be reported, journalists depend on external knowledge from expert sources. A deeply complex topic such as the coronavirus pandemic, which affects all areas of society, requires the input of people with specific knowledge and experience. In order to analyse the extent and diversity of the experts and sources who receive coverage in the news items, data was recorded manually and automatically.

The manual content analysis recorded the social sphere/sub-area in which the expert or main source works (14 main categories were compiled, including economy, science, medicine, health and caregiving, etc.). The manual content analysis deliberately focused on a wide range of experts and sources. As a result, not only scientific actors were considered (these are examined in more detail in the automated content analysis in Chapter 3.1.4). All actors who (can) convey their position, view, decision or request as the main focus of a news item owing to their privileged knowledge are considered experts, i.e., also within other spheres, such as culture or sports. This also included guest contributors. In line with this criterion, 83% of the news items involve the opinion of an expert as a main focus point. This shows that reporting on COVID-19 relies heavily on external experts. Experts convey their views particularly frequently in TV reports: only 14.3% of news items do not contain an expert opinion as a main focus. In Sunday papers and weekly media, the number of news items without an expert opinion is twice as high (29.7%).

Business representatives (entrepreneurs, trade unions, etc.) are the most likely to find a platform for their viewpoints in media coverage (13.6%). Foreign authority representatives with expert status (8.2%) and scientists (7.6%) as well as representatives from the health and caregiving sector (7.1%) also find attention. Despite their great overall coverage, the visibility of national government representatives (4.6%) and the Federal Office of Public Health (FOPH) with its representative Daniel Koch (3.2%) within an expert role is comparatively low. The FOPH only attracts attention within an expert role with a 5.8% share in the media at the beginning of the crisis – during the first phase. The low expert representation from the government and the authorities is due to the fact that, although they are often discussed as active actors in reporting, they themselves do not voice their opinions as experts. The fact that government representatives and the FOPH do not appear predominantly in expert roles in reporting can also be interpreted as a sign of the existing distance to authorities and the government (see Chapter 3.3.1). International organisations (3.1%) such as the WHO and members of the military and the police – often tasked with enforcing measures and sanctioning violations (1.8%) – have comparatively few experts featuring in reports.

In terms of expert selection, looking at the diversity index (Shannon's H), a relatively high level of diversity can be determined over time: the diversity index steadily increases from 3.41 in the first phase and 3.66 in the fourth phase, and is thus close to the ideal value of 3.8. During the first phase, business representatives (17.5%) and representatives of foreign governments (12.3%) are called in as experts more frequently. They comment on the development of the epidemic in China and the effects on international economic performance. Doctors (5.8%) and members of the health and caregiving sector (8.4%)are also asked for assessments, but to a much lesser extent than the strong focus on medicine as a discussion topic (see above) would have suggested. During the second phase, with the spread of the virus within Europe and a worsening of the situation in Switzerland, the media provides a platform for more than just business representatives (11.4%). Sports associations (11.8%), the general public (10.6%) and national political actors, including cantonal governments and administrations and parties, are also given expert status (7.9%). During the third and fourth phases, the media again began consulting actors from the world of business (14.7%) on the consequences of the crisis for the domestic economy. With the exception of judiciary representatives, the other experts included in reports are evenly distributed across the other social spheres. The fact that the coronavirus pandemic is an issue for society as a whole, on which various expert groups should also express their views and perspectives, is therefore largely taken into account in the media from mid-March 2020.

The diversity values calculated for the individual media outlets lie between 3.51 (Sunday paper/ magazine) and 3.66 (public broadcasting) and can therefore also be assessed as an indicator for a comparatively diverse use of experts. The focus in expert selection differs, however, according to the type of media. The news sites of subscription newspapers most frequently rely on business representatives (15.6%) as well as international government representatives (8.3%) and researchers (8.3%). The news sites of commuter media and the tabloid press also create a platform for citizen voices (10.4%).

Looking at the distribution of experts according to the type of news item (information, interpretation, opinion, interview), it is evident that actors in the world of business (15.4%) and international governments (9.8%) are the primary contributors to information pieces. In the more comprehensive interpretive news items and interviews, on the other hand, scientists clearly dominate the conversation with a 13.6% and 16.3% reporting share, respectively. This is an indication that the need for contextualisation and orientation was high, especially by scientific experts. This is precisely why it is necessary to examine the diversity of scientists and which scientific actors actually have a platform.

3.1.4 Diversity of scientist repertoires

n addition to the manual analysis of experts, an au-L tomated analysis was used to identify the most discussed scientists in the media (see Table 2). In contrast to the manual content analysis, this analysis was limited to mentioned experts (e.g., Christian Althaus, Marcel Salathé, Beda Stadler) from the scientific context, i.e., to individual scientific roles from colleges, universities or research institutions. The scientists were determined inductively. For this purpose, names were automatically recorded in COVID-19 coverage and manually identified as scientists. For the subsequent analyses, we chose those 30 scientists who received the most coverage in the analysed reports during the four phases. Daniel Koch, Head of the Swiss federal section for Communicable Diseases of the Federal Office of Public Health (FOPH), and Tedros Adhanom, WHO Director General, were included as reference values, although neither is deemed part of the narrower scientific field and primarily appear in media coverage as spokespersons for their respective institutions.

The results show that unsurprisingly, most of the scientific experts conduct research in the fields of virology, epidemiology and immunology. Of the 30 most discussed scientific actors, there are only three who do not conduct research in the medical-biological field. These are all economists. Social scientists, e.g., from the fields of psychology, sociology or political science, do not appear on this list. Although there are many different experts involved in the discourse on COVID-19 in the media, there is no discipline diversity. Economic and social perspectives are given little weight, at least when it comes to the scientific experts.

Most of the scientists are Swiss or work at Swiss universities. On the one hand, this can be explained by the geographical proximity and their availability for journalistic inquiries. On the other hand, Swiss colleges, universities and research institutions also have internationally renowned expertise in the fields of virology and epidemiology. Only a few experts from foreign institutions received coverage. These are chiefly highly prominent figures such as Christian Drosten or Didier Raoult. The latter has attracted attention with various speculative theories about COVID-19. A mapping of the scientists and the media was then carried out using a correspondence analysis (see Figure 5). The closer scientists are to an outlet in the figure, the more coverage they get within this outlet. The size of the circle also indicates coverage across all examined media outlets. The closer the scientists are to the centre, the more likely they are to be "consensus experts" who receive coverage from many media outlets. The further away they are from the centre, the more exclusively they receive coverage from individual media outlets. As a reference value, Daniel Koch is pretty much exactly in the middle in the figure. He is highly discussed across all media, but comparatively less so in the media of French-speaking Switzerland or in Weltwoche.

The first noticeable aspect is the differences between the language regions. The media in German-speaking Switzerland and French-speaking Switzerland evidently have significantly different repertoires of science experts. The media outlets of French-speaking Switzerland give WHO experts Tedros Adhanom and Michael Ryan more attention. German-speaking Switzerland, on the other hand, looks more towards Germany; Christian Drosten in particular receives a lot of coverage. There are virtually no experts who receive the same level of coverage in both language regions. One exception is Isabella Eckerle, who comes from Germany and heads the Centre for Emerging Viral Diseases at the University of Geneva. Other than Emma Hodcroft, she is also the only woman among the 30 most discussed experts. Female scientific experts are therefore severely under-represented in the discourse on COVID-19.

According to this evaluation, French-speaking Switzerland is more homogeneous with regard to expert repertoires. Experts and media outlets in French-speaking Switzerland are all very close to one another. In German-speaking Switzerland, the expert repertoire of COVID-19 issues is more heterogeneous. Weltwoche deviates the most, giving the expert Beda Stadler a comparatively larger platform and allowing Rainer Eichenberger, an economist, to figure relatively prominently. Stadler stood out with his rather critical assessments of the federal lockdown strategy. Eichenberger attracted attention with the statement that herd immunity against the coronavirus virus could be built up with a targeted infection of the population. The other media outlets and experts in German-speaking Switzerland are relatively close together, as seen in Figure 5. The proximity to the experts in the figure also seems to be shaped by the media companies and their centralized newsrooms across outlets. A TX Group cluster with bernerzeitung.ch, tagesanzeiger.ch and SonntagsZeitung, which share a great amount of coverage, can be identified. blick.ch and SonntagsBlick (Ringier) as well as aargauerzeitung.ch and watson.ch (CH Media) are each relatively close to one another. In the reports by these groups, the same scientists tend to find attention. By contrast, nzz.ch and NZZ am Sonntag tend to use different scientific experts in their reporting; a repertoire of scientists can be defined for each media outlet. These repertoires show which scientists appeared how often in the reporting of the individual media outlets. The diversity in this regard can be described using the Shannon's H index. In addition, the concentration of scientists can be shown via the share of the most frequently mentioned (CR1) or the three most frequently mentioned actors (CR3). The higher the two values, the more the reporting is concentrated on just a few experts.

Another indicator is the relative importance of scientific experts in a media outlet's COVID-19 coverage, i.e., what percentage of the news items actually features experts.

According to the Shannon's H index, *srf.ch* has the most diverse repertoire with 2.89 points. The concentration of scientists is correspondingly at its lowest on SRF's website. Marcel Salathé receives the most coverage (CR1 = 12%). The three most discussed actors, Marcel Salathé, Mathias Egger and Pietro Vernazza, make up 31% (CR3) of the expert coverage within *srf.ch*'s COVID-19 reporting – this is in contrast to *rts.ch*, where the three most mentioned actors make up 59%. At the same time, scientists are generally assigned the greatest importance at *srf.ch* where a scientist is discussed in 8.3% of the news items.

Mixed findings can be found regarding the diversity of the repertoires of tabloid press and commuter media. *Blick.ch* (2.84) and *watson.ch* (2.65) as well as *20minuten.ch* (2.58) are particularly diverse. The two Sunday tabloids, *SonntagsBlick* (2.11) and *Le Matin Dimanche* (1.49), on the other hand, have the lowest diversity. The other Sunday newspapers and *Weltwoche* also tend to have below-average repertoire diversity, but they differ significantly from one another. *NZZ am Sonntags* (2.52) scores the best, while the values for *SonntagsZeitung* (2.34) and especially for *Weltwoche* (2.22) are quite low.

The repertoires in the online editions of subscription newspapers, on the other hand, have above-average diversity. nzz.ch and 24heures.ch score particularly well. Both have a relatively diverse repertoire (2.78 and 2.70) and a lower concentration of actors. The outlets in German-speaking Switzerland, however, are close to one another. Aargauerzeitung.ch (2.64), bernerzeitung.ch (2.63) and tagesanzeiger.ch (2.57) feature a similarly high diversity level. The values are lower for outlets of the same type in French-speaking Switzerland. Both letemps.ch (2.46) and lenouvelliste.ch (2.31) have rather low values. In general, the diversity values for the media in French-speaking Switzerland tend to be slightly lower than for media in German-speaking Switzerland. This can partly be explained by the slightly higher number of scientists from German-speaking Switzerland in the sample. However, 24heures.ch scores very well, which speaks against a strong sample bias.

Outlet	News items with ex- pert (%)	Shannon's H	CR1	CR3	Top 3 actors	
srf.ch	8.3	2.89	0.12	0.31	Salathé, Egger, Vernazza	
blick.ch	5.7	2.84	0.17	0.37	Drosten, Salathé, Stadler	
nzz.ch	4.8	2.78	0.15	0.37	Salathé, Drosten, Widmer	
24heures.ch	5.1	2.70	0.13	0.35	Raoult, Pittet, Flahault	
watson.ch	6.1	2.65	0.21	0.45	Salathé, Drosten, Althaus	
aargauerzeitung.ch	3.5	2.64	0.21	0.46	Salathé, Drosten, Stadler	
bernerzeitung.ch	3.6	2.63	0.16	0.46	Althaus, Drosten, Salathé	
20minuten.ch	4.3	2.58	0.19	0.47	Drosten, Stadler, Aguzzi	
tagesanzeiger.ch	5.3	2.57	0.22	0.54	Drosten, Althaus, Salathé	
NZZ am Sonntag	6.4	2.52	0.17	0.46	Althaus, Salathé, Neher	
letemps.ch	7.5	2.46	0.16	0.45	Pittet, Raoult, Nanshan	
lematin.ch	3.5	2.38	0.23	0.48	Raoult, Ryan, Eggimann	
SonntagsZeitung	4.7	2.34	0.21	0.46	Althaus, Salathé, Drosten	
lenouvelliste.ch	2.6	2.31	0.19	0.53	Nanshan, Raoult, Ryan	
20minutes.ch	2.9	2.24	0.26	0.55	Raoult, Nanshan, Ryan	
Weltwoche	5.5	2.22	0.25	0.5	Stadler, Aguzzi, Vernazza	
rts.ch	5.9	2.16	0.24	0.59	Pittet, Nanshan, Fellay	
SonntagsBlick	5.4	2.11	0.3	0.5	Drosten, Althaus, Salathé	
Le Matin Dimanche	3.9	1.49	0.38	0.75	Raoult, Flahault, Salathé	

Table 2: Key figures on the repertoires of scientists in the media

The table shows for each medium the proportion of articles naming a scientist, the diversity of scientists according to Shannon H and the concentration of experts via the proportion of the most frequently named actor (CR1) or the three most frequently named actors (CR3).

Reading example: In the srf.ch reporting, a scientist is the subject of 8.3% of the contributions. The repertoire of scientists on srf.ch has a diversity of 2.89 according to Shannon H. The most frequently mentioned scientist, Marcel Salathé, accounts for 12% of the resonance. The three most frequently mentioned scientists take up 31% of the resonance.

3.2 Relevance

3.2.1 Conveyed threat

Reporting of the health threat posed by the virus Rwas also examined. Because of the relevance of media coverage for the development of opinions and intentions during crises, we assume that highly alarmist or trivialising reporting can lead to corresponding reactions amongst the public, e.g. with regard to the acceptance of measures or consumer behaviour. A health threat is created by the media through verbal images ("the apocalypse is imminent") or descriptive situation depictions ("new deaths are reported almost every hour") about the (potential) extent of damage, the probability of occurrence and the expected duration of the damaging event. A distinction is made between threat-generating, neutral/mixed and qualifying/reassuring depictions of the risk posed by the virus. In almost two thirds of the news items, the threat to the health of the Swiss people is not handled as the main focus (71.7%). While 16% of the journalistic news items highlight a clear (and possibly lethal) health threat in Switzerland, 11.2% of the news items paint a neutral picture. Only 1.2% of the media news items feature a qualifying/reassuring depiction.

Overall, the threat situation presented in the reports does not reveal any major differences between media types: the only notable aspect is that around 35% of TV reports contain information about the Swiss threat situation – even if this is neither threatening nor qualifying, but rather presented in a neutral or mixed way. With the exception of *aargauerzeitung.ch* (19.3%),

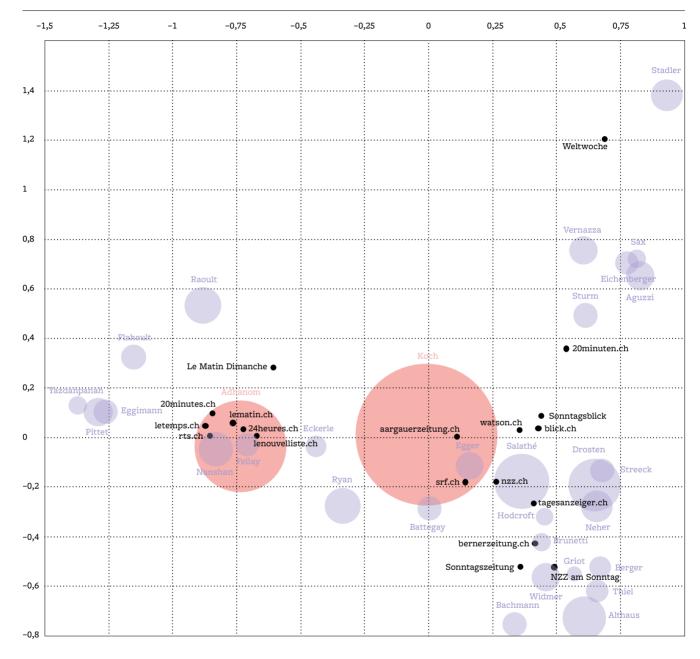


Figure 5: Scientists involved in reporting on the coronavirus pandemic

The figure illustrates the involvement of scientists in the individual media outlets in phases 1 to 4 (excluding radio and TV broadcasts). The size of the circle shows how often the person was mentioned in the reporting (number of news items). The position of the scientists and the media in the figure shows the relative importance of the person in the reporting of the respective medium. The closer, the more exclusively an actor was thematised in an outlet. The further away an observation is from the origin of the coordinate system, the more it differs from the average. The X-axis is determined by the language region, the Y-axis by the media types. The values were determined via a correspondence analysis.

Reading example: Beda Stadler received attention comparatively often in Weltwoche. In comparison to other scientists, he found relatively high attention.

	0%		20		40		60		80	100
Phase 1 (1.127.2.20)	1		2	÷	34			÷		
Phase 2 (28.2.–15.3.20)					÷	į	÷	ġ	•	į
Phase 3 (16.3.–7.4.20)		÷		İ	÷	÷	÷	÷	÷	
Phase 4 (8.4.–30.4.20)		Ļ	ļ.	÷		÷				
 Dangerous/threatening Neutral 	5		3	J						

The figure shows the respective proportion of news items that convey a threat-generating, neutral and qualifying/reassuring picture of the coronavirus/pandemic for Switzerland, as well as the proportion of news items that do not provide any information regarding the threat presented by the virus to the Swiss population during the various reporting phases. The data is based on all news items that were examined via a manual content analysis (n = 1448).

Reading example: 81.1% of news items published during the fourth phase contain no information regarding the danger of the virus for Switzerland.

only outlets from French-speaking Switzerland such as *rts.ch* (37.5%), *Le Journal* (26.2%) or *Le Matin Dimanche* (18.9%) are among the media outlets with the highest proportion of threat-conveying reporting. This could also be explained by the comparatively high infection rates in French-speaking Switzerland.

Although there are no significant differences in the use of threatening depictions of the coronavirus between the media types, the time phases show clear differences (see Figure 6). Around one in five news items (20.8%) during the first phase conveys a threatening picture of the virus for the Swiss population, which at this point was still spreading (particularly in China) and largely unknown. Almost equally high proportions of news items conveying a threat can be observed during the second and third phases - this is in parallel with much greater coverage. During the last analysed phase (8 - 30 April) and thus a period in which the number of cases in Switzerland had already clearly passed its peak, this share is only 8.7%. Threat-conveying reporting is therefore concentrated primarily during a period of great uncertainty and ignorance about the extent of contagion and the potentially lethal risks. Journalism has thus, ex post and viewed favourably, fulfilled an early warning function. Over time, with a decrease in the number of infections and, above all, in death rates, as

well as increasing experience in dealing with the virus, threat-filled reporting is significantly reduced.

3.2.2 Topic relevance to society as a whole

The role played in reporting by societal issues and processes, and thus information and analyses that go beyond individual cases, is an indicator of the topic relevance and macro content. As part of the manual content analysis, this was recorded using three possible topic categories:

- Firstly, we coded the extent to which measures that affect the entire population are discussed. These include, for example, the closure of public spaces, the postponement of elections and polls, as well as restricted travel into and out of the country.
- The second coding was to what extent the damages to society as a whole from the coronavirus or from the counter-measures are discussed. This includes, for example, news items that focus primarily on topics such as the loss of democracy, the lack of division of powers, tense international relations, etc.
- Thirdly, we identified to what extent media coverage focused on the benefits that society can derive from the crisis, such as the innovation processes initiated in the area of digitisation and the reduction of emissions, etc.

The fact that the entire population had to contribute to containing the pandemic, therefore also making them the addressees of the - often official - measures is shown via a high proportion of reporting in this topic category. In 16.1% of the total reporting, the focus is on macro-level measures that affect society as a whole. For comparison, measures that mostly affect organisations, such as the closure of businesses, are a dominant topic in 9.2% of reporting. Measures that require action on an individual level, such as social distancing or regular hand washing, are the focus in only 4.1% of news items. Sunday papers and weekly media (18.2%) and subscription newspapers (17.8%) in particular focus on the societal perspective when discussing measures. For commuter media and tabloid press, measures that affect the entire population are a slightly less explored topic (13.2%).

Media coverage also gives a comparatively high priority to damage with a 7.5% reporting share. This demonstrates that commuter media and the tabloid press show significantly less interest in issues that affect society as a whole: they only allocate 4.5% of their coverage to damage at the macro level. They are far more interested in illustrative and relatable individual cases. Subscription newspapers, on the other hand, focus almost twice as often (9.4%) on negative effects for society.

A consideration of the benefits for society in connection with the coronavirus are rarely a focus of the reports (1.7%). Generally, and for obvious reasons, positive consequences are not mentioned often with regard to this topic. A benefit to organisations is only addressed as the main focus in 1.9% of news items. Positive consequences for the individual are only discussed in 0.4% of reports.

In total, around one in four news items (25.3%) puts a clear focus on the overall social context. In comparison, measures or possible positive and negative consequences for the individual or organisations receive less attention. Only commuter media and the tabloid press address the macro level less frequently, but even amongst those news items, this is the case in almost every fifth piece.

3.3 Deliberation quality

3.3.1 Distance from authorities

One of the tasks of the media is to maintain a critical distance from all actors. This also applies to phases of great uncertainty, during which the government and authorities acquire considerable power to define and make decisions. In federally organised Switzerland, the national government and authorities have received extraordinary powers during the coronavirus situation. Based on the Epidemics Act, adopted by Swiss voters in a referendum in 2013, the Federal Council declared a "special situation" on 28 February 2020 and an "exceptional situation" on 16 March 2020. This went hand in hand with a clear authority shift away from the cantons and toward the national government, as well as away from parliament and towards the executive and authorities. In

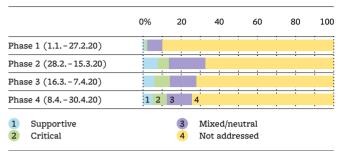


Figure 7: Distance from government and authorities by phases

The figure shows the respective proportion of news items during the various reporting phases in which a supportive, critical or mixed/neutral picture is painted with regard to the national government and authorities, as well as the proportion of news items in which the national government and authorities are not discussed at least with some detail. The data is based on all news items that were examined via a manual content analysis (n = 1,448).

Reading example: 8.2% of news items published during the second phase convey a supportive response toward the government and authorities

the content analysis, we therefore recorded whether and in what way the media assesses the decisions of the Federal Council (government) and national authorities for each news item. Both together – the coverage and the type of discussion (critical-distant, supportive, neutral/mixed) – form an indicator of the distance to authorities.

In general, the Swiss Federal Council and national authorities are often discussed in reports about the coronavirus pandemic. Their actions and decisions are a topic in every fourth news item. This is a very high value when you consider that of all coverage of the coronavirus pandemic, 39% of news items focus on the situation abroad or on global developments. If you concentrate on the news items with a clear focus on Switzerland, regardless of whether the focus is nationwide or on individual cantons or municipalities, around 40% of the news items feature a discussion of the Federal Council and the authorities.

Over time, it becomes clear that the actions of the government and authorities start becoming a topic when the pandemic reached Switzerland (see Figure 7). During the first phase, the topic only receives 10% coverage, but this becomes significantly higher in the later phases. Especially during the phase of the "special situation" (phase 2), when conditions escalate, media outlets focus more on the

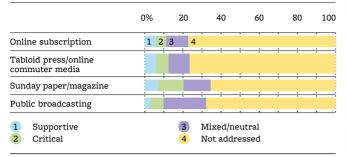


Figure 8: Distance from government and authorities in the examined media types

The figure shows the respective proportion of news items by the examined media types in which a supportive, critical or mixed/neutral picture is painted with regard to the national government and authorities, as well as the proportion of news items in which the national government and authorities are not discussed at least with some detail. The data is based on all news items that were examined via a manual content analysis (n = 1,448).

Reading example: 13.1% of news items published in Sunday papers and weekly media convey a critical response toward the government and authorities.

national executive and the authorities (32%). This focus decreases somewhat later, but remains high during the final phase (25%). The fact that media coverage also generally rises sharply (see Chapter 3.1.1), particularly during the phase of the "special situation" shortly before the lockdown, highlights the media image of a dominant national executive and authority.

At the same time, the findings show that there are slightly more critical reports about the national government and authorities (7%) than explicitly supportive ones (6%). 14% of all news items discuss the actions of the government and authorities in a neutral or mixed manner. It therefore cannot be suggested that the media reported generally uncritically about the authorities and the government.

The level of support and criticism is different across the various phases. During the first phase, the picture painted of the government and authorities is relatively neutral or mixed. However, during subsequent phases, as the government and authorities become more active, reports become more evaluative, i.e., clearly supportive or critical reports increase, particularly during the third and fourth phases. During the second phase, i.e., in the "special situation" phase and before the lockdown has been imposed, supportive reports are more present than critical ones. The government and authorities receive support for the fact that they have (so far) implemented relatively differentiated measures. However, criticism about the Federal Council and authorities not acting decisively enough grows. A systematic examination of the most drastic measure, namely a possible lockdown, for example through contextual comparisons with differently affected countries, only occurs marginally within the media reports examined.

During the third phase, that of the lockdown, no fundamental criticism of the lockdown can be observed. Instead, the focus of the criticism is that the measures were implemented too late, were poorly coordinated and/or poorly communicated. Criticisms also indicate that authorities conducted insufficient testing and that the processes for generating the necessary data were inadequate. During the fourth phase, i.e., from the beginning of April whereby the state of emergency was extended but there was also an easing of measures promised by the end of the month, a fundamental criticism of the lockdown itself can be observed for the first time (including in Weltwoche and SonntagsZeitung); there are claims that the economic damage is too great and other, less drastic measures such as social distancing would have been sufficient to combat the virus. However, this criticism has less coverage than the criticism of the specific planning and the low speed of the easing steps. In addition, the fundamental criticism of the lockdown during this fourth phase received much less coverage than the supportive reports, according to which, for example, the Federal Council "did a great job" of managing the crisis (Sonntags-Blick, 19 April 2020) and state instruments such as short-time proved to be very effective.

Over time, it can be seen that during the second phase before the lockdown in particular, discussion of the actions of the government and authorities increases sharply and the proportion of explicitly supportive reports (8.2%) is higher than the proportion of critical ones (5.5%). The critical reports are effectively calling for more decisive action and stricter measures to combat the coronavirus. During this sensitive phase, the media communicatively helped to prepare for the lockdown, but did little to critically weigh up the possible decisions and the subsequent lockdown in advance.

The actions of the government and authorities are a topic across all types of media (see Figure 8). Reports on this are particularly high amongst public broadcasting (32.2%), primarily the main news programmes *Tagesschau* (43.8%) and *Le Journal* (44.2%), as well as Sunday papers and weekly media, especially *Weltwoche* (50%). Contrary to the repeatedly raised assumption that public broadcasting has insufficient government distance, critical reports about the government and authorities predominate here too (6.7% critical versus 3.4% supportive). Critical reports are represented even more strongly in the Sunday papers and weekly media (13.1% critical versus 7.4% supportive). There was significant criticism of the authorities within *Weltwoche* news items.

There are some major differences within media types. Generally, criticism of authorities in German-language Swiss media is stronger than in French-speaking Switzerland media. Firstly, this can be seen via a direct comparison, for example between SRF and RTS, 20minuten.ch and 20minutes.ch or between nzz.ch and letemps.ch. Secondly, there are numerous media outlets in German-speaking Switzerland that tend to convey messages that support the government and authorities - for example, SonntagsZeitung, aargauerzeitung.ch and Watson.ch. However, unlike in French-speaking Switzerland, several media outlets with relatively critical positions can also be identified in German-speaking Switzerland, including 20minuten.ch, 10vor10 (SRF), nzz.ch and especially Weltwoche. 20 Minuten serves as a platform for critical reports in the field of social and economic policy (e.g., protection of nursing staff, construction site closures), while 10vor10's critiques include that the federal government has shown too little interest in the production of vaccines in Switzerland for years and that insufficient testing is being carried out. nzz.ch accuses the authorities of being dishonest with regard to wearing masks: for authorities to now claim that wearing masks has no benefits contradicts the 2018 pandemic plan. The criticisms argue that scepticism about a mask requirement stems more from the fact that the federal government failed to provide enough masks. In Weltwoche, the main criticism until the end of March is that the Federal Council underestimated the serious-

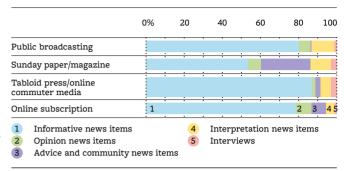


Figure 9: Contextualisation by journalistic reporting style

The figure shows the respective proportion of news items with a corresponding journalistic reporting style for the examined media types. The data is based on all news items that were examined via a manual content analysis (n = 1448).

Reading example: 6.3% of news items published in Sunday papers and weekly media were written as interpretive news items.

ness of the situation for too long, while from April onward, criticism of the lockdown takes centre stage. The stronger criticism in German-speaking Switzerland may be related to the threat situation (at that time, people were more affected in French-speaking Switzerland) or to the political culture because, according to the Abstimmungsmonitor (a project which examines media coverage in the run-up to referendums), less support for government interventions is regularly shown by the media coverage in German-speaking Switzerland.

If one considers the extent of criticism of the government and authorities in the media types over time, little changes in the scene described above. During the second phase before the lockdown, there is no broad exploration, let alone criticism, of a possible lockdown in any media type – not even in those media types and outlets that do subsequently criticise the lockdown later (around April). The media coverage shows that the situation escalated unexpectedly and quickly. In the context of the growing threat, the media followed this development but evidently discussed it with little foresight and hardly any critical or contextual assessment. The same result is found when we analyse the contextualisation in more depth.

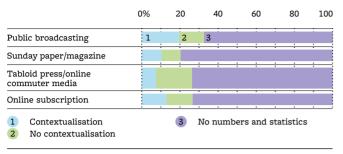


Figure 10: Use of numbers and statistics and contextualisation for the same

The figure shows the respective proportion of news items by the media types examined in which numbers and statistics play a key role and whether or not they are contextualised, as well as the proportion of news items in which numbers and statistics do not play a key role. The data is based on all news items that were examined via a manual content analysis (n = 1448).

Reading example: 19.8% of news items published by public broadcasting outlets placed a focus on numbers and statistics, and these were contextualised.

3.3.2 Contextualisation: background and in-depth reporting

n times of crisis, the public's need for information Lis high: on some days, events occur in quick succession, there are a lot of strange and unfamiliar situations, and expectations change rapidly. During such times of crisis, the media should provide information about current news, convey background information and contextualise events. Whether contextualisation was provided was recorded on the basis of the reporting style or format of the news items. Of all types of news, interpretive news items are those that contextualise and convey background information with clearly understandable internal contributions and research. Contextualisation also features in other formats, but the focus there is more on conveying news (informative news items), commenting (opinion news items), conveying individual statements (interviews) or helping the audience (advice and community news items).

In general, interpretative news items do not feature prominently (see Figure 9): Only 5.6% of all news items primarily aim to place in-depth reporting as the focus of background news items, to provide context and convey background information. There are big differences between the media types and media outlets. Similar to results from other studies, contextualisation in commuter media and the tabloid press is lower (1.9%). In the case of public broadcasting (6%), the magazine *10vor10* offers the most contextualisation, while *Tagesanzeiger.ch* (13.6%) and *nzz.ch* (19.7%) are in the lead among subscription media (8%). Surprisingly, contextualisation in Sunday papers and weekly media (6.3%) is not much higher, despite the fact that they have less pressure to be up-to-date and therefore more time for context research than daily media due to the frequency of publication.

3.3.3 Handling numbers and statistics

contextualising and critically distant handling of Anumbers and statistics is also part of high deliberation quality. Firstly, it is apparent that numbers and statistics play a key role in reporting on the coronavirus pandemic (see Figure 10). In 27.1% of all news items, numbers and statistics are the focus of the report. These primarily include figures about the spread of the coronavirus (infection and death rates), and secondly also unemployment figures, stock market prices, etc. Numbers and statistics are more important to daily media types, particularly in the case of public broadcasting (32.6%), than to Sunday papers and weekly media (20.5%). One possible interpretation is that daily media outlets use numbers and statistics in the news flow to flag changes and highlight the relevance of new numbers.

We can observe that numbers and statistics are actually contextualised in comparatively few cases. Explanations of what these numbers say and justifications for why they are used are by no means always provided. The proportion of news items without contextualisation of numbers and statistics (14.8%) is higher than the percentage of news items that provide context for numbers and statistics (12.4%). Altogether, commuter media and the tabloid press seem to have a "naked" approach to the reporting of numbers, i.e., uncritical and without context. As a result, the proportion of news items without contextualisation is much higher (19.1%) than the share with contextualisation (7.3%). Public broadcasting relies heavily on numbers and contextualises them regularly (19.8% have context, 12.8% have none). Sunday papers and weekly media rely less on numbers than the other media types. However, they do not make the most of their position as non-daily media to distinguish themselves in the middle of the news flow by taking their time to explore explore numbers and data critically and contextually. There are big differences among subscription media outlets: *letemps.ch*, *24heures.ch* and *tagesanzeiger.ch* stand out from other subscription media outlets due to their frequent contextualisation of numbers and statistics. Among other things, they critically examine the case counts in China and indicate how the case counts reported by the FOPH are derived.

4 Conclusion

The coronavirus pandemic and the associated exceptional measures have presented the media with major challenges. The media should generally serve as an early warning system, give attention to a wide variety of topics and actors, critically discuss those in power and contextualise events. These roles are particularly important in an exceptional crisis situation such as a pandemic, where there is much uncertainty, events occur in quick succession and the government and authorities are given new powers. At the same time, this exceptional situation can be seen as a "stress test" for the media. Against this background, how can we assess the performance of Swiss news media in COVID-19 reporting?

Overall, despite clear shortcomings, we can assess media coverage generally in a positive way. We conclude this from the automated and manual content analyses, in which the diversity, relevance and deliberation quality were examined more thoroughly on the basis of nine indicators. The media performed well in several respects not only before but also during the coronavirus pandemic. This is in line with previous results from the Yearbook Quality of the Media, according to which the quality of the media in Switzerland is generally relatively good. On a positive note, diversity of topic spheres and specific thematic focus points within COVID-19 reporting is high, with the exception of the first phase at the beginning of the year. Different areas of society and different national and international aspects are covered. Furthermore, a wide range of actors from different areas of society are able to convey their expertise. Scientific knowledge plays an essential role, particularly in media formats such as interviews or interpretive news items intended to provide guidance. However, one negative aspect is that medical expertise dominates among the discussed scientists, while expertise from economics, law or the humanities and social sciences, for example, is hardly visible. The medical experts themselves, however, are relatively diverse; a concentration of just a few top medical experts has not been identified in most media outlets.

Overall, diversity in COVID-19 reporting is relatively high. At the same time, the media's focus on the coronavirus pandemic goes hand in hand with a displacement of other topics, i.e., a reduced diversity of topics. During the phase shortly before and at the beginning of the lockdown, around 70% of all news items in the media refer to COVID-19. Reference to the issue climate change – which according to observers clearly dominated the election year 2019 – was only made in a maximum of 10% of all news items at the beginning of 2020. However, the climate change issue begins to be pushed away from the media agenda as the pandemic escalates.

The fact that the media pays increasing attention to the coronavirus pandemic from February starting in Italian-speaking Switzerland - can be seen as an indication of relevance. During the phase before the lockdown, the volume of media coverage develops relatively in parallel to the increasing number of cases in Switzerland. The health threat posed by the coronavirus which affects the situation in Switzerland is more present at the beginning and decreases again over the course of the lockdown and as the number of cases falls. The level of threat discussion is comprehensible in this respect. The fact that the volume of reporting only fell a relatively low amount from April onwards, despite the sharp drop in case counts, can be explained by the increasing politicisation and the growing discussion about possible exit strategies. The reporting is also relevant because it is handled from the perspective of society as a whole relatively often. Measures that affect the whole of society and the societal consequences of the coronavirus crisis take centre stage more than individual fates.

While the quality of the media is relatively good when it comes to diversity and relevance, the deliberation quality is more mixed. There is relatively little contextualisation: substantiated, contextualised background reporting can be observed in only around 6% of all news items. The assessment of the deliberation quality is mixed also because although the media maintains a critical distance from the government and authorities overall, but the distance is small during the sensitive phase just before the lockdown. The deliberation quality is also mixed when it comes to dealing with numbers and statistics. These play a key role in media coverage and are contextualised in some media types such as public broadcasting or some subscription media, but other media outlets tend to report mere figures.

The fact that the diversity of topics is limited in the tabloid press and commuter media, and that these media outlets provide less context, corresponds to the general differences in media quality. In contrast with expectations, however, it is not these (historically more emotionalising) media outlets that most intensely highlight the danger of the virus and paint an ominous picture of the situation. We cannot observe a purely alarmist and dramatising reporting among the tabloid press and commuter media. Contrary to the constant accusations regarding a lack of distance from government, public broadcasting news items feature more critical than supportive reports about the government and authorities. Some Sunday papers and weekly media also criticise the government and authorities relatively often, whereby their criticisms before lockdown accused the government and authorities of not taking the virus seriously enough. As the the lockdown phase grew longer, the government and the authorities were then reproached for not beginning to ease restrictions quickly enough. Looking at the Sunday papers and weekly media, it can be observed that they do comparatively little to exploit their potential as non-daily media to provide more background and research-based contextualisation for the flow of events. Contextualisation is higher among the daily media outlets nzz.ch, tagesanzeiger.ch and 10vor10.

A conclusive assessment of media performance was not and is not possible with this study. Some features can only be evaluated later on as the pandemic progresses. And some aspects, such as the justification of arguments, could only be examined to a certain extent. The role of images, such as the possible dramatisation and illustration of the threat with videos of coffins or photos of stacked body bags, could not be examined either. In any event, our mixed but generally positive conclusion on media quality gains plausibility with a comparison to media use. According to a survey, at the beginning of the lockdown phase, a majority of German-speaking Swiss people felt well informed and made use of public broadcasting services in particular, which scored relatively well in the content analysis. At the same time, most people considered the coverage of the topic to be too intense (Friemel et al., 2020). According to a qualitative survey of young people, trust in professional, quality-oriented media provision is intact, but at the same time the media is criticised for an excessive focus on the topic of the coronavirus pandemic and is blamed for topic fatigue (Schwaiger, 2020).

If journalism wants to learn from COVID-19 reporting, we could say: despite the intense pressure and times of great uncertainty, the media managed to conduct a diverse, relevant and relatively matter-offact coverage. However, journalism requires more resources and different structures to be able to pause frequently despite the hectic news situation and provide critical contextualisation and own investigations. This is also necessary because the coronavirus pandemic will certainly not be the last (health) crisis and has not yet been fully overcome.

Literature

Brost, M., & Pörksen, B. (7.4.2020). Angesteckt. Warum der Journalismus in der Corona-Krise besonders gebraucht wird – und vor welchen Problemen er steht. Die ZEIT. https://www.zeit.de/2020/16/coronavirus-berichterstattung-journalismus-information

Friemel, T.N., Geber, S., Egli, S., & Udris, L. (2020, i.E.). Mediennutzung in der Ausnahmesituation. Informations- und Kommunikationsverhalten der Deutschschweizer Bevölkerung in den ersten Tagen des Lockdown während der Corona-Pandemie. Studien Qualität der Medien.

Grimmer, J., & Stewart, B. M. (2013). Text as data: The promise and pitfalls of automatic content analysis methods for political texts. Political Analysis,21(3), 267-297.

Jarren, O. (3.6.2020). Die Corona-Pandemie ist eine besondere Krise. Higgs. https://www.higgs.ch/die-corona-pandemie-ist-eine-besonderekrise/33283/.

Meier, K., & Wyss, V. (9.4.2020). Journalismus in der Krise: die fünf Defizite der Corona-Berichterstattung 2020. Meedia. https://meedia. de/2020/04/09/journalismus-in-der-krise-die-fuenf-defizite-der-corona-berichterstattung/.

Oehmer, F, Eisenegger, M. Udris, L. & Vogler, D. (2020). Codebuch zum Projekt «Corona-Berichterstattung in Schweizer Medien». https://zenodo. org/record/3958929.

Russ-Mohl, Stephan (23.4.2020). Medienforscher Russ-Mohl: «Bei solchem Journalismus bin ich etwas ratlos». Medienwoche. https://medienwoche. ch/2020/04/23/bei-solchem-journalismus-bin-ich-etwas-ratlos/

Sandhu, S. (2013). Krisen als soziale Konstruktion: zur institutionellen Logik des Krisenmanagements und der Krisenkommunikation. In A. Thießen (Hg.), Handbuch Krisenmanagement (S. 93–113). Wiesbaden: Springer VS. https://doi.org/10.1007/978-3-531-19367-0_6

Schwaiger, L. (2020, i.E.). Mediale Lebenswelten junger Schweizerinnen und Schweizer. Studien Qualität der Medien.

Silini, A. (12.6.2020). Comment les médias suisses ont-ils couvert la crise du coronavirus? European Journalism Observatory. https://fr.ejo.ch/formats-pratiques/comment-medias-suisses-couvert-crise-coronavirus-covid-19-presse

Copyright

Contact

Research Center for the Public Sphere and Society (fög)/University of Zurich fög/University of Zurich Andreasstrasse 15 CH-8050 Zürich kontakt@foeg.uzh.ch +41 (0)44 635 21 11 www.foeg.uzh.ch