



Auditing the 2020 'Christmas Decree': communicating pandemic restrictions during Italy's first 'Covid-Christmas'

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Abstract

This article investigates the online public reception of travel restrictions during the Covid-19 pandemic in Italy and the role of civil society in communicating them. In particular, it observes the '2020 Christmas Decree' provision allowing people living in municipalities with fewer than 5,000 inhabitants to move within a 30-kilometre radius from their town's border on given days during the Christmas period. To help understand these new rules, a group of three civic hackers created a tool called '30cappa', providing a map visualisation for citizens to check where they could legally travel, triggering online and press debates on the new rules. By analysing these online and media debates, this article finds that the Italian authorities' communication around the 'Christmas Decree' rules was unclear to the general public. In this context, local news outlets sought to play a clarifying role, drawing from communication actions by civil society actors. Through these findings, this article contributes to the literature on the public communication role of civil society in times of emergency.

1. Introduction

In February 2020, Italy became the first European country to be hit by Covid-19 and enter a national lockdown soon after. As Covid-19 contagion was widespread across the country in December 2020, the central government established rules through the so-called 'Christmas Decree' to allow people to gather for Christmas, while seeking to control the spread of the disease (Council of Ministries of the Italian Republic, 2020).

This article investigates instances of public discontent over travel restrictions during the Covid-19 pandemic in Italy – taking a specific provision of the 2020 'Christmas Decree' as a case study – and observes the role of civil society in steering the debate and clarifying information. In this view, we take the '30cappa' project as a case in point. While providing a general ban on travel outside one's municipality of residence, a specific provision of the Christmas Decree allowed people living in municipalities with fewer than 5,000 inhabitants to move within a 30-kilometre radius measured from the town borders on given days. This prompted a group of three civic hackers¹ to create a website called *30cappa*, providing a map visualisation for citizens to check where they could legally travel to, from their respective towns of residency (Napolitano et al., 2022).

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¹ A civic hacker is a tech expert who uses open-source solutions to address social issues.

This tool obtained visibility in the local press of north-eastern Italy and Sicily, these being the developers' places of origin, and contributed to the debate on clarifying the Decree's provisions.

This research uses a mix of quantitative and qualitative methods to observe the public opinion's reaction to the 30-kilometre issue raised by the Christmas Decree. The texts analysed are social media posts and newspaper articles relating to the issue in question. Through this approach, this article is grounded in the literature on the role of civil society during public emergencies (see, for example, Cai et al., 2021). Here, the authors address 'trust' in an actor (and its authority) as a person's or group's willingness to accept this actor's statements as true and/or its impositions (such as regulations) as reasonable (Solomon, 2021). On this basis, the authors explore the relation between trust in authorities and authoritative information sources, on the one hand, and disobedience, on the other. Beyond its own peculiarities, the Italian case is relevant for observation owing to the extent of the health emergency in the pandemic's early months, Italy's pioneering role in nation-wide restrictions in Europe, and the size of the Italian population, making it one of the European Union's five most populous countries. As such, this article allows for case-specific observations, which are yet transferable to similar cases, on public opinion (and its potential effects on law abidance) in times of emergency.

This article finds that the Italian authorities' communication around the Christmas Decree rules was unclear to the general public. In this context, civil society initiatives such as 30cappa sought to play a clarifying role. The next section provides a summary of the socio-political context in which 30cappa and the Christmas Decree are situated. The article then provides a methodological discussion. The subsequent section illustrates the findings, while then moving to a discussion of their meaning and relevance for issues of communication and disobedience in times of emergency. The final section brings this article to conclusion.

2. Context and literature review

The constraints imposed by local and national governments to contrast the spread of the Covid-19 pandemic were the greatest restrictions of individual freedom in Italian history since World War II (Camporesi, 2020). While Italy suffered one of Europe's strongest Covid waves in early 2020 and its national restrictions were among the most stringent in terms of limitation to individual movement (Malandrino and Demichelis, 2020), there was a general acceptance among the population of the exceptional need for special measures throughout the pandemic. Indeed, the literature on online debates on Covid-19 shows evidence (in Italy and elsewhere) of increased disinformation circulation prior to pandemic outbreaks, but also a rise in scientifically-sound information circulation during the actual emergency phase (Gallotti et al., 2020), as well as a rally-round-the-flag effect in support of the incumbent national government (Loner, 2022). This arguably motivated the general acceptance of restriction measures between February and May 2020. Indeed, similar effects are visible elsewhere in Europe: Kritzinger et al. (2021) observed the rallyround-the-flag effect during the early stage of the pandemic in Austria and France, whereas Johansson et al. (2021) observe such effects disappearing when cohabiting with the pandemic became a 'new normal'. This article observes the role of civil society in

conveying information on government-mandated anti-Covid restrictions in this latter phase of normalisation of 'pandemic life', looking at 30cappa as a case in point.

During the first national lockdown, initial locally oriented measures were followed by a fully-fledged national lockdown. However, from autumn 2020 onwards a regionbased approach was taken. Regions with the highest level of contagion entered full lockdown (red zone) while regions below this threshold underwent tough restrictions such as forbidding movement across municipalities (orange zone). In regions with controllable levels of contagion, milder obligations such as wearing masks applied (yellow zone). At a later stage, a white zone was introduced indicating 'Covid-free' regions. This taxonomy remained in place until 31 March 2022, when the state of emergency ended. By 1 May 2022, the EU Digital Covid Pass was no longer compulsory. Among the examples of how the population of Italy accepted strong exceptional measures, the World Health Organisation (WHO) reported that Italy was one of the bestperforming countries in Europe in terms of vaccination, with 68.62% of the population having received a booster dose by October 2022 – a figure higher than that of economically comparable countries such as France, Spain, Portugal, Germany and the Scandinavian countries (World Health Organisation, 2022). To be sure, the ranking changes if we observe first doses only, which may be the result of different policies in terms of what sectors of the population were recommended to take the booster dose. Nonetheless, the percentage of people vaccinated with at least the first dose in Italy was over 84% by October 2022, one of the highest percentages in Europe (World Health Organisation, 2022). As vaccination was never made compulsory for the whole population, these data signal the high level of abidance of Italian citizens by governmental rules and policies amid widespread recognition of a situation of necessity.

Nonetheless, the evidence illustrated does not ignore case-specific, possibly local, anti-Covid measures. Indeed, even the strictest abidance by the rules does not necessarily imply normative acceptance. For example, fear due to the strong impact Covid-19 had on Italy in its earliest phase, as well as pressure due to the restrictions (for example, the need for constant testing) in place for non-vaccinated people, may have played a role in increasing vaccinations. However, the literature finds that such restrictions did not yield a complete push for vaccination, and countries with similarly strong measures, such as Austria, had a lower vaccination rate compared to Italy (World Health Organisation, 2022; Stefanizzi et al., 2022).

Discontent, however, arose during the various phases of the pandemic, as Italy witnessed the surge of a relatively small but noisy and, in some contexts, influential 'no vax' movement, which conflated a number of groups who opposed the vaccine and anti-Covid restrictions tout-court or even just one of the two elements. Indeed, the media referred to them as 'no-vax, 'no-mask', and 'no-greenpass' interchangeably. Other than expressing opposition to the vaccine rollout, the movement opposed the closely related adoption of the European Union's (EU) Digital Covid Certificate (that is, the 'green pass') that was used as proof of vaccination or as proof of a negative test. Until 1 May 2022, the certificate was necessary to conduct most indoor activities in Italy (including taking public transport across cities) (Euronews, 2022). The Italian 'no vax' movement received media coverage internationally because, despite the adherence of the vast majority of the population to the vaccine campaign, it caused major public disorders and

its positions found sympathies within the far-right inside and outside Parliament (Broderick, 2022). At the end of 2022, the then newly elected far-right government reintegrated no-vax medical personnel within the service, defining the move as a 'peace act' (Agenzia Giornalistica Italia, 2022).

The no-vax movement played a role in expressing discontent amid the regulatory chaos that followed the 2020 Christmas Decree. As shown in the analysis, the most vocal Twitter/X² users criticising the Decree were members and supporters of far-right, vaccine-sceptical political parties such as Italexit, which started as a Eurosceptic party and took several other anti-systemic stances (Luo, 2022). This took place in a context of emergency and numerous unknowns around the vaccination campaign that was about to start. By Christmas 2020, Covid-19 vaccine acceptance in Italy fared as low as 53.7% (Sallam, 2021). However, eight months later vaccine hesitancy was reduced to 25% (Moscardino et al., 2022). The year 2021 and the first half of 2022 were characterised by numerous, noisy, and at times violent no-vax demonstrations across Italy (Broderick, 2022), but the movement failed to affect the results of the vaccination campaign despite being influential in online criticism against anti-Covid regulations. The no-vax movement is illustrative of how high levels of abidance by the rules (including non-mandatory recommendations) can cohabit with violent and non-violent forms of militant disobedience.

Specifically, this article explores public opinion towards the 2020 Christmas Decree, which introduced restrictions to prevent contagion during the 2020 Christmas holidays while allowing restricted numbers of people to gather and celebrate. In particular, it looks at reactions triggered by the Decree itself and the 30Cappa initiative. The latter is a web app created by three Italian civic hackers, illustrating on a map the distance that residents of municipalities with fewer than 5,000 inhabitants could travel according to the Christmas Decree (Napolitano et al., 2022).

In particular, the Decree mandated that in Italy people could not leave their municipality of residency throughout the Christmas period to avoid contagion, whereas residents of municipalities with fewer than 5,000 inhabitants could travel within a thirtykilometre radius from their municipality's borders on 28, 29, 30 December and 4 January (that is, all the non-festive and non-pre-festive days of the Christmas period). Such travel could extend beyond regional borders as long as citizens did not enter provincial capitals. To leave the Italian borders, rules for foreign travel applied (Council of Ministries of the Italian Republic, 2020). At least three layers of complexity were added: first, some municipalities contain enclaves and exclaves. Second, the municipality of Campione d'Italia (featuring fewer than 5,000 inhabitants) is an Italian enclave within Swiss territory. Third, Italian regional governments (a total of twenty) enjoy strong autonomy (with five of them enjoying even further prerogatives under a 'special statute'). One such special statute region, namely Trentino Alto Adige, is further subdivided into two autonomous provinces (Trento and Bolzano). In the wake of the Christmas Decree, the province of Trento raised the population limit imposed by the Decree to 6,000 inhabitants (Napolitano et al., 2022). In this multi-layered regulatory context, a general

 $^{^{\}rm 2}$ The platform X was called Twitter at the time the research was conducted, hence the use of the double name in this article.

sense of confusion emerged among the citizenry through both the press and social media. In short, government regulations were unclear to the general public and the civil society initiative 30cappa helped to clarify them (Napolitano et al., 2022).

The 30 cappa initiative triggered debates on the effectiveness and potential discriminatory effects of the Christmas Decree, eliciting critical positions vis-à-vis the then Conte government. This debate provides a relevant case study for display of public discontent (and potential disobedience) relating to Covid-related restrictions. Contextually, the use of 30 cappa as a clarifying instrument by the local media is observed as a means to promote understanding of and abidance by the law, coherently with the literature on the media's role during emergencies, addressed below in this section (Vermeer et al., 2022). The role of civil society in communicating anti-Covid measures has been addressed by a number of scholars. Cai et al. (2021) conducted case studies in China, Japan and South Korea and found that civil society contributed to contrasting Covid-19 by supporting and communicating governmental efforts or by filling the institutional voids left by the government. On a more critical note, Brechenmacher et al. (2020) found during the early stage of the Covid-19 pandemic that civil society actions were not necessarily democratic – as demonstrated by the aforementioned violent novax protests that characterised the Italian political landscape across 2021. Nonetheless, they find that a number of civil society initiatives helped pandemic response despite the disruption caused by lockdowns and the efforts of antidemocratic political leaders to weaponise lockdowns to silence civil society organisations. In a study focusing on the Netherlands, Kemper et al. (2023) find that civil society initiatives 'have fulfilled various roles such as providing alternative management policies, producing equipment, representing the needs of vulnerable populations, and supporting citizens and providing citizens with other viewpoints and information.'

Each of the above perspectives elaborates on specific aspects of the relationship between public reactions to emergency measures and civil society's role in supporting the government's communication, also considering a diverse range of cultural, historical, and political contexts. This article relates to this literature.

3. Approach and methods

As illustrated above, a growing body of literature finds a connection between trust in media and (health) authorities, on the one hand, and abidance by Covid-prevention measures on the other. This is, however, mediated by the sense of emergency that the general population feels or, by contrast, the sense of normalisation. In this view, a stronger rally-round-the-flag effect is visible during emergency inception and peaks (Loner, 2023). Furthermore, depending on the characterisation of the media used, trust in authorities is affected in different ways. For example, in a study of citizens' behaviour in Covid-19 prevention in China, it was found that the use of central government information and WeChat as a social media are positively correlated with abidance by prevention measures, whereas consumption of local news and the use of Weibo as social media are negatively correlated with it (Wu and Shen, 2022). Coherently, media outlets seek to build trust among the population through the provision of clear-cut information. However, this is not necessarily for the best when it comes to contrasting pseudo-science in times of health emergencies (Limaye et al., 2020). This notwithstanding, there is a

general acceptance of the role of both social and traditional media (mainly newspapers and TV) in influencing trust towards authorities and abidance by Covid prevention measures (Vermeer et al., 2022).

On these grounds, a growing body of literature explores the role of civil society in supporting the government's communication of anti-Covid measures (Cai et al., 2021). This article takes its starting point within the wisdom provided by this literature, exploring the role of civil society in the Italian information ecosystem.

Starting from this body of literature and an already existing analysis of the 30cappa initiative provided by its curators (Napolitano et al., 2022), this article follows a twophase approach. First, quantitative data were collected, then a qualitative analysis was conducted on selected media sources.

Quantitative data consist of Twitter/X data with the hashtag #decretonatale (Christmas Decree) and traffic statistics for the 30cappa website (Napolitano et al., 2022). Twitter/X is a politics-oriented platform and as such it is relevant to this article. Indeed, for the sake of completeness, Facebook posts should also have been analysed as it is Italy's most used platform (Dixon, 2021). However, at the current stage the Facebook Graph API does not allow for the bulk collection of posts and the analysis of opinion trends (Breuer et al., 2022). Twitter policies have also changed with the latest change in ownership and its rebranding as X. However, data collection was conducted prior to this. On these grounds, Twitter/X was used as a proxy on which to build a basic understanding of the Italian public opinion stances over the Christmas Decree. Such an understanding, being only partial, cannot be generalized. Indeed, Twitter/X is used less in Italy compared to other countries, although its relevance to the study of political debates has been proven in the literature (Cossard et al., 2020). This is why the study of the Twitter/X debate was then complemented by a qualitative analysis on media outlets on the more specific topic of the 30cappa initiative. This way, the 30cappa debate is contextualised within the broader debate on the Christmas Decree.

Tweets containing the hashtag #decretonatale (Christmas Decree) were collected for the period between 1 December 2020 and 7 January 2021 included. The latter is the date Christmas restrictions ended, but the choice of the start date was not as straightforward: as a number of anti-Covid restrictions were already in place, discussion over the likelihood of tough restrictions over Christmas started in early autumn, although no such thing as the Christmas Decree was devised until later in the year. Indeed, the Decree entered into force on 18 December 2020 (Council of Ministries of the Italian Republic, 2020). This made it difficult to pinpoint a start date for the Christmas Decree debate. Therefore, the authors opted for including the whole Christmas month in the analysis.

A total of 7,625 tweets were collected, corresponding to 6,649 valid tweets analysed. The tweets that were eliminated were simply automated, often off-topic, tweets using trending hashtags to advertise products and services. Therefore, they were deemed irrelevant for this analysis. The authors conducted an author network analysis of the tweets. This allowed the authors to observe the political characterisation of the profiles who led the Twitter/X debate and their expressions of discontent. This provided the basis for qualitative observations on media outlets. The tweets were cleaned and made ready for analysis by lemmatising the text using the textstem package (RDocumentation

2023), that is, by converting each word to the inflected form (for example, the word 'vuoi' – verb, second person singular, present tense – was converted to its infinitive form 'volere'). Stopwords were then eliminated using three different packages: 'stopwordsiso', 'nltk', and 'snowball' (RDocumentation 2023). This was to ensure all stopwords were eliminated, as most packages are English-proof but not as effective in other languages such as Italian. A further manual cleaning was conducted to eliminate or convert words with diacritic signs (such as accents) which were at times not detected by the aforementioned packages.

The analysis of the tweets was conducted in R. To conduct author network analysis, the 'textnets' package was adopted (Bail, 2016). This tool enabled observation of the most central authors within the Twitter/X debate on the Christmas Decree, detecting whether the debate was led by politicians and other public figures or by private citizens. While such observations will be illustrated, strict anonymity will be maintained around the identity of the tweet authors. This is both an ethical choice and a legal obligation under the General Data Protection Regulation and the Twitter/X API terms and conditions. The most central nodes are identified in terms of betweenness centrality, that is, centrality is higher when a network node (i.e., a tweet author) is more often on the shortest 'path' between two other nodes. Betweenness centrality is a key indicator in Twitter/X debates as it is generally higher for authors who are retweeted more often, post more, or retweet a higher number of tweets from much-followed sources (Riddell et al., 2017). In the case of this article, the network is built on words co-occurring across tweet authors; therefore, the authors who retweeted each other more often are more closely connected. The higher a node's betweenness centrality, the bigger its size in the network graph. The various nodes in the network are then grouped by colour, which indicates modularity. A module is a 'community' of nodes that entertain a stronger relationship within the network (for example, interacting with each other's tweets) (Blondel et al., 2008). This can be due to a common political belonging or to following the same news sources. These characteristics of the network are visually represented in Figure 1. illustrated and discussed in the 'Findings' section. For the sake of readability, only 56 nodes and the respective edges (150 in total) are represented. The analysed nodes are users that posted at least five tweets using the hashtag #decretonatale. Betweenness centrality and modularity have been calculated on this reduced network, considering the graph is mixed (with directed and undirected edges). Retweeting one's own tweet is considered a self-loop, whereas original tweets are not (Zhao et al., 2021). Running the analysis on the full network would have yielded 3,426 nodes and 544,924 edges, increasing computational needs and creating noise in the interpretation of data. The network analysis is merely exploratory and further qualitative analysis is built on it.

The choice of the media outlets to observe was based on traffic statistics of the 30cappa website. Through these, it was possible to observe the sources from which most of the access to the 30cappa website came. This way, the local and national online newspapers to include in the analysis were selected. The media outlets observed include the online version of traditional newspapers as well as Covid-specific websites such as 'covidzone.info', an Italian website started in December 2020 to provide clarity on the ever-changing anti-Covid regulations. The website has been unavailable since May 2022,

but its content was retrievable through 'archive.org'. Qualitative thematic coding has been applied to both articles and comments.

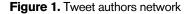
Based on this twofold methodological approach, the authors first built general knowledge of online discontent over the Christmas Decree. Next, the authors conducted analysis of the 30cappa initiative to explore the entrenchment of information, trust, discontent, and disobedience. The next section illustrates this article's empirical findings. All the quotes reported in the findings and the discussion sections are translated from Italian by the authors.

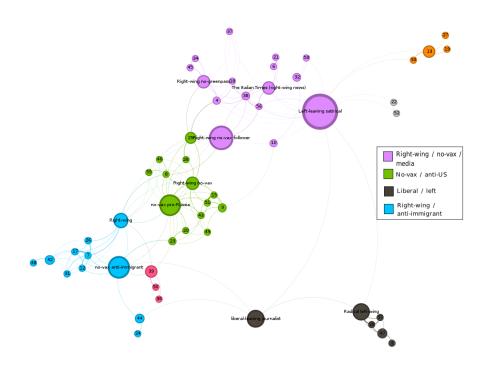
4. Findings

The exploratory analysis conducted on Twitter/X suggests rising discontent among users around the Christmas Decree. Right-leaning, vaccine-sceptical groups featured visibly in the Twitter/X discussion: among the most central nodes (bigger in size) in the tweet author network illustrated in Figure 1 there are followers of the anti-EU, antivax political party Italexit. Labels have been attributed to the most central nodes so as to characterise them politically while preserving their privacy, with the sole exception of 'The Italian Times' which is the profile of a news outlet and not a person. Table 1 shows the network statistics in relation to Figure 1 for better readability and interpretability of the network. Followers of far-right parties who criticised (to any extent) the government's vaccine policy are also present. These profiles feature numerous tweets and retweets in support of Lega and Fratelli d'Italia, of Putin's government, and of theories denying the efficacy of vaccines against Covid-19. While this does not provide any direct information on these users' will to disobey anti-Covid rules, it does show a deeply rooted lack of trust in Italian and European authorities, both in terms of health authorities and governmental authorities in general. Left-leaning voices - whether in favour of or against vaccinations – also featured in the discussion. Tellingly, the most central liberal/left-leaning voices in the debate are concentrated in one group (black in Figure 1), whereas the other main modules (pink, green, blue) all feature overlapping topics and political belongings among their most central nodes. The sole exception among left-leaning voices is an individual playing a satirical role and entertaining stronger relations with a right-leaning module (pink in Figure 1).

Interestingly, none of the most central tweet authors is a senior politician or public figure, although a liberal-leaning journalist is featured as well as the alternative rightwing outlet 'The Italian Times'. On the contrary, they are private citizens and perhaps secondary profiles within small but vocal anti-system parties. In short, the Twitter/X debate on the Christmas Decree was strongly politicised, with a prominent presence of non-primary, small but vocal anti-system parties.

To be sure, two disclaimers need to be made. First, as anticipated, the Twitter/X usership is not representative of the whole Italian public opinion. Second, as illustrated in the literature, critical views are overrepresented in social media posts and comments, with toxic language carrying a silencing effect over other users (Theocharis et al., 2020). Nonetheless, the Twitter/X debate provides the gist of the polarised environment in which the Christmas Decree was approved and in which the 30cappa initiative was launched.





Source: own elaboration. Size: betweenness centrality. Colour: modularity. Visualised with Gephi (ForceAtlas 2).

To retrieve media coverage for 30cappa, the authors used the 30cappa website statistics provided by the website owner and then observed the social media reactions to the articles. Such articles on social media were retrieved through the hashtag #30cappa and analysed qualitatively. It emerged that most criticisms expressed in the comments focused on doubts on the functioning of the tool rather than open criticism or personal attacks when the article was shared on the 30cappa curators' social media pages. However, sharper attacks and criticisms appeared in comments to local media coverage as better illustrated below. One essential observation is that most press coverage for the 30cappa initiative came from local news outlets. With the sole exception of Affari Italiani, Covidzone, and the Italian edition of Mashable, a large share of press coverage (and access to the 30cappa website) came from the online edition of local newspapers (Figure 2). As per Figure 2, extracted from the 30cappa website statistics, Covidzone is the website from which most accesses came (48.4%), followed by RAI News (7.7%). RAI is the Italian national broadcaster, but it features regional services. The main accesses to 30cappa through RAI came from regional services of RAI News.

Label	Betweenness Centrality	Modularity class
Left-leaning satirical	0.3429072388745095	4 (pink)
Right-wing no-vax follower	0.20504067982150975	4 (pink)
No-vax anti-immigrant	0.18243021346469623	1 (blue)
No-vax pro-Russia	0.17215728294045063	7 (green)
Liberal-leaning journalist	0.12821936489382427	2 (black)
Radical left-wing	0.11922852133255406	2 (black)
Right-wing	0.09566808605382536	1 (blue)
Right-wing no-vax	0.07653094356776413	7 (green)
Right-wing no-greenpass	0.07346836065421687	4 (pink)
The Italian Times (right-wing news)	0.07267030326644587	4 (pink)

Table 1. Network statistics in relation to Figure 1

Source: own elaboration.

Among the local news outlets listed in Figure 2, one can see newspapers from a number of provinces: Padova, Treviso, Trento, Udine, and Venice. Coverage was also present on Palermo Today. The visible overrepresentation of north-eastern Italian provinces is explainable by the origin and place of establishment of the 30cappa curators: Maurizio Napolitano is from Trento, while the two other curators (Salvatore Fiandaca and Andrea Borruso) are from Sicily, as pointed out by the local news outlet Palermo Today in its press coverage of the 30cappa initiative (PalermoToday, 2020). Other than this, media outlet ownership matters in the news distribution: the listed newspapers from Treviso, Venice and Padova belong to the same publisher, thus news and articles circulate more easily from one website to the other.

In short, the 30cappa project achieved national relevance, with the highest share of accesses being from the national website Covidzone, established in the wake of the Christmas Decree to provide ad hoc information on rules, exactly like 30cappa, and made popular by its appearance on RAI's main TV channels. However, it was local news outlets that sought to harness the tool provided by 30cappa to place themselves as the source of reliable information on what citizens could do during Christmas 2020. Indeed, 30cappa provided mapping services for the whole of Italy, and therefore local news outlets could use it to build visualisations related to their local area.

Reactions to articles by the local press on 30cappa were mixed. On the public social media pages of the 30cappa curators, commentators are supportive or merely ask questions. On the newspaper's social media pages, however, comments are more numerous and often angry, both against the Christmas Decree and the 30cappa mapping tool. Interestingly for the objective of this article, much criticism against the 30cappa initiative is that it calculates a radial distance from the municipality's border rather than

30 kilometres on a street graph. However, this way of calculating distances is accurate according to the Decree (Council of Ministries of the Italian Republic, 2020). Therefore, this is a sign of the lack of clarity that characterised the Christmas 2020 anti-Covid regulations. Indeed, a user commented: 'So lucky [ironic] that when I called the local police they said 30 kilometres must be calculated as road distance', signalling uncertainty even within public institutions.

Overall, four main attitudes emerge from the qualitative analysis conducted on reactions to media coverage of 30cappa. First, enthusiasm for the initiative (mainly visible on the project curators' pages); second, resignation regarding the new round of restrictions; third, anger against the restrictions; fourth, confusion around the content of the restrictions, as exemplified by the widespread doubts on how to calculate the 30kilometre distance.

In some of the local news outlets, 30cappa was instead promoted as a tool to clarify a complex and unclear (for many) piece of legislation. For example, the north-eastern newspaper Il Dolomiti presents the 30cappa as follows: 'How do you calculate the 30km radius? To help the residents of small municipalities, three computer scientists [...] created a web platform to offer the solution [to this question]' (Leveghi, 2020).

In this context of widespread – though by no means universal – uncertainty and distrust, local news outlets sought to provide clarity through locally-oriented information around the Christmas Decree. Titles underlined that the idea came from three hacktivists and articles contained examples of data visualisation on the newspaper's geographical area of competence, thus raising local interest in the project (PalermoToday, 2020).

SITO	▼ VISITE	AZIONI NEL SITO	AZIONI PER VISITA	TEMPO MEDIO SUL SITO	% RIMBALZI
covidzone.info 📈	48,4% 178.165	343.232	1,9	29s	38%
www.rainews.it	7,7% 28.450	91.214	3,2	2 minuti 3 secondi	28%
mattinopadova	3,3% 12.088	54.014	4,5	11s	28%
tribunatreviso.g	2,9% 10.571	50.650	4,8	8s	26%
www.trentotoda	2,2% 8.228	21.938	2,7	58s	31%
it.mashable.com	2% 7.402	20.956	2,8	58s	30%
www.udine20.it	1,6% 6.059	12.789	2,1	38s	35%
nuovavenezia.g	1,6% 5.836	29.325	5	8s	28%
www.affaritalian	1,5% 5.658	16.606	2,9	1 minuti 51 secondi	28%
www.covidzone	1% 3.771	7.399	2	30s	36%

Figure 2. Websites from which users accessed 30cappa (6 December 2022).

Source: data provided by the 30cappa website owners, updated to 6 December 2022. The website was closed due to the end of its use after the pandemic.

5. Discussion

The characterisation of social media reactions to the Christmas Decree and 30cappa shows diffused frustration towards the lack of clarity in the authorities' communication and thus the latter's delegitimization in the eyes of sectors of the public. Lack of clarity emerged prominently in the analysed comments, especially relating to how to measure the 30 kilometres. Frustration was thus visible and several user comments showed mistrust in the government's competence amid the lack of clear-cut rules as exemplified above. As throughout the Covid-19 pandemic the relationship between trust in the authority and compliance with prevention measures was found to be statistically significant by the literature (Travaglino and Moon, 2021), this discussion section focuses on the clarifying and trust-building role played by civil society with 30cappa as a case in point.

The local newspapers who provided press coverage to the 30cappa initiative presented it as a tool for their local readership to check where they could travel during the Christmas break. The local newspaper from the province of Padova 'Il Mattino' is an example: 'There are 289 municipalities with fewer than 5,000 inhabitants, one can move within a 30km radius and never to a provincial capital. [See] the list and the map. Find out where you can go' (Pucci, 2021). The same applies to local press from the province of Trento, as this territory applied slightly different rules by raising the population limit to 6,000 inhabitants. This aspect is in fact stressed by the local newspaper L'Adige in its press coverage of the 30cappa initiative, also in view of the fact that similar rules were reintroduced locally in 2021 during periods of widespread contagion (L'Adige, 2021).

While north-eastern provinces are overrepresented in the press coverage of 30cappa, press coverage in other regions of Italy took the same approach: that is, building lists and providing mapping tools for locals to calculate where they could travel to. This can be seen in the local media of Napoli and Palermo, southern Italy's most populated cities (NapoliToday, 2020; PalermoToday, 2020).

In itself, the fact that press coverage by the local press targets a local readership is unsurprising. However, in so doing, in the context of the Christmas Decree, local newspapers played a clarifying role for their local readership to understand what they were allowed to do under the existing restrictions. The press coverage provided to 30cappa as a means to this end is one example of this kind, but others can be found. For example, following the first full national lockdown (March to May 2020), the literature found evidence of a growing demand for local news (including TV, which in Italy is still the main medium of communication) in response to national pandemic-related events (Castriota et al., 2021). This is in line with findings from other countries (see for example: Wu and Shen, 2022).

Furthermore, the 30cappa map was embedded in several institutional websites,³ signalling how even government levels acknowledged the growing trust of the

³ For example, the north-western municipality of Campo Ligure used its official social media channels to publicise 30cappa as a tool for its citizens during the 2020 Christmas holidays. See: shorturl.at/iFGW6 (accessed 14 March 2023). The same applies to the Alpine Municipality of Cavedine: shorturl.at/tuTUZ (accessed 11 April 2023).

population in civil society-led initiatives and locally-oriented sources of information over institutional communication, which by Christmas 2020 had become chaotic in the eyes of many.

The regionalised management of the Covid-related health emergency, with regional administrations maintaining wide autonomy for establishing their own rules within those mandated by the central government, pushed many to rely on local news outlets and informal sources of information on the rules applicable where they lived and/or worked – to the point where even local levels of government themselves relied on civil society-produced, locally-oriented means of communication in given situations. In the words of the 30cappa curators as cited by the local news outlet PalermoToday: "When we saw the decree, we wondered how it should be interpreted and reasoned around how to create the maps [...] We certainly have no intention of incentivising the inhabitants of 'small municipalities' to move freely: common sense is fundamental. [We believe] that when words are insufficient to explain concepts, it is perhaps best to provide tools such as maps for comprehension".

In conclusion, in a context in which searching for local news had become relevant to understand pandemic-related rules (Castriota et al., 2021), civil society initiatives such as 30cappa helped to clarify institutional communication.

6. Conclusions and implications

Due to the differences in local rules that characterised the Italian anti-Covid strategy, locally-oriented information became paramount. This pushed local health authorities and government levels to step up their communication (Lovari et al., 2021), with civil society initiatives such as 30 cappa playing a role in this and being relaunched by local media. Based on the observations illustrated in this article, the authors maintain that building trust in local authoritative information sources - both among the media and the institutional channels - can arguably increase clarity around locally specific regulations and therefore enhance trust in the authorities. As trust in the authorities is positively correlated with abidance by anti-Covid measures in Italy (Castriota et al., 2021), such trust-building measures might contribute to reducing disobedience in times of emergency. This also resonates with existing literature on other countries, where a connection between news consumption from certain types of news outlets and law abidance has been found across countries with different political and cultural backgrounds, although the types of news consumption correlated with obedience changed contextually (Wu and Shen, 2022). Civil society has a role to play in this as showcased by the 30cappa experience.

To be sure, this article leaves some questions unanswered. For example, future research could focus on survey data to explore changes in (local) news consumption during the Covid-19 pandemic in Italy and across other countries to draw new insights into the media's role in building scientific trust. Besides, debates on platforms other than Twitter/X should be analysed, such as Facebook, Instagram and even Tiktok, which experienced a sharp rise in usership starting right before the Covid-19 pandemic. Among the limits of this article, local news outlets tend to provide more coverage of a piece of news when locals are involved, coherently with their mission as locally-relevant media. Therefore, the news outlets observed in this article over-represent certain

regions of Italy owing to the provenance of the 30cappa developers. Furthermore, the Covid-19 pandemic is still a fresh experience in everyone's memory, including that of researchers, thus yielding deep and polarising feelings in analysts and observers. Future research on Covid-related phenomena in the years to come may benefit from a higher degree of detachment from the object of study.

Overall, through the analysis of 30cappa as an informative tool and popular reactions to it, this article cast new light on the role local media can play in ensuring correct and reliable information and, ultimately, abidance by the law in times of emergency. On these grounds, the authors maintain that trust-building measures in authoritative media sources and reliance on civil society initiatives in (institutional) communication can help to reduce disobedience in times of emergency.

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