Contents lists available at ScienceDirect



Critical Perspectives on Accounting



journal homepage: www.elsevier.com/locate/cpa

The translation of an extraordinary event and the role of accounts: The covid-19 case \ddagger

Massimo Contrafatto^a, Laura Mazzola^{b,*}, Caterina Pesci^c, Domenico Nicolò^d

^a University of Sussex, UK

^b Queen's University Belfast, UK

^c Università degli Studi di Trento, Italy

^d Università degli Studi Mediterranea di Reggio Calabria, Italy

ARTICLE INFO

Keywords: Extraordinary events and Covid-19 Governing decisions and courses of action Translation Accounts and calculative practices

ABSTRACT

This article examines the dynamics through which an extraordinary event is conceptualized and governed, by focusing on the case of the COVID-19 pandemic in Italy and the decision to implement lockdown at the national level. The emergency generated by the extraordinary nature of the pandemic led various actors to debate and confront in the search for a course of action for containing and mitigating its devastating social and economic effects. The process by which legislative and regulative initiatives were identified and undertaken can be understood and interpreted as a translation of the pandemic, whose outcome led to specific governing decisions, in our case, the adoption of lockdown at the national level. This translation occurred within a decision-making arena, which emerged out of the emergency, where various actors used different resources to discuss and take decisions. In particular, the accounts and calculative practices related to the pandemic played a pivotal role. Through the case study of the first phase of the adoption of specific governing and government decisions and the role of accounts; thus, contributing to the accounting studies relating to the governing of extraordinary events.

1. Introduction

The COVID-19 pandemic (hereafter COV19) has affected economic-social systems and relations globally (OECD, 2020; WHO, 2020), thereby creating a scenario that has been unprecedented, unpredictable, and difficult to navigate (Rinaldi et al., 2020). This event, which in the context of accounting and management studies can be defined as "extraordinary" (Sargiacomo, 2015; Sargiacomo & Walker, 2022; Sargiacomo et al., 2014), led to the declaration of a state of international emergency by the World Health Organization (WHO, Press Conference of 11/03/2020). During this extraordinary event, spaces of inter-relationship emerged (Callon, 1984), wherein different actors (healthcare, economic, social, political, etc.) encountered, debated, and confronted (Callon, 1984) to problematise, manage, and control the devastating health, social and economic effects that resulted from the pandemic (Grossi et al., 2020). These spaces of encounter-debate-confrontation epitomized *arenas* of decision-making (Contrafatto et al., 2020), whose boundaries are

* Corresponding author.

https://doi.org/10.1016/j.cpa.2024.102769

Received 29 December 2022; Received in revised form 18 October 2024; Accepted 18 October 2024

Available online 18 November 2024

^{*} A version in Italian of this article is provided as online supplementary material.

E-mail addresses: massimo.contrafatto@sussex.ac.uk (M. Contrafatto), l.mazzola@qub.ac.uk (L. Mazzola), caterina.pesci@unitn.it (C. Pesci), domenico.nicolo@unirc.it (D. Nicolò).

^{1045-2354/© 2024} The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

not well-defined nor delineable; within these spaces the different actors have come to interact in non-linear, unpredictable and ambiguous ways¹ to take *decisions* about managing the pandemic-related issues of concern.

These decisions, which represent a central element of governing any phenomenon,² involve the adoption of specific courses of action (Callon, 1984). Unlike situations in other contexts, during an extraordinary event decisions are exceptionally taken, and new rules are adopted, based on the need to cope with the emergency of protecting the common good, which, in the case of COV19, was public health. These decisions are often supported by the adoption of specific forms of accounting. In this context, the term 'accounting', although it is traditionally related to financial and economic aspects, has to be more broadly understood to refer to the methodologies and tools designed for assessing the results connected to a particular phenomenon. In the literature on the government of extraordinary events, the term account is widely used to include different types of artefacts or tools to detect, record and report items and activities (Sargiacomo, 2015). According to Contrafatto et al. (2020), the information (in this case, the pandemic-related information), generated by specific accounts, calculative and accounting practices facilitates the acquisition and generation of knowledge about a problem, which will then become subject to governing decisions (Sargiacomo & Walker, 2022). The relevance of calculative practices and accounts relates to their roles in quantifying, measuring, making visible and controlling phenomena that influence social and/or organizational dynamics (Chiapello, 2017; Robson & Bottausci, 2018; Walker, 2016). These practices/tools, however, in making some aspects visible might obscure others (Rinaldi et al., 2020). The unpredictable and unpostponable nature of an extraordinary event, like a pandemic, renders its dynamics and their quantification notably complex by affecting the visibility or invisibility of some of its facets. Therefore, studying an extraordinary event provides an interesting locus of analysis for understanding the processes through which a specific problem emerges and how the actors in a decision-making arena take specific governing decisions. Furthermore, how specific calculative practices and accounts influence these processes is a topic that still needs to be adequately investigated.

Management and accounting scholars have investigated COV19 from different perspectives (Leoni et al., 2021), and by focusing on the role of specific accounts that were developed during the emergency (Ahmad et al., 2021; Antonelli et al., 2022). Nevertheless, what is missing is a vision that connects the role of the different actors involved in decision-making processes and the roles of accounts. While earlier works have investigated the processes and techniques for governing the pandemic (Grossi et al., 2020; Leoni et al., 2021), their focus has mostly been on the perspective of political decision-makers (Ahrens & Ferry, 2020; de Villiers et al., 2020). However, a holistic view, which could be able to connect the processes, techniques and motivations that led the various actors to the adoption of specific decisions, is lacking (Sargiacomo, 2015). The aim of this article is to explore how specific government decisions and related courses of action regarding the governing of the pandemic were adopted, by extending the analysis to the accounts mobilised by the various actors who, to different extents, took part in these decisions. Specifically, the paper focuses on the following research question: What role did the actors and accounts mobilised in the COV19 decision-making arena play in taking the lockdown decision for coping with the first phase of the pandemic?

In addressing this research question, we apply the theoretical perspective of translation (Callon, 1984; Latour, 1986) to the case study of Italy (Yin, 2017) in the first phase of the governing of the pandemic, from January 2020 until the lockdown decision at a national level, which occurred in March 2020.

This perspective is particularly useful because it allows us to analyze the different actors' roles in relation to specific government decisions. Furthermore, this approach implies that the actors involved in the process attempted to materialize their perspectives using specific artifacts and practices (Carter & Toms, 2010), which, in our study, are represented by the accounts. For our research, we adopted a qualitative methodology, drawing on documentary analysis and interviews. The analysis we undertook allowed us to: a) shed light on how the health-related accounts played a central role in the convergence towards decisions that were taken to *navigate* the uncertainty generated by COV19; b) understand the mechanisms that have brought the gradual acceptance of health-related accounts and to observe their evolution; c) investigate the role played by economic and social accounts in the decisions that were taken in the first phase of the pandemic.

The article contributes to the literature on the governing of extraordinary events (Sargiacomo & Walker, 2022), and in particular to COV19, by unveiling how the decisions of the actors, who are involved in a decision-making arena, can be directed by the interpretation of specific accounts and by the negotiation that takes place between these actors (Callon, 1984; Latour, 1986). The role of different accounts as translation devices becomes fundamental in regulating the negotiation, formulation, and revision of governing decisions. Through their ongoing adaptation and evolution, these accounts can play varying roles in different decision-making phases. Our analysis has shown that accounts made visible (Rinaldi et al., 2020; Robson & Bottausci, 2018) some aspects of a phenomenon and obscured others due to a process of negotiation that legitimizes only the interests of some actors. These results encourage deeper reflections about the role of accounts as *political* tools in the etymological meaning, i.e., connected to the *polis* and aimed at pursuing

¹ The non-linearity, unpredictability and ambiguity that are inherent in social and organizational phenomena and processes, particularly those related to extraordinary events, constitute a compelling subject for investigation within the field of economic and business studies (Quattrone, 2017).

² The concept of governing, in its dimensions of processes, decisions, and techniques, has been widely examined by accounting and management scholars, who have often adopted the perspective of governmentality (Dean, 2009) to examine economic-social-organizational phenomena and dynamics, including those relating to extraordinary events (Sargiacomo, 2015). In the present paper, we adopt the translation perspective (Callon, 1984) to investigate how certain government decisions have been adopted to deal with COV19. We use the term *governing* when we refer to decisions/choices that are taken regarding the management of an extraordinary event, including, in particular, those decisions taken by a government/political/administrative body and/or entity.

M. Contrafatto et al.

the common good (Morales & Sponem, 2017).

The paper is organized as follows. First, a review of the literature on extraordinary events and the role of accounts is introduced; whereupon the theoretical perspective of translation is illustrated. We proceed by presenting the adopted methodology and the empirical analysis that has been undertaken. Finally, in the discussion section, we highlight our main contributions and present the conclusions and implications that have been drawn from this study.

2. Accounting and the governing of a pandemic: A literature review

The management and accounting literature on extraordinary events originally focused on natural events with devastating consequences, such as earthquakes or hurricanes (Sargiacomo, 2015; Sargiacomo & Walker, 2022; Sargiacomo et al., 2014). These studies have highlighted how, in these situations, specific governing processes emerge, based on extraordinary and provisional measures to deal with the emergency. At the same time, it is possible to observe the development of calculative practices for providing an account of the peculiar problems posed by a specific disaster (Bracci et al., 2015; Lai et al., 2014; Sargiacomo, 2015). COV19 has significantly boosted the management and accounting literature on the governing of extraordinary events and the role of accounts in this context (Costa et al., 2024; Rinaldi, 2022).

This literature has offered several contributions, by addressing various interrelated issues (Leoni et al., 2021; 2022), such as, for example: the role of accounting, budgeting, and, more generally, of numbers in supporting decisions in response to the pandemic (Ahmad et al., 2021; Ahrens & Ferry, 2020; Ahrens & Ferry, 2021a; Ahrens & Ferry, 2021b; de Villiers et al., 2020; Ritonga & Buanaputra, 2023); the accounting practices adopted by private and public organizations during this crisis (Sargiacomo et al., 2021); the changes observed in the aforementioned practices (Carr & Jooss, 2023; Passetti et al., 2024), as well as in the reporting directed to stakeholders and the rhetorical use of communication tools (Leoni et al., 2022); the issues of inequalities and ethics that emerged as a result of the pandemic crisis (Andrew et al., 2022; Christ & Burritt, 2021; Rinaldi, 2022; Yu, 2021); and the role of accountability and governance (Andreaus et al., 2021; Graham et al., 2023; Hopper, 2020; Koutoupis et al., 2021).

Given the focus of our study, the scholarly works that examine the use of calculative practices in assessing pandemic-related risks are particularly relevant (Ahmad et al., 2021; Mitchell et al., 2021). Among these studies, the concepts of accounts and calculative practices which refer to numbers released during the pandemic and, in particular, to the number of swab tests conducted, were investigated by examining their relevance in the context of strategic decision-making (Ahmad et al., 2021). Similarly, with reference to the calculative practices, other articles have examined measures that were adopted by governments to manage the pandemic and the resulting effects on the economy (Ahrens & Ferry, 2021a; Ahrens & Ferry, 2021b). In addition, other studies have focused on the different accountability mechanisms implemented and the related calculative practices without neglecting their rhetorical element (Andreaus et al., 2021; Antonelli et al., 2022). These studies have illustrated how different styles of accountability (Andreaus et al., 2021) and accounting (Antonelli et al., 2022) have become powerful tools to legitimize the actions carried out by government bodies during the pandemic (Bigoni & Occhipinti, 2024; Mazzola et al., 2024). Attention was also given to the role of communication and dissemination tools which were used to provide news and numbers about the pandemic, such as social media and social movements (La Torre et al., 2022; Landi et al., 2022).

However, much of this existing literature has tended to adopt an implicit evolutionary viewpoint to examine extraordinary events. From this viewpoint, the governing of these events, which is based on the knowledge acquired with respect to phenomena that occurred in the past, is seen as an increasing improvement of existing processes and tools, such as, for instance, existing accounting methods. Furthermore, this view is focused more on the role of a single group of subjects (usually government representatives) and the accounts they mobilised (Ahmad et al., 2021; Andreaus et al., 2021; Antonelli et al., 2022; Mitchell et al., 2021), or different social groups (La Torre et al., 2022; Landi et al., 2022). Such focus tended to ignore relationships with other actors (e.g., representatives of the healthcare sector, economic operators, teachers/educators), who were present in the decision-making arena of the COV19. In addition, there is still a lack of studies that aim to investigate the relationships, negotiations, and confrontations that occurred between the different actors involved at various levels, in the context of the crisis caused by COV19 and the related decision-making processes, which were supported by the use of different accounts. Although the studies conducted so far have illuminated the processes and tools through which an extraordinary event is governed (Sargiacomo, 2015), a more integrated perspective has yet to be adopted. Such a perspective would allow connecting processes, tools, and motivations that orient the positions of the different actors and establish their roles (relevant or marginal) in decision-making. In particular, there is a lack of studies that investigate how tools, such as calculative practices and accounts developed by specific actors, can alternatively shed light or obscure (Rinaldi et al., 2020) and, in doing so, regulate (Chiapello, 2017; Morales & Sponem, 2017; Walker, 2016) various instances, by giving visibility through measuring artifacts to the ideas of the actors involved (Carter & Toms, 2010).

A more holistic analysis of the first phase of COV19, which would take into consideration different perspectives, allows us to better examine the complexity, non-linearity and ambiguity of decision-making processes (Contrafatto et al., 2020; Quattrone, 2017) and governing decisions. Although some studies have addressed the role that accounts played in supporting the governing of COV19 (Ahmad et al., 2021; Antonelli et al., 2022), a more comprehensive analysis which includes the multiple actors, and the accounts designed and used by them, is still largely lacking. Such analysis would be able to examine the complexity regarding the possible multiple functions that the various types of accounts have performed at different times. Calculative practices and accounts, indeed, by giving a measurable shape to social practices (Hopwood, 1974; Willmott, 1983), can perform multiple functions, such as to: distinguish/divide by establishing boundaries between different concepts (Russell & Thomson, 2009); mobilize people and social groups to take action (Skærbæk & Tryggestad, 2010); mediate between concepts and alternative choices (Christner & Strömsten, 2015; Miller & O'Leary, 2007); and legitimize decisions and social actors (Killian & O'Regan, 2016; Hopper, 2020).

As it emerges from our analysis, accounts utilized during the pandemic have fulfilled different functions and roles at different stages. The use of these accounts has accomplished a performative function, i.e., an *order* has been established, through the accounts, in the context of empirical phenomena (Ezzamel, 2012). This order is not immutable but can change depending on the context (Robson & Bottausci, 2018). The possibility that the pandemic accounts have played a changing performative role at different moments is coherent with the constructivist epistemological approach, according to which accounting not only represents but also contributes to the construction of reality (Nørreklit et al., 2010; Quattrone, 2000). This view emphasizes that accounts are able to respond to contingent needs, which change in relation to the time and circumstances (Carter & Toms, 2010).

In the present article, translation theory was adopted as a theoretical analytic perspective. This theory allows us to examine the inter-relationships between different categories of actors (Callon, 1984) and define their roles (Robson & Bottausci, 2018) to understand how a progressive convergence towards the government decisions for managing the first phase of COV19 in Italy occurred.

3. Translation theory

Translation theory (Callon, 1980, 1984; Latour, 1986) allows the analysis of the process through which government decisions and related courses of action for managing a phenomenon are adopted by different actors, who are often motivated by different and (sometimes) contrasting needs and interests (see Table 1). According to this perspective, actors form networks, that is, dynamic spaces within which evolving interrelationships are dynamically established (Wæraas & Nielsen, 2016). In each network, the translation process takes place. Callon (1980, p. 211) argues that "[...] [translation] involves creating convergences and homologies by relating

Table 1

Translation theory and COV19-related governing decisions.

Concept	Definition	Examples applied to the COV19 case
GOVERNING DECISION	The process through which a series of decisions and actions are determined to manage a specific event or phenomenon, particularly an extraordinary one. It is from this process that operational actions are taken.	The decision to implement lockdown to manage and address the initial phase of the pandemic in Italy.
COURSE OF ACTION	A more or less homogeneous set of operational actions implemented to address a particular phenomenon or event (Callon, 1984).	Examples of courses of action:Closure of commercial and social activities (e.g. stores, schools)Identification of procedures to limit mobility
DECISION-MAKING NETWORK AND ARENA	A dynamic space characterized by a set of relationships established (and subject to change) between different actors. These actors, by mobilising various resources, interact, negotiate, and impose alliance models in the decision-making processes related to managing a phenomenon.	The set of actors (healthcare, political, economic, and social) who interacted in the process of defining government decisions and courses of action related to the pandemic.
TRANSLATION	A complex process of negotiation regarding the definition of governing decisions and related courses of action within a decision-making arena. During the translation, meanings, claims, and interests change and, by gaining/losing relevance, redefine the network (arena) itself.	The dynamics of negotiation that took place among the various actors involved in the government decision of lockdown.
TRANSLATION DEVICES	Forms of inscription and/or representation.	Accounts and calculative practices related to the pandemic.
TRANSLATION PHASES	 A. PROBLEMATISATION: Definition of the problem and the course of action to be followed by different actors. B. INTERESSEMENT: An attempt by different actors to convince others of their problematisation and make them converge towards the proposed course of action. C. ENROLMENT: Negotiation and definition of the role of different actors in relation to the course of action to be undertaken. D. MOBILISATION: Negotiation and implementation of the courses of action. 	 A. PROBLEMATISATION: Each actor involved in managing the pandemic defines the issue differently (highlighting specific aspects: e.g., health, economy, etc.) and proposes a corresponding course of action. B. INTERESSEMENT: Various actors try to sufficiently engage others (by defining their role in managing the pandemic) to involve them and converge on their proposed course of action. C. ENROLMENT: Active participation of actors and acceptance of their role in governing COV19. D. MOBILISATION: Implementation of the lockdown. The proponent of this course of action, based on their problematisation, managed to sufficiently engage others to adopt this governing choice (though not always shared by all actors in the arena).

Source: Authors' elaboration.

things [e.g., problematic phenomena] that were previously different [and actors that support different instances]". Translation theory allows us to isolate the different voices that emerge in relation to decisions/choices and courses of action. This theory highlights how these voices change in importance during the process (Carter & Toms, 2010), and how the network itself is subject to continuous redefinitions (Callon, 1984). Carrabine (2000) emphasizes that this process presupposes mobilising relatively durable associations, which possess a dynamic nature. Likewise, the patterns of alliances, accommodations, and separations are constantly subject to change and disruption, as struggles for (and resistance to) power are permanent features of social life (Callon, 1980, 1984). From this view, therefore, these networks can be interpreted as decision-making arenas, i.e., inter-relational spaces (Contrafatto et al., 2020), where different actors continuously interact, compete, confront, and negotiate in asserting their interests concerning a phenomenon, an event and/or a problematic issue.

As underlined by Latour (1986), translation results from a complex process of continuous transformation that derives from a chain of individual translations, each determined by the specific characteristics of the context and of the actor involved. Therefore, each actor produces a specific vision and presents themselves within the decision-making arena based on their category of belonging. In this study, for example, the reference context is the one to which each different category of actors belongs: healthcare actor-healthcare context, economic actor-economic context, and political actor-political context. Different categories of actors mobilize their resources (such as legitimacy and authority) to influence (Latour, 1986) how convergence towards specific courses of action occurs (Callon, 1984). The analysis of how these resources are used, and how the resulting relational dynamics are maintained between the different actors (Carrabine, 2000), is relevant to understand *how* and *why* the translation of the pandemic, which is the case discussed, occurred in one way rather than another. Translation occurs through the mobilization of tools and artifacts, for example, accounts, which in the related literature are forms of inscription and/or representation (Latour, 1986), whose role may be subject to variations (Carter & Toms, 2010).

Translation involves four interconnected phases: i) problematisation, ii) interessement, iii) enrolment, and iv) mobilisation. By analyzing these four phases, in the present paper, we investigated how the pandemic was translated, i.e., how specific government decisions were adopted through specific accounts and calculative practices (Callon, 1984).

Problematisation represents the first phase where the different actors present the problem to be addressed. During this phase, each actor category builds a specific problematisation concerning a particular phenomenon (for example, COV19), underlining the relevant aspects to take into consideration according to their perspective. Each actor, based on their specific problematisation, presents their response and suggests undertaking a consequent course of action (Callon, 1980). This process shows characteristics of complexity and ambiguity. Problematisation possesses specific dynamic properties: it indicates the movements and deviations that have to be necessarily accepted by the different actors and, thus, the relationships that have to be established (Callon, 1984). The problematisations proposed by the various actors are multiple interpretations of the same phenomenon. However, only one interpretation will gain legitimacy through processes of encounter, negotiation, and conflict among these actors. The legitimized interpretation that emerges will be translated into government decisions and related courses of action, thereby shaping the framework for intervention and delineating the responsibilities of each category of actor.

During problematisation, some aspects of the phenomenon are highlighted while others are obscured (Callon, 1984). An order of priority is identified concerning the interests of the various actors and, consequently, their lesser/greater relevance within the decision-making arena. The outcome of this phase is the definition of a new problematisation. Based on this, specific government decisions are adopted to manage the problem. These decisions/choices are the result of a process of negotiation, which also presupposes mediations and power relations, compromises, and conflicts between subjects and groups, whose objectives and interests are often conflicting (Callon, 1980, 1984; Latour, 1986, 1994).

Interessement concerns the ability of an actor to sufficiently *interest* others by involving and making them converge toward their course of action (Callon, 1984). In this phase, there is a subsequent redefinition of the order of priority concerning the different interests and consequent problematisations. Despite the coexistence of multiple problematisations, an order of priority, regarding a specific definition of the phenomenon, is achieved. Based on this order of priority, the role of the different actors is systematically defined in adopting decisions and undertaking the related course of action. Based on the actors' relevance within the decision-making arena in promoting the adoption of a specific course of action, some of them play a more central role. By contrast, other actors remain marginal or are involved to a lesser extent. The definition of the roles of the various actors determines the solidity of the final problematisation. Each actor is able to demand to be integrated into the initial plan or, otherwise, reject the initial configuration by redefining "its identity, goals, projects, orientations, motivations or interests in another manner" (Callon, 1984, p. 207). It is, therefore, in this phase, that the relationships of responsibility, and the consequent accountability between the actors in the arena, are established based on the course of action to be taken. There is no lack of moments of confrontation as each actor continues to defend their own interests (deriving from their own problematisation) and tries to direct the others towards them, although the attempt is to seek convergence towards government decisions and shared courses of action.

The third phase of the translation concerns the *enrolment*; hence, the active participation of actors and the acceptance of their role within the arena. In this phase, the system of relationships between the different actors takes shape, and the accountability relationships are subjected to verification. In the view of Callon (1984, p. 211), "enrollment does not imply, nor does exclude, preestablished roles", meaning that the relationships between actors are subject to changes throughout the translation process. Further or new interests can emerge (Latour, 1994), the relational dynamics within the arena can change, new actors can enter, and others leave; thus, the outcome of this phase can also be a revision of the problematisation and the consequent courses of action.

The translation ends with the *mobilisation*. This phase involves the creation of homologies and convergences between the different actors, allowing the definition of a course of action to follow and, therefore, a method for managing the phenomenon. During the mobilisation, it is possible to observe the validation of the relationships and roles attributed to the different actors, which are to be

maintained based on the responsibility mechanisms established in the previous phases. Mobilisation has to do with the operationalization of decisions and courses of action. For the translation to be considered complete, a course of action has to be identified and undertaken (Callon, 1984). However, implementing a course of action does not imply stabilizing specific dynamics in the decisionmaking arena. As Carter and Toms (2010) argue, the translation process is never complete but always prone to reversals, renegotiations, or subversions. We are dealing with the coexistence of different problematisations and actors with different interests who seek, by mobilising their resources (e.g., authority, legitimacy), to persuade others to converge towards different courses of action throughout all the phases of the translation, including when the translation terminates.

4. Methodology

4.1. Context

The context of analysis of the present article is the case study of Italy (Yin, 2017), during the first phase of the COV19 pandemic. The focus was on the period between the beginning of January and the end of March 2020, i.e., from when the pandemic problem emerged until the implementation of the first government decision applied to the entire national territory: the lockdown. The choice to focus on the first phase of the pandemic was made because the first national lockdown represented the outcome of an initial translation process through which this extraordinary event was meant to be governed. The subsequent phases of the health-related emergency and the related decisions should be considered subsequent translations, representing specific moments in governing the pandemic. Pandemic represents a *sui generis* extraordinary event, which is characterized by a more mutable nature and longer duration than other types of events studied in the literature, such as earthquakes, hurricanes, etc. (Sargiacomo, 2015; Sargiacomo & Walker, 2022; Sargiacomo et al., 2014). While the latter manifest in a relatively shorter period and only their effects persist, the COV19 pandemic lasted longer and revealed different degrees of danger. For this reason, we decided to focus only on a specific phase of the pandemic, and in particular, the one that culminated with the decision to enforce the national lockdown.

The following sections illustrate the sources of information based on which the actors in the COV19 decision-making arena were identified, the translation phases, and the ways in which the data were analyzed.

4.2. Analysis

The empirical analysis has been conducted by using multiple documentary data (see Tables B and C in Appendix B) and interviews (Table A in Appendix B).

The primary database includes the official documents produced and released by each individual category of actors (Government, Task Force, Civil Protection, Technical Scientific Committee-CTS³) and pandemic-related news. In particular, our dataset includes: articles from two national newspapers (Corriere della Sera – hereafter Corriere and IlSole24Ore⁴); official legislative documents (e.g., Decrees of the Prime Minister – DPCM); regulatory sources; declarations of the Prime Minister; minutes of the CTS and conferences of the Civil Protection.

The documentary analysis (Krippendorff, 2004) initially served to identify/define the categories of actors involved in the process of "encountering/debating/confronting" (Contrafatto et al., 2020) within the decision-making arena (healthcare, political, economic, social actors, and media). Subsequently, these data have also been used to identify the different roles of these actors, the accounts of the pandemic, and the translation phases. Secondary data were obtained from 22 interviews and a focus group with several actors (political, healthcare, economic, and social representatives), which were carried out in the period between March and June 2021.

The data collected through this multi-method approach enables a rich and detailed understanding of the object of investigation. The documents, interviews, and focus groups were analyzed following a coding procedure. As argued by Strauss and Corbin (1998), this procedure allows examining the specificities of data, both in a descriptive and analytical sense; that is, it allows comparisons to be made regarding the level of properties of the different conceptual categories and meanings identified. This procedure, which involved the use of a protocol shared between researchers, made it possible to isolate different macro-codes depending on the type of source used. First, the coding process of the primary sources (i.e., the documents), is illustrated, followed by that of the secondary sources (i.e., the interviews and focus group).

Documents have been coded based on the following elements:

- 1. Date of the document/declaration.
- 2. Source of data.
- 3. Category of actor.
- 4. Topic covered (see the codes used for the interviews specified below).
- 5. A specific code, named "information/communication", grouped data regarding the type of accounts defined/identified by each actor in the arena.

 $^{^3}$ The CTS was established on the 05/02/2020, with the Decree of the Head of Civil Protection Department no. 371).

⁴ These two newspapers have been selected because they are representative and widely diffused in their specific segments, respectively the Corriere della Sera for general information and the llSole240re for economic considerations.

The interviews were recorded and subsequently transcribed. The analysis entailed the use of the following macro-codes:

- Context: the elements relating to the social, economic, healthcare, political, and regulatory context have been identified.
- Problematisation: actors, processes, aspects, and critical issues linked to the conceptualization of the pandemic as a problem were identified. The point of view of the subjects interviewed made it possible to isolate the different pandemic aspects that emerged as relevant (healthcare, economic, and social) and the related characteristics and critical issues linked to the emergency. Furthermore, the main processes (e.g., the definition of the pandemic, emerging proposals, etc.), through which the problematisation of the pandemic occurred and the different actors who played a role in these processes, were categorized.
- Negotiation for government decisions: the proposals of the various actors regarding how to manage the pandemic, the operational
 decisions subsequently undertaken, and the perceptions regarding the effects generated by these decisions were isolated (specific
 elements of the translation phases were isolated, such as interessement, enrolment, mobilisation).
- Information/communication: the different types of accounts and calculative practices that, from the perspective of the interviewed subjects, played a pivotal role in the different phases were isolated. The critical issues related to their use were also included.

The analysis protocol was divided into the following sub-processes: reduction, visualization, and data interpretation (O'Dwyer, 2004). The coding process involved constant interaction between researchers. In the first phase, each co-author coded the data individually or with another co-author. Subsequently, the results were compared and aligned. Informed by the translation theory outlined above, the empirical analysis was divided into two phases. In the first phase, we identified the different categories of actors. In the second, the empirical material was used to interpret the phases of translating the pandemic problem into government decisions, courses of action, and the role of the different actors. In each phase, particular attention was given to the role of accounts and related calculative practices. This category, to which the code "information/communication" was attributed, included various indicators, such as the R indicator (which measures the infectious capacity of a pathogen), the rate of infections, etc., which played a fundamental role in the translation process.

5. Empirical analysis: The actors, the decision-making arena, and the COV19 translation

5.1. The actors and the decision-making arena for the translation of COV19 in Italy

As a result of the outbreak of a new infectious disease in the Chinese city of Wuhan in December 2019, an unpredictable, complex, and unprecedented global scenario emerged in a few weeks as COV19 rapidly spread worldwide. The present study refers only to the Italian context, and it examines a specific network of actors and their role in governing the pandemic (Callon, 1980, 1984). These actors were identified inductively, considering only those who had been explicitly mentioned in the examined documents. Each group of actors conceptualized the pandemic from a specific perspective, which was strongly affected by their own interests. For example, the category of health-related actors, including physicians, virologists, psychologists, epidemiologists, etc., gave relevance almost exclusively to health-related issues/problems. On the other hand, the economic category, comprising actors such as the Ministry of Economy and Finance and representatives of business and professions, mainly focused on the possible economic impacts of the pandemic. With regard to the social actors, our findings revealed that for this category, which generally includes those who work in the sectors of education/teaching and volunteering, COV19 has been connoted in terms of its impacts on the social life of individuals and communities. The political actor, i.e., the group of subjects which deals with the overall formulation and implementation of policies and socio-economic planning (European Union, National Government, Presidents of Regions, Mayors, etc.), played an active role in all phases related to the governing of the pandemic, by establishing, among others, specific bodies of experts, such as the aforementioned CTS. The political actor sought to reconcile the requests coming from the different actors in the pandemic arena. Finally, it seemed worthwhile to consider the media as a distinct actor, which acted as a "sounding board" for the different perspectives.

In the process of *navigating* through the complexities connected to COV19 (Rinaldi et al., 2020), these different actors debated and confronted within the decision-making arena, which emerged out of the pandemic emergency. The pandemic, subsequently defined as "a health-related emergency with unpredictable effects" (Chamber of Deputies, 2021), required government to undertake decisions that, from the theoretical perspective adopted in this article, were the result of a process of translation. The phases through which this process occurred are examined in the following sub-paragraphs (Callon, 1980, 1984; Wæraas & Nielsen, 2016).

5.2. The translation of the pandemic: From problematisation to mobilisation

The empirical analysis focused, as already mentioned, on the period between the beginning of January and the end of March 2020, i.e., from the time when COV19 was identified as a problem until the nationwide lockdown decision. Our documentary analysis, particularly of the Decrees of the Prime Minister, has aided in identifying the salient intermediate phases, and through these, to isolate the single phases of the translation process, even if these sometimes overlapped temporally.

From the institution of a task force, i.e., a group of experts appointed by the Ministry of Health to deal with the healthcare emergency (which occurred on the 22nd of January 2020), to the declaration of the state of emergency (Official Gazette n.26, 01/02/2020), until the enforcement of the first red zones (Official Gazette n.45, 23/02/2020), each actor encountered, debated and confronted about the pandemic problem and the possible decisions and courses of action to undertake. Our empirical analysis has unveiled the complexity connected to different conceptualizations, not only between the different categories of actors, but also within each category, which have mobilised multiple visions, meanings, perspectives and resources (Waldorff, 2013).

5.2.1. Data analysis of phase 1: Emergence of COV19

This phase began with the establishment of a task force, which occurred on the 22nd of January 2020 (Communication No. 16, Ministry of Health, 22/01/2020). In the initial phase, "little was known about COV19, and it was poorly understood" (Interview No. 9, Social Actor). Our findings show conflicting views even among the healthcare category. For example, some epidemiologists believed that COV19 would have been a short-lived phenomenon. Some of these experts claimed that "the best scenario is that the crisis lasts until the spring or summer of this year" and that "the worst epidemic [is] fear" (Corriere, 29/01/2020, p. 2). However, on the same day, the same newspaper, a few pages later, reported the opinion of the director of one of the most prestigious Health Institutes (Humanitas) regarding the need to adopt urgent measures to contain the spread of the virus and to invest in the research for a vaccine. Furthermore, the Corriere of the 29/01/2020 (p. 2) reported two interviews with renowned epidemiologists who provided different views of COV19 and its related risks: "Before the epidemic can be eradicated, we will have a total of no more than 1500 dead [...]. Twice as many as the SARS epidemic that hit China in 2002-2003" (Epidemiologist 1, Corriere of 29/01/2020). Another epidemiologist, on the other hand, expressed a more alarming view of the phenomenon, underlining the need to "urgently develop a vaccine and to adopt urgent measures to tackle the infection" (Epidemiologist 2; Corriere, 29/01/2020).

Therefore, especially in this phase, the different conceptualizations among the healthcare actor category were conflicting and, understandably, did not help to clarify the real extent of the emergency. Similarly, our empirical findings, at this stage, show inconsistencies and sometimes conflicting opinions about information provided to the public by the political actor. On the one hand, alarming information was provided, such as: "The new virus, although for the moment classified as type B in terms of danger, like those of SARS, AIDS or polio, is managed as belonging to class A, the same as cholera or plague" (Minister of Health Hearing, 27/01/2020). On the other hand, within the same hearing, an attempt was also made to reassure the population by claiming that "adherence to adequate infection prevention and control practices [...] ensures that the probability of the onset of secondary cases in the EU, starting from one case identified within the boundaries of the EU itself, is low" (Minister of Health Hearing, 27/01/2020).

Also with regard to the decisions and actions to be undertaken, the analyzed data show an initial lack of convergence of views even within the category of the political actor who, on the one hand, proposed radical interventions that would have changed social behavior: "this is not the time for half measures: radical measures are needed [...]" (Statement by a political representative reported by the Corriere, 22/02/2020). On the other hand, another representative sought to instill calm: "the watchword is normality: [...] let us not lose our habits, we cannot stop Milan and Italy. Our economy is stronger than fear: let us go out to drink an aperitif, a coffee or eat a pizza" (Statement by a political representative reported by the Corriere, 27/02/2020). These considerations show that fears linked to the economic effects of the pandemic were the reasons for alternative positions, which conflicted with the views that privileged health-related aspects.

In sum, our data shows that, among the individual categories of actors (healthcare and political), different perspectives emerged with regard to the degree of the possible effects of COV19. These different and somewhat contrasting perspectives, consequently, affected the views about the courses of action to adopt, ranging from "we cannot stop Italy" to/versus "radical measures are needed". This diversity of views has led to a real contrast between the categories of actors and within each of them. The opinions expressed by some of our interviewees and focus group participants are helpful for understanding the effects generated by these contrasting views and perspectives:

"We suffered from psychological terrorism [...] because much fear was transmitted. Furthermore, at the beginning [voice was given to] too many people who perhaps did not have the expertise to do so; so everyone went on TV to express their opinions, even [without having] the necessary knowledge to understand the problem. Therefore, the commentators spoke like they were virologists" (Focus group, Social actor).

"[...] Different points of view have emerged [which] have [generated] discontent, mechanisms of fear and uncertainty" (Interview no. 7, Political actor). [...]. "There was a lot of fear and confusion: if the contagion arrives, we are dead" (Interview no. 9, Social actor).

In other words, our analysis unveils that this first phase was characterized by a divergence of views, conflicts, uncertainty, and fear. Nevertheless, some critical decisions were taken. For example, as reported by the Corriere on the 31st of January 2020, the task force introduced a protocol to manage the repatriation of Italian residents in Wuhan (China), due to the decision taken by airlines to suspend all flights to and from China⁵(CTS Minutes, 14/02/2020). According to some of our interviewees, these decisions were characterized not only by uncertainty but also by unpreparedness of all the actors in the arena: "We were unprepared [...]. Imagine that we did not even have the basic personal protection equipment" (Interview No. 20, Healthcare actor). Furthermore, our empirical analysis shows that national media (e.g., Corriere) mainly reported health-related news and accounts. Only the media dedicated to the economic-financial sector started to shed light on the impact on the economy, particularly on businesses and employment, and the related accounts (IlSole24Ore). At this stage, the voice of the social actor is absent from media attention.

The analysis illustrates, thus, that during the first phase of the COV19 manifestation, an important role was played by the healthrelated accounts, which had been proposed in the first instance by health-related actors and then disseminated by the media. These accounts included the number of infections, deaths and recoveries (source: documents from the Taskforce, CTS and Civil Protection; Corriere, 04/02/2020). From the end of January 2020, health-related accounts, which compared China with the rest of the world, were for the first time published (Corriere, 30/01/2020), along with indicators that highlighted how the pandemic was evolving, for

⁵ The protocol required a 14-day quarantine, corresponding to what was considered 'the maximum incubation period of the virus'; furthermore, the repatriation applied only to those who had not already contracted the virus.

example, by highlighting the increasing rate of infections. Furthermore, our empirical analysis reveals that the infection-related data started to be geographically disaggregated in relation to the different European nations and the world, although China was still the primary reference (Corriere, 02/02/2020). Also, the analysis highlights that some economic accounts (macro and micro) were gradually added to the health-related accounts, such as stock market indices and the oil price (Corriere, January-February 2020). Other economic data (e.g., price of healthcare and medical devices) and macroeconomic data (e.g., GDP decrease; stock market crashes; deficit/GDP ratio), which were progressively introduced, began to make damage to the economy visible.⁶ The economic accounts, which were initially referred only to China and subsequently also to Italy, were gradually extended to other European countries (IlSole24Ore, 08/02/2020). Data on the aid requested from the EU to deal with the health and economic effects of the pandemic also began to be published (source: Declaration to the EU by Commissioner Gentiloni, February 2020).

In conclusion, the empirical findings show how the accounts were multiple since the beginning of the pandemic. Regarding the typology of these accounts, our analysis indicates that several health-related accounts began to emerge, as well as, though to a lesser extent, those related to the economy. This propensity towards the mobilization of predominantly health-related accounts meant that COV19, although it was still not well-known, was portrayed, within the pandemic arena, as a purely health-related problem. In the subsequent phases, we observe an evolution of the accounts, which, over time, have become more refined and diversified; these accounts were also able to grasp more detailed aspects of the pandemic which, to different extents, affect the problematisation initially formulated.

5.2.2. Phase 1 discussion from the translation theory: The problematisation

The initial moment of translation is the problematisation phase, whereby COV19 comes to be conceptualized as a problem. However, the conceptualization does not conclude with this phase; rather it extends to the entire translation process through the interaction of the multiple actors involved in the decision-making arena and by virtue of using certain accounts (Wæraas & Nielsen, 2016) (see Table 2). Consistent with Callon's (1980) arguments, during this phase, the different actors articulate the pandemic problem in a non-linear manner. This first phase is predominantly characterized by confusion, debate, and divergence of conceptualizations, opinions, and views about the problem both between actors belonging to the same category as well as among those of different categories. The accounts disseminated through the media highlighted a tension between the proposed problematisations, particularly between the health-related and the economic perspectives. In this initial confusing phase, health-related accounts and their representation, through artifacts such as visual techniques (Carter & Toms, 2010), favored the process of constructing the problem, by making this more comprehensible and understandable with regards to its potential effects (Antonelli et al., 2022; Robson & Bottausci, 2018; Sargiacomo, 2015). Although different conceptualizations initially coexisted in the public debate among the actors, the use and diffusion of health-related accounts prevailed. In particular, these accounts, which reported on the number/rate of infections, deaths, and recoveries, immediately infused the idea of danger to human life, by profoundly influencing the decision-making mechanisms of the actors in the arena (Morales & Sponem, 2017). On the other hand, other forms of non-healthcare accounts, such as the economic ones, started to develop at this stage, although these were mainly reported by media which focused on economic matters. At this stage, the economic accounts that were not immediately significant for people's standard of living, could be understood and interpreted only by a small number of actors in the arena because of their predominantly technical nature (see, for example, the impact of COV19 on the deficit/GDP ratio).

In this process, the media played essentially a hybrid role as, from time to time, they gave a voice to the various perspectives; in doing so, media tended to act as a sounding board for some problematisations. Through this process, the healthcare-related perspective began to acquire greater relevance. As our empirical analysis reveals, the accounts, which were disseminated with varying emphasis by the media, influenced the existing equilibrium in the decision-making arena. As a result of a prevailing media representation, a greater prominence was given to a specific problematisation (Callon, 1980) of COV19, i.e., the healthcare-related one. The accounts, particularly the health-related ones, played a primary role in *regulating* the process of problematisation, i.e., in constructing and defining the nature of the pandemic problem (Callon, 1980). In addition, management and accounting theories help us to understand that this regulation is connected to the *dividing* role (Russell & Thomson, 2009), which accounts can play in different contexts since they have given, in our case study, visibility to a specific problematisation on which to build convergences among the possible existing alternatives.

In summary, the health-related accounts have made it possible to isolate specific aspects of the pandemic problem, giving them more relevance compared to others, which, in this phase, have remained substantially obscured (Rinaldi et al., 2020; Robson & Bottausci, 2018). In this first phase, the political actor exacerbated the tension between health-related and economic problematisation. This actor was called to undertake decisions supported by data (expressed mainly by health-related accounts), which privileged health-related aspects and concerns. In this context, the social aspect/dimension of the problematisation, did not emerge within the public debate, because this was not represented and, therefore, made visible by data and related accounts.

5.2.3. Data analysis of phase 2: Establishment of the first "red zones"

The second phase of our analysis, which considers the period starting from February 2020, concerns the definition of the first courses of action to respond to the pandemic emergency. The empirical analysis has highlighted how the health-related perspective

⁶ Initially, these calculations and accounts regarded China, since that the pandemic had manifested only in this country, and measured the impact of COV19 on: the Chinese GDP (IlSole24Ore, 29/01/2020); economic growth; stock market indices; and demand for crude oil (IlSole24Ore, 04/02/2020).

Accounts mobilised by the different actors in the translation process.

		Actors					
		Healthcare	Economic	Social	Political	Media	
hase	Problematisation	 Number of infections Number of deaths Number of recoveries 	 Stock market indices Oil prices Prices of medical supplies and devices Breach of deficit/GDP ratio 		 Number of infections Number of deaths Number of recoveries 	 Number of infections Number of deaths Number of recoverie Contagion rate increase 	
	Interessement	 Contagion indicator R0 and RT Spatial comparisons of virus evolution Number of infections Number of deaths Number of recoveries 	 Extraordinary wage supplementation hours absolute value Unemployment hours Quantification of economic support for red zones (have these been defined?) Calculation of the impact of tax payment suspension 		 Contagion indicator R0 and RT Number of infections Number of deaths Number of recoveries Quantification of economic support for red zones Calculation of the impact of tax payment suspension 	 Contagion indicator R0 and RT Spatial comparisons of virus evolution Number of infections Number of deaths Number of recoverie Predominantly mobilised by economic media: Extraordinary wage supplementation hours – absolute value Unemployment hour Quantification of economic support for red zones Calculation of the 	
	Enrolment	 Contagion indicator R0 and RT Spatial comparisons of virus evolution Number of infections Number of deaths 	 Number of jobs lost Deficit/GDP ratio Quantification of economic support 	 Number of students in remote learning Medical staff hires 	 Number of jobs lost Deficit/GDP ratio Quantification of economic support 	 impact of tax payment suspension Contagion indicator R0 and RT Spatial comparisons of virus evolution Number of infections Number of deaths Number of recoverie 	
		 Number of deaths Number of recoveries 				Predominantly	

mobilised by economic

- media: Extraordinary wage supplementation hours - absolute value
- Unemployment hoursQuantification of
- economic support for red zones
- Calculation of the impact of tax payment suspension

(continued on next page)

Table 2 (continued)

	Actors					
	Healthcare	Economic	Social	Political	Media	
Mobilisation	 Contagion indicator R0 and RT Spatial comparisons of virus evolution Number of infections Number of deaths Number of deaths Number of recoveries Hospital saturation level Economic interventions for new healthcare structures 	 Quantification of economic support Economic interventions for new healthcare structures 	 Number of students in distance learning Hospital saturation level Economic interventions for new healthcare structures 		 Contagion indicator R0 and RT Spatial comparisons of virus evolution Number of infections Number of deaths Number of recoveries Hospital saturation level 	

Source: Authors' elaboration.

was supported and carried forward because it was the prevailing key for understanding the pandemic problem. The health-related perspective drove main decisions and courses of action, such as the establishment of the first "red zones" (Official Gazette No. 45, 23/02/2020). Some interviewees saw this decision as necessary: "With regard to the closure, we must go back to what everyone says; that is, the virus clearly does not have legs and moves through contacts. It was necessary to close and therefore create red zones" (Interviewee No. 20, Healthcare actor). This need was justified by the seriousness of the epidemiological situation, which highlighted, as reported by the CTS minutes, "the persistence of a [health] alarm, reported by the World Health Organization [and] supported by the analysis of the epidemiological data available to the scientific community" (CTS Minutes, 07/02/2020). These epidemiological data, which epitomized forms of health-related accounts, have played a crucial role in highlighting health as a central element for conceptualizing COV19.

This perspective, sustained ever more clearly by the health-related actor, was supported by the political actor, which gradually tended to attribute more importance to healthcare experts than to those of other categories; this was because, as emphasized by the Prime Minister in an interview: "I do not have this type of technical expertise, which only healthcare experts have" (Prime Minister press conference, 25/02/2020). In this context, the CTS played a crucial role which, by representing the different voices of scientists and technicians, directly guided subsequent decisions about the limitation of people's mobility and the closure of activities. In this phase, the political actor substantially delegated these decisions to the experts who had competencies in health-related matters.

The COV19 task force of the Infectious Diseases Department and the IT Department of the Italian NHS daily published healthrelated data; these data were given great emphasis via national television and newspapers. Furthermore, as it emerges from the meetings of the CTS's, the task force, and the press conferences, the R index, which calculated the rate of contagion, in this phase became an important point of reference as it was considered more reliable than other forms of calculation/measurement (Task Force Minutes, 20/02/2020). This meant that the R index started to prevail over other forms of measurement/calculation. The health-related numbers, increasingly disseminated by media, showed concerning data in this period (see Appendix B Table C).

Although the health-related perspective was the basis on which governing decisions were taken at this stage, the economic implications of the pandemic gradually became the object of greater attention. Under the pressure of the economic actors, the Italian government issued on the 24th of February 2020 a Decree which allowed companies that were particularly affected by the pandemic emergency to suspend their tax-related obligations (MEF; Decree 24/02/2020). In this phase, therefore, a more widespread awareness of the economic impact of the pandemic began to emerge; this was also epitomized by the words expressed by some interviewees: "Only afterward this [health-related concerns] [...] economic concerns arose, that is, how to support [entrepreneurial] activities" (Interviewee No. 12; Political actor).

Although the attention of the generalist media remained strongly focused on the health-related problem, there was increasing attention given to data and information regarding the economic impacts of the pandemic by the media specializing in business and economic affairs (see IISole24Ore, February 2020). IISole24Ore, for instance, emphasized the Italian government's intentions to support the economy by reporting the words of the Prime Minister: "Support measures for the most affected Italian businesses are under study. The extraordinary wage guarantee fund for corporate crises has been extended" (IISole24Ore, 05/02/2020). Moreover, data regarding the economic forecasts were no longer limited to geographical disaggregation. Also, comparative information over time was provided, such as, for example, the hours of extraordinary layoffs in absolute terms (11.9 million hours in January 2020) or in relative terms by comparing the numbers of layoffs in January 2020 with those of the previous month (December 2019) (+57.6 %) and/or the same month of the previous year (January 2019) (+52.6 %); also the hours of unemployment were reported (IISole24Ore, 21/02/2020). In this phase, an increasing number of economic-related accounts emerged, which were advocated by economic actors and, to a large extent, supported by political actors, such as, for example, i) the quantification of economic aid for the red zones, and ii)

the calculation of the impact of suspension of tax payments in the areas hitherto affected by the pandemic crisis (Prime Minister press conference, 25/02/2020).

In summary, our empirical data show that, in this phase, more structured discussions about the support measures to be adopted to tackle the health-related problem started; these discussions, however, began to also take on an economic relevance. In contrast, the social-related aspects were not fully recognized yet.

5.2.4. Discussion phase 2: The interessement

During the interessement phase there is a redefinition of the problem, which is the object of translation (Wæraas & Nielsen, 2016). Although the perspective of the healthcare actor becomes ever more dominant, economic interests, and the connected actor(s), gradually take a less marginal position. In this phase, the perspective of the healthcare actors is dominant, also as result of the everincreasing diffusion of more advanced health-related accounts. Over time, health-related accounts became more complex to capture the various aspects of the pandemic through comparisons over time and space (between geographical areas), thereby providing more information to monitor its evolution. For example, the R index (in the R0 and RT formulations⁷) was claimed to be able to calculate and measure the level of virus transmission (Ahmad et al., 2021). This index, substantially, was the basis upon which most of the decisions adopted by the Italian government and regional authorities were taken. The informative value of this indicator was internationally recognized as being a healthcare account of high importance (Ahmad et al., 2021; Mitchell et al., 2021). Health-related accounts had the most remarkable persuasive capacity (Callon, 1984); we argue that their construction and diffusion led in this phase to obscuring alternative possible problematisations.

The economic conceptualization, though it was not still central, increasingly developed and became more widely diffused, whereas the social-related concerns remained still substantially obscure. The more significant resources (Contrafatto et al., 2020), which were available to the healthcare actor (for example, greater media presence and technical knowledge), revealed an asymmetry of power (Latour, 1986) within the decision-making arena. On the other hand, these resources drove convergence towards a health-related problematisation of the pandemic. This asymmetry reflects what has already been found in the literature, that is, within a decision-making arena there are some more active actors whose translation takes on greater strength than others (Carter & Toms, 2010).

The health-related accounts, increasingly structured, therefore performed a *mobilising role* (Skærbæk & Tryggestad, 2010) as they became key in mobilising different positions to encourage the convergence of other actors around the health-related problematisation. By playing a mobilising role, these accounts persuaded actors that the health-centered problematisation was, at that moment, the most important and, thus, the one to converge on. In this phase, we observe a progressive legitimization of the healthcare actor, and related problematisation, given that this actor is widely recognized as being more competent regarding the technical/scientific aspects of the pandemic. This legitimization was achieved and favored by the accounts that the healthcare actor had proposed and mobilised (Latour, 1986). The more significant mobilising role (Skærbæk & Tryggestad, 2010) of these health-related accounts is related to the fact that these accounts were more diffused and also able to promptly highlight alarming numbers/data. On the other hand, the economic accounts, in addition to being less widespread, did not highlight data that the general population could perceive as being alarming yet. Instead, many economic accounts, which were released in this period, aimed at reassuring the population by showing data about the support initiatives (e.g., quantification of financial/economic support, suspension of taxes, hours of extraordinary layoffs). Other accounts (for example, the unemployment rate or the GDP decrease) had not yet caused major concerns, given that the real economic effects of the pandemic had not fully manifested.

The prevalent diffusion and acceptance of health-related accounts, however, obscured the fact that other types of accounts had also been made available and had gradually developed to provide more accurate information. The smaller space given to some accounts (e. g., the social-related) had an impact on the process of interessement and, in particular, on the emergence of alternative problematisations, which were different from the prevailing medical/healthcare-centered one. Although the economic accounts, for example concerning layoffs and/or unemployment, emphasized the multidimensionality of the pandemic, they primarily served as a counterbalance to the concerns generated by the health-related accounts. In this phase, the economic accounts' function was limited to making measurable actions to contain the economic damages rather than highlighting the actual effects of the decisions taken to govern COV19.

5.2.5. Data analysis of phase 3: Further restrictive measures (local lockdown) and economic measures

The empirical analysis highlighted some changes in the governing decisions regarding the course of action to be undertaken. An escalation was observed, from measures such as stopping tourist mobility and closing schools (Ministry of Health Ordinance of the 23/02/2020) to the decision to enforce the lockdown aimed at containing the spread of pandemic and its effects. In the third phase of our analysis, local lockdowns were also implemented. As observed by one of the interviewees directly involved in these decisions, this more stringent course of action, in this specific phase (from February to March 2020), seemed to be necessary: "at a certain point, we had no choice but to drastically intervene with regard to the closures" (Interviewee no. 18; Political actor).

With regard to the role of the different actors, our analysis shows that the political and economic related actors gradually started to play a more relevant role. In contrast, the social actors continued to have a more subordinate function.

In this phase, economic-related accounts also began to evolve for responding to the needs of capturing increasingly more detailed aspects and complexities of the pandemic' effects (see Appendix B, Table C, IlSole24Ore, February-March 2020). In particular, more

⁷ Generally speaking, R0 and RT were used to rate COV19' s ability to spread. R0 calculates the number of people that one infected person will pass on a virus to, whereas RT estimates the number of infections over time.

relevance started to be given to some macroeconomic accounts, in consideration of the first effects observed in the local and global macroeconomic context. For example, on the 4th of March 2020, IlSole24Ore highlighted the number of lost jobs. Furthermore, other accounts emphasized the effects of COV19 on GDP in terms of the deficit/GDP ratio (IlSole24Ore, 03/03/2020). These alarming economic effects pushed the political actor to further emphasize the measures adopted to cope with the economic consequences. Our documentary analysis shows that the press releases of the Prime Minister, which in this phase were held regularly and frequently, often placed significant emphasis on the economic measures adopted through the various Decrees of the Prime Minister himself. For example: "We have allocated 7.5 billion to support families and businesses who are facing this emergency, which [...] is not just health related. It is also an economic emergency" (Prime Minister press conference, 05/03/2020).

In this phase, social-related accounts began to be used, albeit still to a limited extent. IlSole24Ore began to publish, for instance, data relating to the impact of the pandemic on education, by reporting data on the number of students engaging in distance learning (IlSole24Ore, 05/03/2020). Furthermore, the socio-healthcare accounts, which regarded the medical-health personnel who had been hired to cope with the pandemic emergency, were also published. On March 4th, 2020, the Corriere headlined "Seven thousand doctors are missing in wards. Yes to hiring", and then presented a ranking of the five specialties where there was major shortages of doctors. In this phase, social problems, however, remained on the margins of the debate in the pandemic arena; there was little evidence that these, if not directly linked to healthcare issues, were supported by adequate accounts that could give instructions regarding possible courses of action to undertake.

5.2.6. Discussion of phase 3: The enrolment

The empirical analysis reveals how the health-related accounts, increasingly more structured and diffused, as well as the economic accounts, which complemented and supported the former, contributed to consolidating the relationships between the actors in the arena. This consolidation process can be interpreted as a form of *enrolment* (Callon, 1984), through which the prevalent role of the healthcare actor was confirmed. Furthermore, the central role of the political actor, as a 'spokesperson' for the final problematisation, was consolidated (Callon, 1984; Carter & Toms, 2010). However, problematisation, continued to be centered on the health-related perspective. In this phase, the political actor confirmed its decisive role by adopting a specific course of action: the lockdown, although in this phase it was still limited to some geographical areas.

Similarly to observations in the previous phases, a fundamental role in this process was played by the health-related accounts, which tended to be even more widely disseminated by the media, thereby giving visibility to the healthcare problem and simplifying the related data interpretation (Robson & Bottausci, 2018). Health-related accounts, in this phase, consolidated the (health-centered) problematisation and legitimized the acceptance of the most stringent course of action: the partial and/or total closure of all activities. The economic accounts began to take on a more central role, when some of them, namely those relating to the economic support, allowed the adopted governing decisions to be acceptable. These economic accounts helped in counteracting and mitigating the alarming economic data, (such as, for example, the increase in the unemployment rate and the deterioration of the deficit/GDP ratio), which could have raised concern among the public. The analysis shows that in this phase, economic accounts performed an important role not only in giving voice to the economic actor but also in favoring acceptance of the healthcare-centered problematisation, which from the perspective of Callon (1984), represents the *enrolment* of the pandemic problem. The alarming economic effects highlighted by some accounts were made acceptable by the emphasis placed on other accounts, still economic-related (e.g., economic support measures), which sent reassuring messages. Even the few social-related accounts that emerged in this phase seem to have contributed to the acceptance of the healthcare problematisation as they highlighted the efforts made in education (for example, the number of students engaged in distance learning) and the workforce needs in the healthcare field.

From the analysis, it emerges that in this phase, the accounts played a *mediating role* (Christner & Strömsten, 2015; Miller & O'Leary, 2007). The use of multiple forms of accounts, which supported each other, mediated between the different perspectives and, in doing so, favoured the acceptance of the prevailing one. Thanks to these multidimensional accounts (mainly health- and economic-related, but also social-, though to a much lesser extent), the role of the political actor became increasingly central (Carter & Toms, 2010). The accounts, indeed, became an essential device that the political actors could use to support a specific course of action, unravel the initial confusion, and reassure the public. At this stage, the government decision was to implement the lockdown, which was still partial, given that it only affected some geographical areas. The choice of the partial lockdown was supported by the health-related accounts and was made acceptable, to the other actors of the arena, because it was mediated (Christner & Strömsten, 2015; Miller & O'Leary, 2007) by the economic accounts and, to a much lesser extent, by the social-related ones; these economic- (and social-) related accounts revealed and emphasized support measures taken for mitigating the adverse effects of lockdowns on communities.

5.2.7. Data analysis of phase 4: The national lockdown decision

The final phase of our period of analysis regards the adoption of the Legislative Decree of 03/08/2020 (Official Gazette – General Series. No. 59 of 08/03/2020; Official Gazette – General Series no. 62 of 09/03/2020), which introduced the total national lockdown in Italy. From the viewpoint of the theory adopted in this paper, the decision to take this course of action represented the final moment of the translation of the pandemic.

In this phase, the economic relevance of the pandemic problem began to be acknowledged, as shown by resources allocated to support the economy (Prime Minister's Conferences of 11/03/2020 and 16/03/2020). As headlined by the IISole24Ore on the 11th of March 2020: "The EU has allocated a 25 billion fund for companies in difficulty". The following day, the same newspaper reported the news of the subsequent adoption of a fiscal aid decree, which was focused on three lines of interventions: "economic support for the most affected business supply chains; a threshold of 400 thousand euros for the services sector; and 700 thousand euros for artisan and retail sectors".

However, the COV19-related social relevance still remained in the background. As observed by one of our interviewees:

"At that moment, the lockdown was necessary [...], when there is a risk for the health [and/or] a risk for life [...]; we should tell this to the people who were in the military trucks in Bergamo who died without their family; but it was even more traumatic for those who [were] kept at home because there was no room in hospitals" (Interviewee No. 17; Political actor).

The interviewee referred to the number of deaths in the province of Bergamo,⁸ and to the data regarding hospital beds. The media incisively disseminated this information which was related to the healthcare perspective. In addition to the data collected through newspapers, it is essential to remember that every day, hour after hour, the images disseminated through other channels (television, web, etc.) reinforced the relevance of the numerical data.

In this phase, new accounts emerged, whose nature was partly healthcare as well as socio-economic, such as the level of saturation of healthcare facilities and the economic spending for, and investments in, new healthcare facilities (Legislative Decree no. 14 of the 09/03/2020). For example, on the 7th of March the Corriere opened with the headline "Twenty thousand reinforcements in hospitals – recruitment plan for doctors and nurses. More restrictive measures are ready and probable red zone for other municipalities in Lombardia. Infections exceed 5,000; 567 patients in intensive care units" (Corriere, 07/03/2020). Thus, hybrid accounts developed; these accounts simultaneously encompassed the health, economic, and social aspects, as they were linked to the initiatives undertaken for strengthening healthcare facilities. In this period, some social accounts were also mobilised; these were primarily aimed at conveying reassurance regarding the containment of the adverse effects of the lockdown, such as the number of distance learning students (Appendix B Table C; Corriere, 05/03/2020).

As in the previous phase, which led to the partial lockdown, in this fourth phase the economic-related accounts played an important role in supporting the decisions made by the political actor to adopt the even more restrictive course of action regarding the total lockdown. The political actor communicated the decision to introduce emergency aid to the population by leveraging awareness about the economic effects of the pandemic: "The health-related emergency is turning into a full economic crisis [...] the State is here; the Government will intervene with extraordinary measures and initiatives" (Prime Minister press conference, 21/03/2020). In a press conference held on 28/03/2020, the Prime Minister claimed: "We have just signed a new Decree of the Prime Minister which allocates the sum of 4.3 billion euros to the municipal solidarity fund; an advance of 66 % compared to the deadline which was scheduled for May; moreover, and perhaps the most important thing that directly concerns citizens: [...] we have [specifically] allocated 400 million and a further advance to the local councils and municipalities, with the constraints to use these sums for the citizens who do not have the money to do their shopping".

The economic effects generated by COV19, which was substantially delineated as a health-centered problem that gave priority to healthcare-related decisions, were the subject of specific initiatives. In contrast, the social effects were still scarcely considered. As argued by one interviewee: "[...] there has been much communication about some situations related to doctors and paramedics. However, in this pandemic, all categories have been badly affected and have paid a high price [...], and this has [remained] completely unknown (Interviewee No. 9, Social actor).

5.2.8. Discussion of phase 4: The mobilisation

The total lockdown decision, as the course of action to be undertaken, represents the final phase of the translation process: i.e., *mobilisation*. In this phase, the most used accounts made it possible to *justify and explain* this decision; but also, they allowed individual and collective practices that were consistent with the adopted decision and course of action (Sargiacomo, 2015). The data relating to the previous phases showed how the health-related accounts had become the *compass* which guided all the different actors towards the courses of action to be undertaken. The economic accounts and the social-related ones, though to a lesser extent, have been proposed, used, and diffused to achieve the acceptance of the decisions undertaken (Killian & O'Regan, 2016). The data released through the media have become, *de facto*, the accounts for the pandemic; these pandemic accounts have legitimated the governing decisions, which have permitted controlling some effects (Morales & Sponem, 2017; Walker, 2016) but also making others less visible (Rinaldi et al., 2020).

In the negotiation process (Callon, 1984), the greater visibility given to some accounts (Robson & Bottausci, 2018) inevitably obscured others; as a result, the needs of some actors in the (pandemic) arena, who could not fully voice their requests, were substantially marginalized. In this phase of the translation, we have observed a continuous negotiation process within the arena where different perspectives about the pandemic emerged. Supported by the mobilisation of different accounts, which became powerful artifacts for the materialization of the ideas of the actors in the arena (Carter & Toms, 2010), these different perspectives directly influenced the problematisation of the pandemic and the decision-making about the courses of action to be undertaken for mitigating its effects. As shown by the empirical analysis, each phase had its peculiarities, and the accounts, which increasingly developed, played different roles in these phases, by assuming a performative function (Ezzamel, 2012).

6. Conclusions

This paper examined the first phase of the diffusion of COV19 in Italy and joined studies that focus on the governing of

⁸ Bergamo is a city located in Lombardia, a region in Northern Italy, which was heavily hit by the pandemic. The interviewee refers to the news, widely disseminated by the Italian mass media, that the bodies of people who died of COV19 were transported from the hospitals to crematoria by military trucks.

extraordinary events and the role of accounting and accounts in this context (Sargiacomo, 2015; Sargiacomo & Walker, 2022; Sargiacomo et al., 2014). The adoption of specific governing decisions was interpreted as a translation process (Callon, 1984) in which different actors in the COV19 decision-making arena, by drawing on the information provided by specific accounts, encountered, debated, and confronted.

During the phases of translation, various problematisations emerged and, along with them, considerable asymmetries of resources were observed (legitimacy, authority, etc.) (Latour, 1986). The co-existence of different problematisations and the presence of asymmetries of resources between actors significantly impacted how the latter participated in the decisions/choices about governing the pandemic. The different problematisations were justified, validated, and supported through accounts relating to the various aspects of COV19. In the problematisation phase, which was characterized by uncertainty over, and fear of, a phenomenon that was substantially unknown, some simple-to-understand health-related accounts began to emerge (number of deaths, number of infections, etc.). These relatively simple accounts allowed the abstract idea of the pandemic to assume some meaning (Carter & Toms, 2010). The media gave immediate emphasis to those accounts, while other forms of accounts of a different nature (e.g., economic, social, etc.) did not gain the same relevance. During the second phase, the interessement, there was a convergence towards a health-related problematisation of COV19. More sophisticated health-related accounts (for example, the R index) contributed to this convergence. Some economic accounts were also being developed; their dissemination, however, appears primarily aimed at reassuring the population regarding the possible economic effects of the pandemic (for example, the numbers relating to economic support). In the enrolment phase, the central role of health-related accounts was confirmed, whereas economic-related accounts began to play a supporting function to the former. Then, the first social accounts were mobilised. These accounts performed a similar function to the economic ones, as they encouraged acceptance of the social consequences of decisions and related courses of action undertaken (for example, the number of students engaging in distance learning). The joint use of artifacts, such as different types of accounts, contributed to accepting the decisions which were being undertaken. Finally, the fourth phase (mobilisation) related to the moment of legitimation of the problematisation of COV19, which drove the decision of enforcing lockdown at a national level. With regard to the accounts developed and disseminated, we noted that, in this phase, the role patterns previously observed were still maintained. In particular, we identified that the health-related accounts, in association with the economic-related accounts, and, increasingly, with social ones though the latter played a more ancillary role - aimed at promoting individual practices and collective actions consistent with governing the COV19 pandemic.

In this last phase, the accounts *legitimized*, by providing numerical evidence, the decisions and courses of action already undertaken. The absolute centrality of the health-related accounts meant that only some aspects of COV19 were being problematised (Callon, 1980), while others remained in the background.

Unlike other catastrophic events studied in the literature, such as earthquakes and floods, the pandemic represented a *particular crisis* due to its longer-lasting extraordinary nature, higher unpredictability, and uncertainty regarding the decisions to be taken. These peculiar characteristics have made the governing of the pandemic even more complex, and this, as emphasized by Rinaldi et al. (2020), required an interpretation of the phenomenon and its governing as a *navigation*, i.e., a process of '*trial and error*', with non-obvious outcomes. Navigation implies the search for the correct route, albeit in its intrinsic uncertainty, insecurity, and unpredictability. During the problematisation phase, in particular, the attempts to preserve the economic system clashed with the need to take into consideration the protection of a common good, such as public health. The health-related accounts developed in this phase prevailed over the more conventional forms of accounting, which are traditionally aimed at accounting for the economic and financial aspects of human activities (Morales & Sponem, 2017). In short, an attempt was made to develop a communication system that used accounts that could give voice to the most urgent health-related problems. The success of this form of communication was not guaranteed; however, it was decisive in the attempt to make health-related aspects prevail over other forms of problematisations. This attempt materialized through the development of health-related accounts that, due to their simplicity and immediacy, were frequently disseminated and widely spread by the media. In this form of governing, which we have named "trial and error", i.e., characterized by tentative attempts, it was precisely the accounts that made innovation possible (Carter & Toms, 2010). In the case discussed in this paper, these accounts played a crucial role in governing the pandemic and reporting updates on the state of the country.

Compared to other extraordinary events studied in the literature (Sargiacomo, 2015), our analysis shows the lack of solid points of reference, relative to similar events that occurred in the past, upon which to take decisions. Our empirical analysis shows, consistently with Latour's arguments (Latour, 1994), a mode of governing that arose from the creation of relationships/interactions, which were characterized by debates but also confrontations (Contrafatto et al., 2020) among actors within the decision-making arena. The interactions between the different actors and the attribution of their roles were not obvious. The relationships between the actors and their repercussions in terms of governing the pandemic were mediated and modified by the construction, legitimation, and mobilization of accounts; these accounts, in particular, were capable of orienting specific government decisions and encouraging their acceptance (Ahmad et al., 2021; Mitchell et al., 2021). In our study, the accounts, paraphrasing Morales and Sponem (2017, p. 12), "did not [only perform] a purely technical-rational function" but served "particular interests". During the problematisation phase of the pandemic, in which the different actors debated and were confronted with confusion and uncertainty, the elements measured through health-related accounts provided the coordinates, i.e., a first point of reference to build a convergence towards the problematisation of COV19. In the subsequent phases, the progressive structuring and diffusion of health-related accounts, integrated over time by economic accounts and finally, albeit to a lesser extent, by social ones, reduced uncertainty about the governing of the pandemic. This, in turn, supported the acceptance and legitimization of the decisions and actions undertaken. Therefore, our study has provided a first main contribution to the literature about the governing and government of extraordinary events in general, and of COV19 in particular, to understand how an event can be navigated, that is, tentatively governed by trial and error, through the mobilization and legitimation of specific forms of account. Our analysis shows how different types of accounts, developed by various

categories of actors, evolve and integrate with each other in navigating an extraordinary event.

Furthermore, our paper offers a second main contribution by providing an in-depth empirical analysis of the phases and instruments (Andreaus et al., 2021; Contrafatto et al., 2020; Rinaldi, 2022; Quattrone, 2017) through which the governing of the extraordinary event occurred, through a process of encountering-debating-confrontation between different actors. Our analysis has shown that this process was not without moments of conflict, not only with respect to the definition of the problem but also the possible government decisions to be adopted. This process was oriented towards a continuous search for convergences, which in our case, were regulated, that is, shaped and oriented, by specific accounts, which played a performative function (Ezzamel, 2012), which was specific for the different phases. In each of the above-mentioned phases, the accounts became instruments for dividing (phase 1), mobilising (phase 2), mediating (phase 3), and controlling and legitimizing (phase 4) some decisions over others. These different roles of the accounts were, in our case, functional to the evolution of the governing process of the extraordinary event. In particular, the final decision, i.e., the lockdown, was legitimized and accepted by the various actors through what the accounts made visible (Robson & Bottausci, 2018) but also through what they obscured (Rinaldi et al., 2020). The fact that economic- and social- related accounts are only partially used and disseminated reduces the information available to the various actors regarding the effects of decisions. Our study, therefore, contributes to highlighting the need for all social demands – even those that have not yet found space in the negotiation between actors in the decision-making arena – to become part of an accountability and accounting system. The development of such a system in the future – specifically designed for extraordinary events and capable of giving voice to actors with fewer resources (for example, those with less authority and visibility) - would contribute to addressing some of the ethical criticalities which arose in the governing of COV19 (Andrew et al., 2022; Christ & Burritt, 2021; Rinaldi, 2022; Yu, 2021).

The experience of COV19, as illustrated in this study, led to the development of a pandemic-related information system; however, with regard to some actors, the information system revealed certain limitations. Moreover, this information system has extended beyond our analyzed phases by determining new translation processes. Future studies could focus on analyzing data and accounts developed during the different translations of the pandemic to provide a comprehensive dashboard of indicators that could support the governing of similar events in the future; this could help mitigate negative consequences that may not be immediately apparent. The political actor could, and should, value the experience gained, along with all the resulting measurements, rather than allowing them to fade into oblivion.

Furthermore, this study contributes to the literature about the role that accounting, and accounts, play as devices of translation (Callon, 1980, 1984; Latour, 1986, 1994; Wæraas & Nielsen, 2016). Empirical evidence has shown a regulatory role of accounts, both in the translation process and in the dynamics within the arena of the actors involved. The accounts *per se* and their representation contributed to defining the relationships between the actors within the arena. Information and accounts for COV19 have regulated the translation process; first by contributing to the acceptance of, and then by prioritizing and legitimizing, a specific problematisation, i. e., the health-centered one. In the case studied in this article, this acceptance and legitimacy were supported by the modes of representation, through graphs, maps, and other visual forms, to represent the diffusion and impacts of COV19 (Robson & Bottausci, 2018). Furthermore, accounts played a relevant role in regulating the relationships among the various actors in the arena, by providing each of them greater or lesser visibility and legitimacy in carrying forward their values, demands, and perspectives. Our analysis has unveiled how, through the accounts, some actors assumed a relevant role while others were substantially marginalized. From this perspective, therefore, accounts played an important role as regulatory devices of translation, by influencing its several phases and building and defining the relationships between the different actors.

Finally, this work contributes to understanding the political implications of extraordinary events. The analysis has shown how the accounting tool adopted is, at the same time, a revealer of dynamics but also a vehicle to direct the attention of actors towards one aspect of the problem. However, the focus on a specific problem, explained by simple accounts that are understandable to all actors in the arena, can excessively reduce the complexity that extraordinary events inevitably entail. Reducing measurements to a few variables that are easily understood by most people facilitates decision-making. However, it also carries the risk of obscuring the complexities inherent in those decisions (Andrew et al., 2022; Christ & Burritt, 2021; Rinaldi et al., 2020; Rinaldi, 2022; Yu, 2021). Simplification, although necessary and inevitable, should be accompanied by further efforts to develop and disseminate economic and social accounts that consider issues beyond the health-related ones, giving them a voice throughout all phases of the translation process. Given that the lockdown clearly prioritized health-related aspects over others, studies and political actions should focus more in-depth on the consequences of this decision and related courses of action. The decision to implement lockdowns was adopted by most countries worldwide, despite there being partial awareness of the related consequences. These included, for example, the severe economic crisis that would lead to the closure of numerous businesses, the significant losses that would have been recorded in the financial statements of nearly all companies, the substantial loss of jobs, that would have inevitably increased the already high unemployment, especially (but not exclusively) in some regions. The role performed by governments in protecting the common good, of which public health is a fundamental element, is essential and should not be sacrificed over economic considerations (Morales & Sponem, 2017). However, it is necessary to understand how to balance various aspects of the common good that also have economic, but above all, social and psychological implications.

Further studies should focus on measuring the economic and social effects of the lockdown decision to provide a more comprehensive understanding of the phenomenon and give voice to actors who were marginalized in the initial phases of governing the pandemic. Most importantly, the findings of these studies should guide governments in formulating policies to address the economic and social consequences of a prolonged period of emergency and isolation that affected most countries. The social consequences of the lockdown, which affect individuals' relational and psychological aspects, should become the subject of future studies to understand this phenomenon in its entirety. Although it is now clear, these consequences have never been the subject of careful consideration in terms of accountability and accounting. In this context, accounting can be at the service of many different disciplines, such as psychology, medicine, sociology, etc.; this potential should be the subject of proper scholarly investigations. It is also essential to continue investigating how to design a more holistic reporting system, which could be capable of giving voice to the effects of government decisions from different perspectives in a more structured manner. Such a system would allow the formulation of supporting policies, even from the early stages of an extraordinary event, that could mitigate and reduce the duration of its consequences for society.

Finally, further research adopting a translation theory-based approach, i.e., capable of considering different actors' demands, should be conducted to include other countries and other types of extraordinary events. The conclusions proposed and the implications highlighted in this paper, which focused exclusively on Italy and a specific phase of the governing of COV19, may differ when applied to other contexts.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

The authors thank the editors and the two anonymous referees for their constant, constructive, and helpful comments. A special thanks goes to Gianfranco Rusconi and David Collison for their comments on earlier versions of this work. Finally, thanks to the participants of the eighth CSEAR Italy conference, the 32nd CSEAR UK conference, and the seminar held on December 7, 2022, at the Kent Business School (UK) for the valuable feedback received.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.cpa.2024.102769.

Data availability

The data that has been used is confidential.

References

- Ahmad, S., Connolly, C., & Demirag, I. (2021). Testing times: Governing a pandemic with numbers. Accounting, Auditing & Accountability Journal, 34(6), 1362–1375. https://doi.org/10.1108/AAAJ-08-2020-4863
- Ahrens, T., & Ferry, L. (2020). Financial resilience of English local government in the aftermath of COVID-19. Journal of Public Budgeting, Accounting & Financial Management, 32(5), 813–823. https://doi.org/10.1108/JPBAFM-07-2020-0098
- Ahrens, T., & Ferry, L. (2021a). Accounting and accountability practices in times of crisis: A Foucauldian perspective on the UK government's response to COVID-19 for England. Accounting, Auditing & Accountability Journal, 34(6), 1332–1344. https://doi.org/10.1108/AAAJ-07-2020-4659
- Ahrens, T., & Ferry, L. (2021b). Debate: What support should local government expect from accounting during a sudden crisis such as Covid-19? Public Money & Management, 41(1), 12–14. https://doi.org/10.1080/09540962.2021.1825163
- Andreaus, M., Rinaldi, L., Pesci, C., & Girardi, A. (2021). Accountability in times of exception: An exploratory study of account-giving practices during the early stages of the COVID-19 pandemic in Italy. Journal of Public Budgeting, Accounting & Financial Management, 33(4), 447–467. https://doi.org/10.1108/JPBAFM-06-2020-0091
- Andrew, J., Baker, M., Cooper, C., & Tweedie, J. (2022). Wealth taxes and the post-COVID future of the state. *Critical Perspectives on Accounting*, Article 102431. Advance online publication. <u>https://doi.org/10.1016/j.cpa.2022.102431</u>.
- Antonelli, V., Bigoni, M., Funnell, W., & Cafaro, E. M. (2022). Accounting for biosecurity in Italy under COVID-19 lockdown. Accounting. Auditing & Accountability Journal, 35(1), 120–130. https://doi.org/10.1108/AAAJ-07-2020-4674
- Bracci, E., Humphrey, C., Moll, J., & Steccolini, I. (2015). Public Sector Accounting, Accountability and Austerity: More Than Balancing the Books? Accounting, Auditing & Accountability Journal, 28(6), 878–908. https://doi.org/10.1108/AAAJ-06-2015-2090
- Bigoni, M., & Occhipinti, Z. (2024). Accounting and accountability for pandemics: Emerging themes and future implications. In Accounting, Accountability and Crisis Management (pp. 15–35). Routledge.
- Callon, M. (1980). Struggles and Negotiations to Define What is Problematic and What is Not. In: Knorr, K.D., Krohn, R., Whitley, R. (Eds.) The Social Process of Scientific Investigation. (pp. 197-219) Sociology of the Sciences A Yearbook, vol 4. Springer, Dordrecht. <u>https://doi.org/10.1007/978-94-009-9109-5_8</u>.

Callon, M. (1984). Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay. *The Sociological Review, 32*(1_suppl), 196–233. https://doi.org/10.1111/j.1467-954X.1984.tb00113.x

- Carr, M., & Jooss, S. (2023). Navigating management control change: Pathways to the future of work. Accounting, Auditing & Accountability Journal, 36(9), 390–417. https://doi.org/10.1108/AAAJ-08-2022-6005
- Carrabine, E. (2000). Discourse, governmentality and translation: Towards a social theory of imprisonment. Theoretical Criminology, 4(3), 309–331. https://doi.org/ 10.1177/1362480600004003004
- Carter, C., & Toms, S. (2010). The contours of critical accounting. Critical Perspectives on Accounting, 21(3), 171–182. https://doi.org/10.1016/j.cpa.2010.02.001

Chiapello, E. (2017). Critical accounting research and neoliberalism. Critical Perspectives on Accounting, 43, 47–64. https://doi.org/10.1016/j.cpa.2016.09.002

- Christ, K. L., & Burritt, R. L. (2021). Accounting for modern slavery risk in the time of COVID-19: Challenges and opportunities. Accounting, Auditing & Accountability Journal., 34(6), 1484–1501. https://doi.org/10.1108/AAAJ-08-2020-4726
- Christner, C. H., & Strömsten, T. (2015). Scientists, venture capitalists and the stock exchange: The mediating role of accounting in product innovation. Management Accounting Research, 28, 50–67. https://doi.org/10.1016/j.mar.2015.04.004
- Contrafatto, M., Ferguson, J., Power, D., Stevenson, L., & Collison, D. (2020). Understanding Power-related Strategies and Initiatives: The Case of the European Commission Green Paper on CSR. Accounting, Auditing & Accountability Journal, 33(3), 559–587. https://doi.org/10.1108/AAAJ-06-2018-3529

- Costa, E., Contrafatto, M., & Parker, L. D. (2024) Accounting, accountability and crisis management: Lessons learnt from COVID-19 in Italy. Routledge. 1st Edition. De Villiers, C., Cerbone, D., & Van Zijl, W. (2020). The South African government's response to COVID-19. Journal of Public Budgeting, Accounting & Financial Management, 32(5), 797–811. https://doi.org/10.1108/JPBAFM-07-2020-0120
- Dean, M. M. (2009). Governmentality: Power and rule in modern society. Governmentality, 1-304.
- Ezzamel, M. (2012). Accounting and order. Routledge. 1st Edition New York Routledge.
- Graham, C., Himick, D., & Nappert, P. L. (2023). The dissipation of corporate accountability: Deaths of the elderly in for-profit care homes during the coronavirus pandemic. *Critical Perspectives on Accounting*, 99, Article 102595. https://doi.org/10.1016/j.cpa.2023.102595
- Grossi, G., Ho, A. T., & Joyce, P. G. (2020). Budgetary responses to a global pandemic: International experiences and lessons for a sustainable future. Journal of Public Budgeting, Accounting & Financial Management., 32(5), 737–744. https://doi.org/10.1108/JPBAFM-12-2020-189
- Hopper, T. (2020). Swimming in a sea of uncertainty-business, governance and the coronavirus (COVID-19) pandemic. Journal of Accounting & Organizational Change, 16(4), 533–539. https://doi.org/10.1108/JAOC-07-2020-0091
- Hopwood, A. G. (1974). Accounting and human behaviour. London: Accounting Age.
- Killian, S., & O'Regan, P. (2016). Social accounting and the co-creation of corporate legitimacy. Accounting, Organizations and Society, 50, 1–12. https://doi.org/ 10.1016/j.aos.2016.02.004
- Koutoupis, A., Kyriakogkonas, P., Pazarskis, M., & Davidopoulos, L. (2021). Corporate governance and COVID-19: A literature review. Corporate Governance: The International Journal of Business in Society, 21(6), 969–982. https://doi.org/10.1108/CG-10-2020-0447
- Krippendorff, K. (2004). Content Analysis: An Introduction to Its Methodology (2nd ed.). Thousand Oaks, CA: Sage. La Torre, M., Di Tullio, P., Tamburro, P., Massaro, M., & Rea, M. A. (2022). Calculative practices, social movements and the rise of collective identity: How
- #istayathome mobilised a nation. Accounting, Auditing & Accountability Journal, 35(9), 1–27. https://doi.org/10.1108/AAAJ-08-2020-4819 Lai, A., Leoni, G., & Stacchezzini, R. (2014). The socializing effects of accounting in flood recovery. Critical Perspectives on Accounting, 25(7), 579–603. https://doi.org/
- 10.1016/j.cpa.2014.04.002
- Landi, S., Costantini, A., Fasan, M., & Bonazzi, M. (2022). Public engagement and dialogic accounting through social media during COVID-19 crisis: A missed opportunity? Accounting, Auditing & Accountability Journal, 35(1), 35–47. https://doi.org/10.1108/AAAJ-08-2020-4884

Latour, B. (1986). The power of association. In J. Law (Ed.), Power, action belief: A new sociology of knowledge? London: Routledge and Kegan Paul.

Latour, B. (1994). On technical mediation - Philosophy, sociology, genealogy. Common Knowledge, 3(2), 29-64.

- Leoni, G., Lai, A., Stacchezzini, R., Steccolini, I., Brammer, S., Linnenluecke, M., & Demirag, I. (2021). Accounting, management and accountability in times of crisis: Lessons from the COVID-19 pandemic. Accounting, Auditing & Accountability Journal, 34(6), 1305–1319.
- Leoni, G., Lai, A., Stacchezzini, R., Steccolini, I., Brammer, S., Linnenluecke, M., & Demirag, I. (2022). The pervasive role of accounting and accountability during the COVID-19 emergency. Accounting. Auditing & Accountability Journal, 35(1), 1–19. https://doi.org/10.1108/AAAJ-10-2021-5493
- Mazzola, L., Rusconi, G., & Contrafatto, M. (2024). Accounting and accountability for governing extraordinary events. In Accounting, Accountability and Crisis Management (pp. 73–91). Routledge.
- Miller, P., & O'Leary, T. (2007). Mediating instruments and making markets: Capital budgeting, science and the economy. Accounting, Organizations and Society, 32 (7–8), 701–734. https://doi.org/10.1016/j.aos.2007.02.003
- Mitchell, F., Nørreklit, H., Nørreklit, L., Cinquini, L., Koeppe, F., Magnacca, F., Mauro, S. G., Jakobsen, M., Korhonen, T., Laine, T., & Liboriussen, J. M. (2021). Evaluating performance management of COVID-19 reality in three European countries: A pragmatic constructivist study. Accounting, Auditing & Accountability Journal, 34(6), 1345–1361. https://doi.org/10.1108/AAAJ-08-2020-4778
- Morales, J., & Sponem, S. (2017). You too can have a critical perspective! 25 years of Critical Perspectives on Accounting. Critical Perspectives on Accounting, 43, 149–166. https://doi.org/10.1016/j.cpa.2016.09.003
- Nørreklit, H., Nørreklit, L., & Mitchell, F. (2010). Towards a paradigmatic foundation for accounting practice. Accounting, Auditing & Accountability Journal, 23(6), 733–758. https://doi.org/10.1108/09513571011065844
- O' Dwyer, B. (2004). Qualitative data analysis: Illuminating a process for transforming a 'Messy' but 'Attractive' 'Nuisance'. In C. Humphrey, & B. Lee (Eds.), *The Real Life Guide to Accounting Research* (pp. 391–407). Oxford: Elsevier. https://doi.org/10.1016/B978-008043972-3/50025-6.
- OECD (Organization for Economic Co-operation and Development) (2020). OECD insights Coronavirus (COVID-19). Retrieved from https://www.oecd.org/coronavirus/en/.
- Passetti, E., Menin, P., Mariani, A., & Vincenzo, A. A. (2024). Pandemic and management accounting change in the business context: Empirical evidence from Italy. In Accounting, Accountability and Crisis Management (pp. 207–223). Routledge.
- Quattrone, P. (2017). Embracing ambiguity in management controls and decision-making processes: On how to design data visualisations to prompt wise judgement. Accounting and Business Research, 47(5), 588–612. https://doi.org/10.1080/00014788.2017.1320842
- Quattrone, P. (2000). Constructivism and accounting research: Towards a trans-disciplinary perspective. Accounting, Auditing & Accountability Journal, 13(2), 130–155. https://doi.org/10.1108/09513570010323047
- Rinaldi, L. (2022). Accounting and the COVID-19 pandemic two years on: Insights, gaps, and an agenda for future research. Accounting Forum, 47(3), 333–364. https://doi.org/10.1080/01559982.2022.2045418
- Rinaldi, L., Cho, C. H., Lodhia, S. K., Michelon, G., & Tilt, C. A. (2020). Accounting in times of the COVID-19 pandemic: A forum for academic research. Accounting Forum, 44(3), 180–183. https://doi.org/10.1080/01559982.2020.1778873
- Ritonga, I. T., & Buanaputra, V. G. (2023). Re-budgeting local government budgets to handle the COVID-19 pandemic: Indonesia's experience. Accounting Forum, 1–24. https://doi.org/10.1080/01559982.2023.2272069
- Robson, K., & Bottausci, C. (2018). The sociology of translation and accounting inscriptions: Reflections on Latour and Accounting Research. Critical Perspectives on Accounting, 54, 60–75. https://doi.org/10.1016/j.cpa.2017.11.003
- Russell, S. L., & Thomson, I. (2009). Analysing the role of sustainable development indicators in accounting for and constructing a Sustainable Scotland. Accounting Forum, 33(3), 225–244. https://doi.org/10.1016/j.accfor.2008.07.008
- Sargiacomo, M. (2015). Earthquakes, exceptional government and extraordinary accounting. Accounting, Organizations and Society, 42, 67–89. https://doi.org/ 10.1016/i.aos.2015.02.001
- Sargiacomo, M., & Walker, S. P. (2022). Disaster governance and hybrid organizations: Accounting, performance challenges and evacuee housing. Accounting, Auditing & Accountability Journal, 35(3), 887–916. https://doi.org/10.1108/AAAJ-12-2019-4323
- Sargiacomo, M., Corazza, L., D'Andreamatteo, A., Dumay, J., & Guthrie, J. (2021). COVID-19 and the governmentality of emergency food in the City of Turin. Accounting, Auditing & Accountability Journal, 34(6), 1457–1470. https://doi.org/10.1108/AAAJ-09-2020-4926
- Sargiacomo, M., Ianni, L., & Everett, J. (2014). Accounting for suffering: Calculative practices in the field of disaster relief. Critical Perspectives on Accounting, 25(7), 652–669. https://doi.org/10.1016/j.cpa.2014.03.011
- Skærbæk, P., & Tryggestad, K. (2010). The role of accounting devices in performing corporate strategy. Accounting, organizations and society, 35(1), 108–124. https://doi.org/10.1016/j.aos.2009.01.003
- Strauss, A., & Corbin, J. (1998). Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory. Thousand Oaks, CA: Sage Publications Inc. Wæraas, A., & Nielsen, J. A. (2016). Translation theory 'translated': Three perspectives on translation in organizational research. International journal of management reviews, 18(3), 236–270. https://doi.org/10.1111/ijmr.12092

Waldorff, S. B. (2013). Accounting for organizational innovations: Mobilizing institutional logics in translation. Scandinavian Journal of Management, 29(3), 219–234. https://doi.org/10.1016/j.scaman.2013.03.010

Walker, S. P. (2016). Revisiting the roles of accounting in society. Accounting, Organizations and Society, 49, 41–50. https://doi.org/10.1016/j.aos.2015.11.007
Willmott, H. C. (1983). Paradigms for accounting research: Critical reflections on Tomkins and Groves' "Everyday accountant and researching his reality". Accounting, Organizations and Society, 8(4), 389–405.

WHO (World Health Organization) (2020). WHO Coronavirus Disease (COVID-19) dashboard. Retrieved from.

Yin, R. K. (2017). Case Study Research and Applications: Design and Methods. Los Angeles, CA: Sage Publications.

Yu, A. (2021). Accountability as mourning: Accounting for death in the time of COVID-19. Accounting, Organizations and Society, 90, 10118. https://doi.org/10.1016/ j.aos.2020.101198