DOTTORATO DI RICERCA IN

Scienze Politiche e Sociali

Ciclo 35

Settore Concorsuale: 14/C2 - SOCIOLOGIA DEI PROCESSI CULTURALI E COMUNICATIVI

Settore Scientifico Disciplinare: SPS/08 - SOCIOLOGIA DEI PROCESSI CULTURALI E COMUNICATIVI

GRASSROOTS FIGHTS AGAINST CORRUPTION IN THE DIGITAL AGE: INFRASTRUCTURAL ACTIVISM IN ITALY AND SPAIN

Presentata da: *Alice Fubini*

Coordinatore Dottorato

Prof. Roberto Rizza

Supervisore

Prof.ssa Alice Mattoni

Co- Supervisore

Prof.ssa Adrienne Russell

Esame finale anno 2024

ACKNOWLEDGMENTS

TABLE OF CONTENTS

List of Tables

List of Tables - Appendix 1

List of Figures

List of Figures - Appendix 1

List of Abbreviations

ACTs, Anti-Corruption Technologies

AC, Anti-Corruption

ALAC, Advocacy and Legal Advice Centre

ANAC, Autorità Nazionale Anti Corruzione

CGT, Constructivist Grounded Theory

CSOs, Civil Society Organizations

DDWAs, Data-driven Web Apps

GT, Grounded Theory

Libera, Libera. Associazioni, nomi e numeri contro le mafie

STS Studies, Science and Technology Studies

ABSTRACT

This thesis examines the challenges and opportunities of the digital age for anti-corruption activism, casting light on a specific form of activism, called *infrastructural activism*. This form of activism expands the repertoire of action and contention of civil society actors by creating the preconditions for the development, maintenance, and diffusion of different types of socio-technical infrastructures: grassroots and institutionalized whistleblowing infrastructures, on the one hand, and community and platform-based monitoring infrastructures, on the other.

Indeed, the research considers two types of initiatives, located between Italy and Spain, that over time have incorporated different types of digital technologies into their anti-corruption practices for two main purposes. First, to facilitate whistleblowing by implementing the adoption of open-source software that guarantees high standards of security and anonymity. Second, to monitor governmental actors and combat institutional opacity through the use of public data, open databases, and data-driven platforms.

Bridging corruption and social movement studies with science and technology, media, and journalism studies, this thesis identifies a specific perspective for looking at the grassroots anti-corruption struggle in platform and datafied societies. Indeed, infrastructural activism and related infrastructures play a pivotal role in this struggle by anchoring not only the efforts of civil society organizations but also the efforts of other actors who may use (or replicate) them to detect corruption or prevent it by increasing transparency.

Thus, adopting the lens of infrastructural activism, this dissertation contributes to social movement studies by encouraging a debate on how the broader process of "infrastructuralization of platform-based services", in which platforms acquire certain characteristics of infrastructures, can also affect platforms and technologies developed by grassroots collective actors.

Keywords: Infrastructural Activism; Anti-corruption; Digital Technologies; Whistleblowing; Monitoring.

INTRODUCTION

This research sheds light on the (new) challenges and opportunities that "platform" (van Dijk et al. 2018) and "datafied" societies (Schäfer and van Es 2017) offer for activism in the digital age. It does so by exploring how, and with what consequences civil society organizations involved in anti-corruption initiatives integrate different types of digital technologies into their repertoire of action and contention. Indeed, the field of anti-corruption activism represents a privileged context for capturing the impact of digital technologies on grassroots collective actors for several reasons. First, anti-corruption activism is increasingly experimenting with different types of technologies, both in terms of integrating existing ones and creating ad hoc technologies to prevent, counter, or expose wrongdoing, especially in certain geographical contexts such as Brazil or India. Thus, the case of anti-corruption activism represents an emblematic scenario for studying the intertwining of collective action and digital media and technologies that characterize grassroots politics nowadays.

Second, anti-corruption activism represents a privileged scenario for exploring not only the use of new cutting-edge technologies but also alternative strategies for preventing and countering the so-called 'backlashes' of technological development, from the use of malware for surveillance purposes by state actors to the more general cyber threats that make actors involved in contentious actions increasingly vulnerable in a digital environment. Indeed, for those involved in the fight against corruption, there is a greater awareness of the risks associated with the use of certain technologies, which in many cases - instead of protecting - can jeopardize the security of those active involved in a fight as complex and risky as anti-corruption. At the same time, the advent of advanced digital technologies may in some cases encourage rather than combat corrupt practices.

1

Third, anti-corruption activism offers a favorable context for exploring the possible impact of digital technologies on the relations between institutional and grassroots actors, who are not only bound by the common goal of fighting the same social issue but are also aware that more effective action against corruption requires the creation of coalitions (also intended as 'conflictual cooperation') between different civil society organizations and institutional actors, be they public authorities or members of government.

After these preliminary remarks on the importance of looking at the case of anti-corruption activism, the introduction presents the main theme of the research in more detail, providing concrete examples of the use of technology for anti-corruption purposes by grassroots actors. It then presents the research puzzle, thus the main objectives and research questions that guided both the data collection and data analysis phases, leading to the identification of the main contributions.

The main topic under investigation

Investigating the grassroots fight against corruption in the digital age has become increasingly relevant in recent years among scholars who have begun to explore the challenges, opportunities, and even counter-effects of using multiple digital technologies in different anti-corruption scenarios (see Adam and Fazekas 2021; Mattoni 2021, 2024). Indeed, civil society and social movement organizations are increasingly deeply intertwined with a wide range of digital technologies such as social media platforms, dedicated apps, crowdsourcing platforms, data-driven portals, whistleblowing platforms, bots, and other AI applications. These digital technologies are considered in certain circumstances as "game changers" (Earl 2016) for the activists' repertoires of contention (Tarrow 1995; Tilly 1978) and communication (Mattoni 2013).

Concrete examples of such use of technologies for monitoring purposes are rooted in pioneering cases like the UK version of FixMystreet launched in 2007, a website that allows citizens to map and report street problems to councils in charge of fixing them (see King and Paul 2007). Looking at the em-

ployment of social media platforms for promoting political change and increasing mobilization also against corruption, an emblematic case is represented by the Facebook page "We Are All Khaled Said", created in 2011 during the Egyptian revolution (Alaimo 2015).

At the same time, social media platforms may be employed also as online spaces for debating anti-corruption-related issues, as in the case of Facebook pages employed for these purposes by Indian anti-corruption initiatives (Chakraborty and Mattoni 2023). Sticking to the Indian context but considering instead the development of crowdsourcing platforms, an emblematic case is represented by "I Paid a Bribe", a bottom-up digital initiative built-up for collecting data on bribes and exposing cases of petty corruption (Chakraborty 2024; Kossow and Kukutschka 2017; Ryvkin et al. 2017). Technologies used for anti-corruption purposes count also advanced declinations, characterized by a certain "degree of autonomy" (Odilla 2023), thus artificial intelligence. A pioneering initiative in this framework is represented by Rosie, the Brazilian bot employed to monitor the public spending of representatives and encourage people to use Twitter to discuss any suspect activity (Odilla 2023; Odilla and Mattoni 2023).

The existing literature also emphasizes the main dysfunctionalities, as in the case of the extensive use of open data (Yu and Robinson 2012) and how it is connected with a wrong perception of the relationship between transparency and accountability (Huss and Kendel 2020). Others shed light on the double-edged sword of digitalization and counter-effects, such as the risk of surveillance by governmental actors, which jeopardizes the safety of grassroots anti-corruption activists and victims of corruption (Adam and Fazekas 2021; Berendt and Schiffner 2022) or, even further, employing digital technologies for supporting corruption and related illegal activities (Reynolds and Irwin 2017).

Thus, both strengths and weaknesses of digital technologies for anti-corruption civil society organizations have been recognized in several research that cut across corruption studies, social movement studies, science and technology studies, media studies, and journalism studies, but in a discontinuous manner. As such, although the literature on this topic has grown rapidly in re-

cent years, it is too fragmented, with the main consequence that the interdisciplinary nature of this object of study may remain unexplored.

This fragmentation is also linked to some gaps and under-explored topics in the existing literature, from which this dissertation move its path. Indeed, this thesis fits into this flourishing but fragmented strand of research by attempting to shed light on some issues (and challenges) that seem to have received relatively scant attention. First, this dissertation examines how and which actors develop ad hoc grassroots digital technologies to carry out specific anti-corruption practices (i.e. practices related to whistleblowing and practices related to monitoring public actors), shedding light on how these digital technologies complement existing repertoires of actions and what kinds of skills they require. Second, this dissertation explores the underestimated links between journalism and activism in the fight against corruption, looking in particular at monitoring practices that rely on the use of (open) data. Third, this dissertation seeks to expand research on the relationship between social movements and the use of digital technologies, joining a strand of research that considers the creation of technologies as an outcome in itself and then looks at how these same technologies are adopted by institutional actors based on grassroots experiences.

The research puzzle

Considering the main gaps in the current literature, this thesis moves from two broad research questions, which are then narrowed down to specific sub-questions. The first research question aims to unpack the way(s) in which anti-corruption CSOs embed digital technologies in their repertoires of contention. In practice, this means looking at three main elements: the different types of collective actors involved in these anti-corruption practices, which types of ACTs they are employing, and what they project to them in terms of expectations or values.

Hence the first research questions and the related sub-questions are the following:

RQ1: *How do grassroots collective actors employ digital technologies in their anti-corruption practices?*

- Rq1.a: *What types of collective actors are involved?*

- Rq1.b: *What types of digital technologies are used?*

- Rq1.c: *What kinds of imaginaries do these actors assign to anti-corruption practices and digital technologies?*

With regard to the second research question, the focus is on the implications of the use of digital technologies in this arena of contention. Thus, the aim is to capture the types of outcomes achieved and their narratives and, more importantly, to consider these implications at the relational level. In other words, the aim is to investigate if and how the digital technologies embedded in the grassroots anti-corruption struggle affect not only the bottom-up, but also the top-down efforts carried out for the same struggle. Therefore, the second research question and related sub-questions are the following:

RQ2: *What are the consequences of using digital technologies to fight corruption from below?*

- Rq2.a: *What types of outcomes are achieved by these grassroots collective actors?*

- Rq2.b: *How does the use of digital technologies (re)shape the relationship between bottom-up and top-down anti-corruption efforts?*

To answer these research questions, this dissertation adopts a comparative qualitative research design to analyze two types of anti-corruption initiatives located between Italy and Spain. On the one hand, this thesis looks at six initiatives and projects aimed at facilitating the whistleblowing process through the adoption and dissemination of a grassroots ACT based on the GlobaLeaks software. On the other hand, this thesis focuses on three initiatives that aim to prevent corruption by monitoring public actors through the use of public (open) databases. Indeed in both countries, the prominent grassroots collective actors that tend to integrate different types of digital tools and technologies in their fight over time are those involved in whistleblowing and monitoring practices.

The Italian whistleblowing inititiaves correspond to the *ALAC* service for assisting potential whistleblowers (i.e. Advocacy and Legal Advice Center)

and the *WhistleblowingPA* project for the public adiministrations, both implemented by Transparency International Italia in conjunction with the developers of GlobaLeaks. The Spanish initiatives counts the Xnet's *BuzonX*, which is the first digital whistleblowing platform used to leak data on a huge corruption scandal knows as "El caso Bankia", followed by the cases of *Buzón Ético y de Buen Gobierno*, *Buzon de denuncia anonimas*, and *Buzon de denuncias*, which represent three additional Spanish digital whistleblowing platforms adopted by public institutions thanks to the leading role played by Xnet and the developers of GlobaLeaks. These platforms were adopted respectively by the Municipality of Barcelona and the anti-fraud authorities of Catalonia and Valencia.

As regards the monitoring initiatives, this dissertation investigates the Italian *Fondazione Openpolis* and the project *Common Comunità Moniroranti*, compared with the Spanish *Civio*. The former and the latter grassroots initiatives tend to include journalist hallmarks during the time becoming more akin to "informative activism" (Fubini 2023a, 2024), in which key components of data journalism and data activism are embedded in each other. Common instead, sticks to the local dimension of (data) activism shaped by its territorial ties by adopting the so-called 'community-based monitoring approach', closely linked to the conception of "monitoring democracy" (Keane 2009).

Both Southern European countries represent relevant contexts for the study of the grassroots fight against corruption from a comparative perspective (della Porta et al., 2017) due to their similarities and differences in terms of the level of control of corruption, the level of ICT development and the level of grassroots mobilization against corruption. As regards the level of control of corruption, both countries are characterized by a medium level. In terms of the level of grassroots mobilization against corruption, the two countries differ considerably. While Spain has been characterized by massive grassroots opposition in recent years, Italy does not constitute a scenario of massive protests against corruption. Finally, and more crucially in the framework of this thesis, these two southern European countries diverge in terms of ICT development, which inevitably affects e-government initiatives and the related

issues of transparency in public administrations: high level in Spain and low in Italy.

Therefore, by investigating both whistleblowing and monitoring initiatives and the related anti-corruption technologies, this dissertation aims to contribute to this flourishing field of research by elaborating concepts as heuristic tools to explain the opportunities, challenges and consequences of including digital technologies in the fight against corruption, to the extent the main contribution even beyond this specific area of contention. To pursue this main goal this research adopts the constructivist grounded theory as the main method (cf. Bryant 2017; Bryant and Charmaz 2019; Charmaz 2006, 2014), which is characterised by an abductive research strategy aimed at discovering concepts and developing a theoretical contribution "grounded" in the data. In practice, the research process consists of a constant back and forth between data collection and data analysis to pursue different levels of abstraction in continuity with the logic of theory building.

Main contributions

Following the constructivist grounded theory for the whole research process, this dissertation identifies the existence of four different types of (high-tech or low-tech) anti-corruption infrastructures developed by both whistleblowing and monitoring initiatives. Each anti-corruption infrastructure represents an opportunity, a challenge and a concrete outcome at the same time. The development of both high-tech and low-tech infrastructures represents an opportunity for all grassroots anti-corruption initiatives to broaden (and anchor) their repertoire of action and also contention. At the same time, these infrastructures represent a challenge because they require different types of resources and skills to be maintained over time. Moreover, their diffusion in different grassroots contexts, and even their institutionalization, represent concrete outcomes achieved by the grassroots collective actors involved in the different initiatives studied.

7

Concerning whistleblowing initiatives, the analysis distinguishes between high-tech *grassroots* or *institutional(ized) whistleblowing infrastructures*, which are fostered by social and technological drivers.[1] The former refers to the relational dynamics between the actors involved in whistleblowing, and the latter to the technological features of the software. Looking at the monitoring initiatives, this dissertation distinguishes between *platform-based* and *community-based monitoring infrastructures*. Both types of monitoring infrastructures rely on a certain configuration of strategies aimed at preventing or reacting to institutional (data) opacity. The combination of different "strategic choices" depends on the collective identities, the data-related skills of the grassroots collective actors involved, and, consequently, the centrality gained by the technological component. The former represents a case of high-tech infrastructure, the latter a case of low-tech infrastructure.

What has emerged as a common element in all the empirical cases studied is that the different types of anti-corruption technological infrastructures, developed and maintained or disseminated (or institutionalized) by the respective collective actors, rely on a specific form of activism, labeled *infrastructural activism*.[2] This type of activism is finalized to expand and strengthen the repertoire of actions and contention of grassroots actors, anchoring it to specific digital technologies that constitute more than platforms for anti-corruption purposes. Indeed - as will be discussed in the conclusion of this thesis - these platforms tend to acquire some of the characteristics of (digital) infrastructures, such as their "embeddedness", "transparency" and their temporal and spatial "ubiquity". In short, this particular form of anti-corruption activism represents the main theoretical contribution of this thesis, which can capture how the development of both low and high technologies can provide a kind of technologi-

---

[1] The concept of "whistleblowing infrastructure" was already employed in research on digital whistleblowing platforms (Fubini, 2023b; Fubini and Lo Piccolo, forthcoming).

[2] The term *infrastructural activism* had already been used by Maharawal (2021), for referring to the literal and material meaning of the concept of infrastructure, which is far from the notion of digital infrastructure. In fact, the author used this term to describe the rise of the 'Google bus blockades', a form of protest against gentrification, growing inequality and the housing crisis linked to the economic impact of the technology sector between 2013 and 2018 in the San Francisco Bay Area, where the protests have revolved towards blockading the streets and highways used by the so-called 'Google buses'.

cal infrastructure to expand existing repertoires of action and contention, the latter understood as broader litigious performances, i.e. the various forms of litigious politics (Tilly 2006; Tilly and Tarrow, 2008), therefore in both protest and latency phases (Mattoni and Ceccobelli, 2024).

Thesis Outline

This dissertation is structured in six chapters. Chapter 1 provides an overview of the current literature on digital technologies in the grassroots fight against corruption to identify gaps, under-researched issues, and open debates in a still innovative line of research. Secondly, it provides an overview of the main theoretical approaches and key concepts related to the main topic of this dissertation. Indeed, this research relies on an integrated theoretical framework that combines social movement studies, corruption studies, science and technology studies, and media and journalism studies. Finally, it concludes by specifying the 'situated' empirical approach chosen to study the phenomenon of anti-corruption activism in the digital age.

Moving to Chapter 2, it presents the research design and the main methods employed casting light on the main methodological choices that shape the research project as a whole. First, it highlights the type of research design adopted: a qualitative cross-country comparative research design. Then it describes in detail the different stages of the research process based on Constructivist Grounded Theory. This method adopts an abductive research strategy to discover concepts and develop a theory based on the data. Constructivist Grounded Theory was used in conjunction with Situational Analysis during the early stages of data collection and data analysis.

Chapter 3 reconstrutes the background context on which the nine empirical case studies originate and are still located for pursuing their fight. This chapter sheds light on the main differences and similarities between the Italian and Spanish anti-corruption arenas, considering four dimensions. First, the level of digitization and development of ICTs, to assess how high or low-level technological diffusion may impact the access and diffusion of technologies among

civil society actors. Second, the main features of corruption, for casting light on the extent of corruption within the countries, the main areas of opportunity for corruption, as well as the models and manifestations of corruption. Third, the legal framework for comparing the main domestic laws that directly address the issues of preventing and combating corruption in both countries, paying more attention to transparency laws, and the regulation of the whistleblowing phenomenon. Fourth, the main actors involved in the anti-corruption arenas, considering both top-down and bottom-up efforts in this fight. All these dimensions converge in defining both the opportunities and the constraints on corrupt behavior, as well as in determining the corruption risk within these countries.

Chapter 4 introduces the nine initiatives under investigation, all devoted to tackle corrupted behaviors mainly through the employment of ACTs. These initiatives may be clustered into two groups. On the one hand those aimed at facilitating the whistleblowing phenomenon through the adoption of digital encrypted platforms based on the open-source software GlobaLeaks, either involving grassroots actors (i.e. *ALAC*, *WhistleblowingPA*, and *BuzonX*) or public institutions thanks to leading role of the former actors (*Buzón Ético y de Buen Gobierno*, *Buzon de denuncia anonimas*, and *Buzon de denuncias*). On the other hand, the remaining initiatives are devoted to monitoring governmental and state actors and expose institutional opacity mainly through data-related practices (i.e. *Common*, *Openpolis* and *Civio*).

Chapter 5 presents and discusses the main empirical and theoretical findings emerged from the analysis of the six whistleblowing initiatives. It shows how CSOs facilitate the whistleblowing process thanks to the development, adoption, and then diffusion of a grassroots ACT among different types of actors, fostered by intertwined social and technological "drivers". These drivers form the basis for the implementation and maintenance of different types of "whistleblowing infrastructures", facilitating processes of diffusion and institutionalization of a grassroots ACT. Indeed, the analysis suggests to distinguishing between *grassroots infrastructures* and *institutional(ized) infrastructures*. The former type arises from a process of

diffusion of the same ACT among "peers", i.e. other CSOs. The latter represents the result of the institutionalization of the same grassroots technology, which implies a *direct* or *indirect* involvement of public actors, such as public administration, municipalities, and anti-corruption authorities. Thus, the results presented in this chapter cast light on a specific form of activism that characterizes the grassroots initiatives involved in facilitating the whistleblowing process, i.e. *infrastructural activism*. This type of activism seems to be relevant for understanding current grassroots anti-corruption efforts, even beyond the specificities of digital whistleblowing initiatives, as will be argued in the last chapter of this dissertation.

Chapter 6 presents and discusses the main empirical and theoretical findings emerged from the analysis of the three civic monitoring initiatives aimed at monitoring governemnetal actors through public data. Looking at the main empirical findings, the analysis points out that monitor public actors implies tackling institutional data opacity, which is considered a red flag for corrupted behaviors. This main challenge requires a combination of two different types of strategies: *preventive* and *reactive strategies*. These strategies are characterized by different degrees of use of digital technologies. Different configurations of these strategies (and related anti-corruption practices) co-occur in defining the peculiarities of two additional types of anti-corruption infrastructures, devoted in this case to monitor public actors through (open) data. Indeed, turning to the theoretical findings, the analysis shows that both Italian and Spanish initiatives under investigation represent emblematic cases of grassroots *monitoring infrastructures*. More precisely, Openpolis and Civio have been able to build high-tech *platform-based infrastructures*, while Common has instead reinforced its repertoire of contention (and its community-based approach to monitoring at the local level through a low-tech *community-based infrastructure*. As for the whistleblowing cases, both types of monitoring infrastructures represent the main output of a specific form of activism, called *infrastructural activism*.

Finally, the Conclusion discusses in detail both the empirical and theoretical contributions of this thesis. Taking into account the main empirical

findings on both types of anti-corruption initiatives, it discusses the results from a comparative perspective, highlighting the differences and similarities between the Italian and Spanish cases, and trying to shed light on the extent to which the specificities of each country's context affect these results, even partially. Afterward, it discusses the main theoretical contribution offered by the conceptualization of *infrastructural activism*, highlighting possible links with the so-called "infrastructuralization of platform-based services" that affects research in media and communication studies. Finally, it offers concluding remarks, pointing out some limitations of the research and then suggesting possible directions that could be explored to further improve both the empirical and theoretical contributions.

CHAPTER 1

ANTI-CORRUPTION IN THE DIGITAL AGE FROM A GRASSROOTS PERSPECTIVE

Introduction

This first chapter sheds light on anti-corruption activism in the digital age by providing an overview of the current literature on the employment of digital technologies by grassroots collective actors in different scenarios.[3] The literature sheds light on the role of both commercial platforms, as in the case of social media, and non-commercial platforms created by grassroots activists with advanced skills in technology development.

Then, the chapter points out under-researched issues and open debates that characterize this emerging line of inquiry. These main gaps represent the starting point for setting out the research puzzle of the entire thesis, together with the identification of key existing concepts capable of unpacking from an inter-disciplinary perspective the main phenomenon under investigation. Indeed, this thesis builds on an integrated theoretical framework that combines social movement studies, corruption studies, science and technology studies, and media and journalism studies.

The chapter is structured as follows: the first section (1.1) points out three main gaps in the current literature. First, the understudied role of digital technologies in civil society anti-corruption practices in a systematic way. This is also the case of the few studies that examine the role of anti-corruption technologies by considering both bottom-up and top-down efforts in this fight (Adam and Fazekas 2021; Chene 2016; Inuwa et al. 2019; Kossow and Dykes 2018), as they tend to give more prominence to technologies implemented by public institutions. Second, studies of anti-corruption activism give scant prom-

---

[3] The term "grassroots collective actors" refers to non-state and non-market actors, such as less structured groups of activists, civic associations, NGOs, and social movement organizations.

inence to the entanglements between journalistic practices and the practices of anti-corruption activists in the digital age. This gap requires even more attention, as these intertwinings become even more evident when considering the process of datafication, in which so-called "data-related practices" (i.e. the creation, use and transformation of digital data) are also used by activists for anti-corruption purposes (Mattoni 2017). Third, the limited attempts to assess the impact (and outcomes) of digital technologies on grassroots anti-corruption efforts (Adam and Fazekas 2021). This gap has been exacerbated by ongoing debates around the evaluation of the effects and concrete outcomes achieved by collective actors in the fight against corruption (Davies and Fumega 2014; Kossow 2020).

The second section (1.2) provides an overview of the key concepts, theoretical and empirical approaches, and interpretive frameworks that can be employed to unpack the phenomenon under investigation. Specifically, it proposes three lenses through which to analyze the grassroots anti-corruption struggles in the digital age: "datafication", "platformization" and "hybridization". Combining these three conceptual lenses represents an attempt to shed light on the main implications of an ever-evolving process such as digitization also for anti-corruption activism.

Before looking at specific subfields of research, this section presents the term "Anti-corruption Tehcnologies" (hereafter ACTs) conceived as an heuristic tool for referring to the variety of technologies that are employed in the fight against corruption (Mattoni 2024). ACTs are defined as socio-technicalal asemblages in which social, symbolic and material dimensions co-exist.

Then, it introduces key concepts and interpretative frameworks emerging from the studies of social movement outcomes (della Porta and Diani 2020; Giugni et al. 1999; Meyer 2021). Among the variety of issues and emerging topics that cut across this subfield (Bosi and Uba 2021), this section highlights the role of digital media and technologies in shaping social movement achievements (Romanos and Sabada 2016), and it highlights a specific type of outcome, the "technological outcomes". Stick to this theme, the section introduces a key interpretive framework that comes from an emerging research

frontier that cuts across both social movement studies and science and technology studies. This interdisciplinary line of inquiry considers the creation of digital technologies as a specific type of outcome achieved by collective actors and distinguishes different types of trajectories of technological development (Weisskircher 2019). Then, this section gives prominence to the debate on how different relational dynamics between grassroots actors and public institutions affect the activists' achievements, focusing on the "institutionalization" of social movement organizations, which represent an outcome in itself. Thus, the subfield of social movement outcomes - even when intertwined with others - represents a key strand of research in the framework of this dissertation.

Finally, this section introduces the "situated" empirical approach adopted throughout the thesis. This approach argues that the study of so-called "Anti-Corruption Technologies" (hereafter ACTs) – which represents a heuristic tool to define the wide range of digital technologies used in anti-corruption (Mattoni 2024) – needs to focus on the specific context (or rather situation) in which they are developed, adopted and disseminated. This type of approach is particularly useful for unpacking the differences and similarities between the initiatives examined, going even beyond the main countries' features in which they originate.

1.1. *Digital technologies in the grassroots struggle against corruption: an overview of the current literature and the main gaps*

Grassroots anti-corruption efforts for detecting or preventing corrupted behaviors are flourishing around the world, involving local civil society organizations in collective action as well as coalitions of social movements. These different scales of grassroots opposition are increasingly incorporating a wide range of digital technologies into their anti-corruption practices, such as social media platforms, apps, data-driven portals, digital platforms for e-participation and leaking, or crowdsourced, bots, and other more advanced AI applications

(Adam and Fazekas 2021; Kossow and Dykes 2018).[4] These different digital technologies bound by anti-corruption purposes may be labeled as "Anti-Corruption Technologies", hereafter ACTs (Mattoni 2024). The term ACTs' was conceived as a heuristic tool to go beyond the purely instrumental approach adopted in corruption studies and to look at digital technologies. Following the definition proposed by Mattoni, ACTs are conceived as "socio-technical assemblages" that result from the entanglement of three main dimensions: the material, the symbolic and the social.[5]

Although most of them are seen as great allies in this fight, the literature has also begun to highlight not just their limitations (or paradoxes), such as the lack of transparency of public data but also their counter-effects, mostly related to security risks and the need for anonymity for those who disclose corrupted behaviors (cf. Adam and Fazekas 2021; Mattoni 2021).

Looking at emblematic cases in which digital technologies are employed by grassroots collective actors for anti-corruption purposes, a consistent part of the literature focuses on the role of social media platforms for favoring mobilization.[6] Considering the studies of the role played by these platforms during the "Arab Springs"– in which the fight against corruption was tied to other social contentious issues – the analysis of two specific contexts such as Egypt and Tunisia points out their capacity to "turn individualized, localized, and community-specific dissent into structured movements" (Howard and Hussain 2011). Among others, one emblematic case of employment of a specific social media to increase the visibility of the Egyptian Revolution is represented by the Facebook page "We Are All Khaled Said" (Alaimo 2015).

At the same time, recent studies point out how anti-corruption grassroots initiatives consider social media as the right digital environment not just for visibility purposes or to communicate their mission to their audiences, but for

---

[4] Several of the tools mentioned as ACTs are not or were not conceptualized as exclusively for anti-corruption purposes.

[5] For a detailed discussion on ACTs and their main dimensions: see 1.2.

[6] The following examples are characterized by a more pronounced use of certain ACTs than others, but the ecosystem in which the various AC initiatives are embedded involves more than one digital technology, includes old and new media, and is characterized by intertwined online and offline interactions.

debating anti-corruption-related issues, as in the case of three Indian bottom-up initiatives, who employ Facebook pages and visual tool for discussing among their members a specific anti-corruption policy of the central government (Chakraborty and Mattoni 2023).[7]

Concerning other types of ACTs such as crowdsourcing platforms finalized to increase transparency and accountability, Fix My Street in the UK is a pioneering case of an app developed by the charity My Society to enable citizens to report and discuss local problems and then notify street problems to the councils responsible for fixing them, thus facilitating bottom-up and top-down interactions (cf. King and Brown 2007). Over the years, the application has evolved into a project (e.g. fixmystreet.org) not only for citizens or developers who want to replicate in their local community this open-source civic technology. Indeed, there is also a FixMyStreet version for local governments, together with WhatDoTheyKnow for managing FOI requests (e.g.). The latter project represents an example of a freedom of information portal.

As regards the crowdsourcing platforms based on extensive use of data, the "mainstream" case of development of a digital public space in which exposing petty corruption, is represented by the Indian grassroots initiative "I Paid a Bribe" (Chakraborty 2024; Kossow and Kukutschka 2017; Ryvkin et al. 2017), then replicated transnationally (Ang 2014). Looking at e-participation platforms, scholars have started to go beyond the extensive research on the effects of (just) e-governance on corruption (Chêne 2016; Gans-Morse et al. 2018), pointing out cases in which e-participation processes were enabled by grassroots actors. One emblematic example is represented by an Estonian civic portal (i.e. rahvaalgatus.ee), which originated from a bottom-up collaborative effort (Huss, 2024).

At the same time, scholars investigate the growing use of data-related practices for anti-corruption purposes in specific settings such as Italy and Spain (Mattoni 2017), comparing two campaigns, respectively "Senza Corruzione Riparte il Futuro" and 15MpaRato as a reaction to the scandal well

---

[7] Association for Democratic Reforms, I Paid a Bribe, and the India against Corruption movement.

known as "el caso Bankia". The Spanish campaign ended with the development of a digital whistleblowing platform based on the GlobaLeaks software, characterized by a high standard of security and anonymity (Mungiu-Pippidi and Dadašov 2016; Walle 2020). For the so-called "data activists" big data - but even small data (Mattoni 2021) - may be capable of supporting both accountability and downward transparency mechanisms (Taylor et al. 2014). More recently, these data-related practices have been investigated also in conjunction with data journalism for creating grassroots data-driven platforms and data portals, giving more prominence to data-transformation practices carried out by Italian and Spanish initiatives (Fubini 2023a).

Looking at the employment of more advanced technologies, recent studies investigate the case of "Rosie", a bot developed by tech grassroots actors, which independently monitors the public expenditure of Brazilian deputies and uses Twitter to encourage people to discuss any suspicious activity (Odilla 2023). Starting from the case of Rosie and comparing more than thirty initiatives (originated both top-down and bottom-up), scholars have started to explore the pioneering cases of using AI to detect or prevent corrupt behavior (Arvik 2019; Köbis et al. 2021) also from below (Odilla 2023; Odilla and Mattoni 2023). They cast light on both potentialities and limitations related to the use in the anti-corruption struggle of advanced technologies based on AI, that differ from the others "by a degree of autonomy" (Odilla 2023, 354).[8]

The examples mentioned so far show that the study of anti-corruption in the digital age from the grassroots perspective is characterized by a growing interest over time by scholars from different research fields (Fubini and Mattoni 2020). However, such rapid growth leads to fragmentation within the line of inquiry, which is also due to the highly interdisciplinary nature of the topic. There are still very few studies on this phenomenon that look at multiple types of ACTs in multiple geographical contexts (Adam and Fazekas 2021), or research that focuses at the same time on the opportunities as well as the limita-

---

[8] Odilla defines AI in the framework of anti-corruption: a "data processing systems driven by tasks or problems designed to, with a degree of autonomy, identify, predict, summarise, and/or communicate actions related to the misuse of position, information and/or resources aimed at private gain at the expense of the collective good" (2023, 354).

tions and challenges related to technologies for fighting corruption (Mattoni 2021). Additionally just a few deal with the different approaches for studying the leading role of digital media in the fight against corruption from below (Mattoni 2021).

The excessive fragmentation of such a highly interdisciplinary field of study is also the result of the existence of some gaps in the literature, which have emerged mainly by focusing on studies aimed at systematizing specific issues related to fighting corruption from below. These main gaps - from which this research project originates - are further explored in the following subsections.

1.1.1 *The under-researched role of digital technologies in civil society anti-corruption practices*

While the centrality of civil society organizations in the fight against corruption is widely recognized in studies that cross both corruption and social movement studies (della Porta 2018; della Porta et al. 2017; della Porta and Mattoni 2021; Grimes 2008; Johnston 2012, 2013; Larsson and Grimes 2022; Mungiu-Pippidi 2013a, 2013b; Rose-Ackerman and Palifka 2016; Rotberg 2017), few scholars examine systematically how these actors include in their anti-corruption practices different types of digital tools and with which consequences (Adam and Fazekas 2021; Mattoni 2021).

According to the literature, grassroots actors perform a variety of anti-corruption practices and activities to support their struggle (Bader et al. 2019; Carr and Outhwaite 2011; Hollaway 2006; Huss et al. 2023). Bader and colleagues (2019) point out six main civil society anti-corruption activities: monitoring and reporting, awareness-raising, advocacy, direct action, capacity building, and co-governance. These activities may be tied to other anti-corruption practices that deal with increasing transparency through open data, citizen engagement, collective action, and integrity promotion (Huss et al. 2023). The majority of these practices represent "ways of increasing societal accountability", intended as "a mechanism of control" carried out by civil society associa-

tions and movements (and media) aimed at exposing governmental wrongdoings (Smulovitz and Peruzzotti 2000). Indeed, these actions may consist of signaling governmental wrongdoings including corrupt behaviors, exerting political pressure and symbolic sanctions, and establishing permanent monitoring organizations (Peruzzotti 2012). [9]

Additionally, different practices may be tied to different "roles" played by civil society in this fight, distinguishing between education, communicative, representational, watchdog, and cooperative roles (Bader et al. 2018). The educational role is based on awareness-raising campaigns as the main instrument. The communicative role, instead, is exerted through public forums, citizen auditing, and monitoring. Representational role refers to coalitions and partnerships. The watchdog role is almost connected with citizen auditing and monitoring, and it is strictly tied to social accountability (Joshi and Houtzager 2012). Finally, the cooperative role is tied to the so-called "sandwich strategy", theorized by Fox (2015) in which civil society interplays with e-governmental initiatives, trying to exert the already mentioned social accountability, going beyond a too-weak horizontal accountability.

However, these attempts to identify different anti-corruption practices and their main instruments include just partially the wide range of digital technologies, such as the case related to the use of open data for increasing transparency (Huss et al. 2023). Looking at the systematic literature review conducted by Inuwa and colleagues (2019), they point out different types of strategies to curb corruption, distinguishing between the traditional AC strategies, i.e. political and governmental AC strategies, the economic AC strategy, and the socio-cultural AC strategy. They follow the transparency and accountability AC strategies based on government transparency (open government data initiatives), right to know (press freedom), (voice and) accountability. Finally, the authors shed light on technological AC strategies, distinguishing between e-government systems, internet penetration, social media, and mobile phones. Nevertheless, they emphasize the use of technology by government institutions

---

[9] For a further discussion on social or societal accountability, see section 1.2.

instead of grassroots actors. Then - even more crucial - they do not provide a critical understanding of the entanglements between these tech strategies with the previous ones. One of the few exceptions is the research conducted by Adam and Fazekas (2021), which examines cases of digital technology adoption by civil society organizations as well as institutional actors and related consequences for the AC struggle.[10]

Another attempt to examine more systematically how grassroots actors use digital media to fight corruption is an analysis of 69 academic articles published on the topic between 2009 and 2019. (Fubini and Mattoni 2020).[11] This study casts light on the main types of grassroots practices in which digital media are employed. It points out that the use of digital media – and consequently their roles – is most frequently associated with the following practices: gaining visibility through communicative actions and raising public awareness about corruption and anti-corruption initiatives. In some cases the tentative for increasing public awareness counts also the production from below of pieces of information. The practice of gaining visibility is defined as "the wide array of communicative actions made up for the spreading of one's own views, messages and values beyond the narrow boundaries of one's own organization" (Ceccobelli 2019, 150). Raising public awareness – thus exposing corrupted behaviors –instead, is an activity to combat corruption carried out by civil society organizations (Carr and Outhwaite 2011; Sampson 2010) and at the same time corresponds to the main role fulfilled by journalism in the same fighting (Camaj 2013). As described in the following sub-section, the innovative side of digital technologies may, for instance, foster hybridity dynamics between different fields and their main actors – as in the case of (data) journalism and (data) activism. Thus, these dynamics create new entanglements between practices, tools, skills, and values.

---

[10] See 1.1.2 for a detailed discussion on the research carried out by Adam and Fazekas (2021).
[11] This draft paper is based on a systematic literature review on digital media and their uses in anti-corruption from the grassroots that counts 69 academic articles published between 2009 and 2019. The SLR was conducted following a bibliographic search on four central indexed scientific literature databases - Web of Science, Scopus, Ebsco, and ProQuest. The provisional findings were presented during ECPR General Conference 2020.

1.1.2 *The underestimated blurring boundaries between journalism and activism in the fight against corruption: looking at their (data-related) practices*

Looking at the literature on journalism in the fight against corruption, a significant number of studies look at (news) media as a particularly relevant arena for studying the social constructions of corruption (Berti et al. 2020), starting from a critical conceptualization of the so-called "watchdog role" of journalism (Ettema and Glasser 1998; Norris 2014; Tumber and Waisbord, 2004; Waisbord 2000), or more, in general, the "social function" of journalism (Allern 2002). Notably, there is a line of investigation that looks at the legacy media coverage of the corruption issue and its effects, which fosters extensively the broad debate around the political role of media within the corruption arena (Mancini 2018; Mancini et al. 2017). [12] Scholars point out the existence of controversial roles and the negative impact of journalism in (un)covering corruption issues (Mancini et al., 2016; Skolkay, 2016) and the politicization of corruption and anti-corruption strategies at the level of politics, policy, and polity[13]. The issue of media coverage is also investigated looking at the symbolic dimension of corruption (Bratu and Kažoka 2018).

Although some authors recognize the central role of free media and journalism in the fight against corruption – referring in particular to investigative journalism initiatives[14], they do not directly associate them with civil society organizations in a joint effort (see Weder and Brunetti 2003; Färdigh et al. 2012), except in the case of "cohesive" coalitions in which journalists and media are also involved as active partners (Mungiu-Pippidi 2010). Other scholars, instead, define the relationship between digital media and anti-corruption strategies from below in terms of "watchdog function" (Mullard and Aarrik 2020) generally tied to the role of journalism, already mentioned above.

---

[12] See the project co-funded by the European Commission under the Seventh Framework Program: Anticorruption Policies Revisited (ANTICORRP), and in particular its "Work Package 6" which analyzed the relationship between media and corruption.
[13] See MIUR PRIN 2017 – 2017CRLZ3F: "PolitiCanti. The Politicisation of Corruption and Anticorruption Strategies in Italy" and it follows the path of the ANTICORRP.
[14] Organized Crime and Corruption Reporting Project (OCCRP), International Consortium of Investigative Journalists (ICIJ)

However, less attention is paid to the potential contribution of hybrid forms of journalism and even less on how data journalism can be linked to data activism through the hybridization of skills and roles. Nevertheless, looking at the open debates around the broad theoretical framework of data activism, some scholars point out the necessity of finding practices able to make alternative data narratives count (Milan and van der Velden 2016).

A response to this question may arise by examining the emergence of hybrid forms of data activism and data journalism in the fight against corruption from below, where the practices ascribed to content production seem to hold a more central role (Fubini 2024). Indeed, considering the centrality acquired by the various types of data and the related practices also for anti-corruption purposes (Mattoni 2017), an emblematic case of these "blurring boundaries" (Loosen 2015) is represented by data journalism and data activism fields of action (Appelgren and Salaverría 2018; Baack 2018, Cheruiyot et al. 2019, Gray and Bounegru 2019, Fubini 2023a, Milan and Gutiérrez 2015).[15] The "liminal spaces" (Chadwick, 2013) between the two fields rest on what Baack (2018) defines as the "complementary values and ambitions", i.e. transparency and the freedom of information also in terms of access to public data, and what Gray and Bounegru (2019) consider as a "boundary object" between the two, i.e. dataset (Fubini 2023a).

Thus, the innovative side of digital technologies may for instance create new hybrid forms of activism that come close to other fields, such as the case of journalism, shedding light on how different actors may instead share practices, tools, skills, and values. Additionally, looking at digital media and technologies as "innovative" and not just "additional" tools, this strand of literature stays in continuity with the emerging trend in media studies in conjunction with social movement studies that consider the wide range of digital technologies and media as "game changers" in the hands of grassroots actors (Earl 2016), considering both their potentialities but also dysfunctionalities. As ex-

---

[15] For a discussion on the blurring of boundaries between activism and journalism, see: Ahva, 2017; Baack, 2017; Deuze & Witschge, 2020; Gray & Bounegru, 2019; Hamilton, 2016; Milan & Gutiérrez, 2015; Powers, 2018; Russell, 2016.

plained in the following sub-section, looking at the advantages but also at the counter-effects of digitalization for fighting corruption, represents (just) the first step to cast light on the impact(s) that digital technologies have in this struggle.

1.1.3 *Limited attempts to assess the impact (and outcomes) of digital technologies on grassroots anti-corruption efforts*

Considering social movement and corruption studies, scholars have recently explored the consequences of anti-corruption activism (Almén and Burell 2018; della Porta and Mattoni 2021), but just partially in interaction with the use of digital technologies (Adam and Fazekas 2021; Mattoni and Odilla 2021). Among the few attempts to study the consequences of the use of ACTs by grassroots collective actors, three different tendencies can be identified. Some studies focus on the positive and negative consequences of incorporating digital tools and technologies in the fight against corruption. Finally, few studies have attempted to assess the impact of different types of ACTs on corruption, showing that their impact is limited due to, for example, low levels of security in the implementation of ACTs and lack of transparency in terms of data availability and accessibility. The limitations outlined represent challenges that the various actors involved in the fight against corruption in the digital age need to address to improve their effectiveness.

Moving from the broad debate on the relationship between grassroots contentious politics and digital media (Mattoni 2021), the literature on this topic distinguishes among positive implications and dysfunctionalities of digital technology usage for anti-corruption purposes. Looking at the potentialities of some of these tools for the struggle against corruption, scholars refer to the possibility of digital technologies to promote transparency and accountability as well as to identify and reduce corruption (Kossow and Kukutschka 2017; Martinez and Kukutschka 2016). Some authors put more emphasis on crowdsourcing and whistleblowing platforms employed by grassroots actors as technologies for increasing the upward transparency mechanism, thus from

grassroots actors to governmental institutions (Adam and Fazekas 2021; Kossow 2020). Looking at research on open data from a broader perspective, some scholars point out their potential to enable in certain circumstances the surfacing of corruption behaviors (Damm et al. 2019).

Considering data-related practices, seems that data obtained by digital technologies represent an increasingly relevant layer in the framework of anti-corruption. The role of data also depends on the type of data: some scholars show that big data sustains accountability and transparency mechanisms (Taylor et al. 2014), while others invite to adopt a broader conception of data, going beyond the distinction between "big" and "small" data (Mattoni 2021).

On the other hand, scholars shed light on how extensive use of open data (Yu and Robinson 2012) and a wrong perception of the relationship between transparency and accountability (Huss and Kendel 2020) affect the downward transparency mechanism, promoted by top-down actors to bottom-up, thus civil society (Adam and Fazekas 2021; Davies and Fumega 2014), going beyond a normative conception of open data.

Concerning other dysfunctionalities - that may be increased also through the use of digital technologies - some scholars point out the widespread resignation as a negative effect of the increase of transparency in highly corrupt countries (Bauhr and Grimes 2014; Zinnbauer 2015). Furthermore, some scholars have started to highlight the double-edged sword of the digitalization process that in some cases fosters corruption instead of curbs it. In fact, both low and high-tech digital technologies may become facilitators of corruption practices, creating new opportunities for corruption, related to dark web, cryptocurrencies, or the misuse of technologies such as centralized databases (Adam and Fazekas 2021) and enabling several counter effects, such as supporting illegal activities (Shelley 2014) also at the transnational level (Pyrooz et al. 2015).

However, pointing out potentialities and limits represents just a first step for measuring the impact and effectiveness of these digital tools on grassroots anti-corruption effort, albeit evaluating the impacts and the concrete outcomes achieved by collective actors in the anti-corruption struggle is still a matter of

debate (Davies and Fumega 2014; Kossow 2020). According to Kossow, "Research suggests that these [digital] tools can be used to lower corruption, but not under what circumstances or how. This points out specific research questions that look at the interaction of ICT tools with other factors contributing to the control of corruption" (2020, 157).

In fact, an intermediate step consists of looking at the different types of factors that may be conducive to increasing the effectiveness of grassroots initiatives in tackling corruption. Scholars distinguishes between "systemic" (or structural) factors, contextual factors and features of the AC initiatives in themselves. However, the majority of these studies do not mention digital technologies as one of these "enabling" factors. Nonetheless, looking at these studies allows us to identify gaps in the literature and potential directions for research that have not yet been explored, which is where this thesis seeks to fit in.

As pointed out by Bader and colleagues (2018), the systemic factors rest on features of the political system, intended as specific attributes of democracy: scholars emphasize a high level of democratization, respect for the rule of law, governmental transparency, and political competition. The societal systems, instead, should be characterized by a low level of civil society fragmentation, low competition for resources and influence between grassroots actors, and strong support by individual anti-corruption activities (Bukenya et al 2012; Holloway 2008). As concern the "contextual factors", the centrality is gained by donor commitments and support, although this factor is not immune to criticism and limitations (Vukovic 2014). Another crucial contextual factor consists of the presence of a generally favorable legislative environment, as emerged from research in specific countries, such as the Indian (Bhargava 2012) or Romanian cases (Mungiu-Pippidi 2005).

Finally, the third type of factors that facilitates an effective AC struggle is tied to the features of the grassroots AC initiatives themselves. Indeed, in consistency with the "situated" conception of corruption and anti-corruption struggle (Marquette and Peiffer 2015) adopted in this research (see 1.2), seems that from key CSOs' features emerge some crucial challenges of fighting. These key features may be clustered into "organizational characteristics" on the one

hand, and "advocacy strategies" on the other hand. Looking at the organizational aspects, the first factor is represented by the so-called "CSO capacity", intended as human and financial resources. Among human resources, scholars highlight first and foremost the necessity to increase the professionalization of citizens (or "support base") who participate in the anti-corruption struggle carried out by CSOs (Kalikh 2015). Indeed, "As volunteers become more professional in their work, this helps make civil society organizations work more effectively as well" (Bader et al. 2018, 10). An additional advantage is represented by including human resources with specialized professional skills, such as a deep knowledge of legislation.

Looking at the advocacy strategies, scholars highlight the importance of "timing" for AC actions (e.g. during election campaigns), formulating feasible objectives (i.e. the factor of concreteness), and - even more crucial - building partnerships between peers and with state and governmental authorities. As regards the relational dynamics between grassroots actors, some authors shed light on "concreteness", intended as focused initiatives with clear aims and a high level of internal cohesion that looks also at creating or reinforcing coalitions with other grassroots actors. Instead, building partnerships with state and governmental authorities means looking for cooperation (Hodess 2013; Vukovic 2014), instead of a confrontational approach to "expose and oppose" those in power (Eaton 2003, 470).

Cooperating with institutional actors represents an additional key factor in increasing the "effectiveness" of CSOs in the AC struggle. Nevertheless, as in the case of donors, some forms of strict cooperation with state or governmental actors have counter-effects (Chêne and Dell 2008). Najam (2000) distinguish among four types of relationships between CSOs and governmental actors: cooperation, confrontation, complementarity and co-optation. These different relational dynamics may affect the process of institutionalization of a collective actor.[16] Additionally, building up coalitions based on a cooperative approach is strictly tied to the political will of the authorities or their representatives. In this

---

[16] The institutionalization of a social movement organization, which is both a process and an outcome will be discussed in the following section (see 1.2.2).

regard, some scholars emphasize cooperation with authorities at the local level, as in the case of municipalities (Abers 1998; Huss et al. 2019; Wampler 2008).

Coming back to corruption studies, some scholars highlight a positive correlation between a high number of civil society actors and better control of corruption practices (Mungiu-Pippidi 2015). Others, instead, point out that anti-corruption efforts seem to be less effective with the high number of actors involved: a good balance occurs when just a few professional civil society organizations obtain a leading role (Grimes 2008). According to Fox (2015), the coalitions between civil society organizations and other types of actors that fight against corruption seem to achieve better results.

The 'conducive' factors and features of the CSOs involved in the fight against corruption - including the propensity to collaborate with external actors - relate to the so-called ACTs and inevitably influence their impact. Indeed "anti-corruption effects are mediated by the socio-economic context and the broader accountability framework" (Adam and Fazekas 2021, 12).

Finally, looking at the contribution provided by Adam and Fazekas (2021), the authors make a step forward in distinguishing between four "impact mechanisms" related to the effect of digital tools on corruption, based on the understanding that corrupt transactions take place between public and private actors: via "downward" or "upward" transparency, following administrative processes, and through collective action. The downward transparency mechanism refers to government activities that are made available to citizens, thus finalizing the improvement of vertical accountability (Bauhr and Grimes 2017) and reducing information asymmetries (Grönlund et al. 2010).

On the contrary, the upward transparency mechanism implies the transfer of information from citizens to different levels of government or public officials. As regards the impact of digital technologies on administrative procedures, authors highlight a reduction of petty corruption by automating and standardizing processes within government, thereby reducing officials' discretion and increasing opportunities for oversight, thus contributing to horizontal accountability. The last mechanism is tied to collective action in which digital tools may drastically lower the cost of coordination within the CSOs. However,

each of these mechanisms may also foster counter effects: indeed there are both positive and negative impacts of emerging technologies on corruption, depending on how impact mechanisms interact with contextual factors.

Their research rests on the analysis of concrete cases of employment of digital tools for anti-corruption and shows how is still complex to assess the impact of these tools almost adopted by governmental institutions. Thus, although the majority of the empirical cases analyzed by the two authors refer to top-down efforts - except crowdsourcing platforms, as for example in the case of the already mentioned I Paid a Bribe in India (see Chakraborty 2024) – the authors argue that assessing the impact of technologies on reducing corruption is a challenge in itself. Nonetheless, their analysis sheds light on the limitations or weaknesses of technologies that can also be used by CSOs and collective actors, such as the issue of anonymity crucial for the development and employment of a whistleblowing platform, or the limitations of transparency portals and thus the problems of effective availability of public data. Both examples suggest that these tools are not a "panacea" for the fight against corruption and neither their availability is tied to a positive impact. These two challenges, both for CSOs who deal with whistleblowing and for those involved in monitoring state and government institutions through public data, represent one of the criteria for selecting the empirical case studies of this thesis.[17]

The discussion of the main gaps in the literature has introduced some 'key concepts' that contribute to defining the theoretical perimeter within which this research moves (e.g. the hybridization between data journalism and data activism, the centrality of relational dynamics between both grassroots and institutional actors movin in a continuum between cooperation and cooptation, the need to the evaluation of the impact or outcomes of ACTs). Hence, it is the following section that provides a broader overview of the main theoretical approaches and concepts inherent to this thesis, which will form the basis of the final discussion of the main findings at both empirical and theoretical levels.

---

[17] See Chapter 2, sub-section 2.1.2

1.2 *An interdisciplinary theoretical framework for studying grassroots struggle against corruption: key strands, approaches and concepts*

This section provides an overview of the main theoretical approaches, interpretative frameworks and key concepts to unpack the interdisciplinary topic of this thesis. Indeed for investigating the anti-corruption activism in the digital age, this dissertation draws on an integrated theoretical framework that combines Corruption Studies, Science and Technology Studies, and Social Movement Studies. Drawing on the long history of collaboration between the latter two fields, this section introduces analytical lenses and concepts also from media and journalism studies. They are especially useful for exploring how media transformations have relevant implications not only for public life and media studies in general (Powers and Russell 2020) but specifically for grassroots anti-corruption struggles and related research.

To shed light on how media transformation affects also the grassroots struggle against corruption, this section presents the processes of datafication, platformization, and hybridization as three analytical lenses for exploring anti-corruption activism in the digital era. Looking at "datafication", the main related concept corresponds to the notion of "data activism" and the associated theoretical framework well established in social movement studies (see Milan 2017, 2024; Milan and van der Velden 2016). Data activists or "grassroots tech groups" (Hintz and Milan 2009) and their propensity to build up data-driven technologies that may represent an outcome in itself (Weisskirkcker 2019), resonate also with the role of the so-called "tech-oriented social movements" tied to the STS perspectives (Hess 2005).

As regards "platformization" (Bucher and Helmond 2018; Gillespie 2010; Nieborg and Poell 2018; Nieborg and Poell 2019; Plantin et al. 2016; van Dijck et al. 2018), some additional concepts and theoretical implications arose: first and foremost the connection between the notion of platforms with the concept of "infrastructure" (van Dijck et al. 2018), as for "data infrastructure" for datafication. However, in this case, theoretical implications seem to be more inci-

sive for the overall debate in Media Studies. Indeed, scholars have started to cast light on the so-called "infrastructural turn" that affects also Media Studies (Plantin and Punathambekar 2019), tied to the broad phenomenon of the "infrastructuralization of digital platforms" (Plantin et al. 2018).

Considering "hybridization", the related notions and interpretative frameworks deal specifically with the concept of "blurring" or "shifting" boundaries" (Carlson and Lewis 2015; Loosen 2015) between different fields or arenas of contention.[18] Here again, the issue of power dynamics and their reconfiguration acquire centrality through the concepts of "boundary-drawing power" (Chadwick and Collister 2014) and to the role of specific grassroots actors as agents in the "media vanguards" (Russell 2016). Then, this lens is strictly tied to the "hybrid media system" as the main theoretical framework introduced by Chadwick (2012, 2917) characterized by a "holistic" approach, which resonates with by the integrated "media ecology perspective" adopted also by social movent scholars.

This section then introduces the concept of "Anti-Corruption Technologies" (i.e. ACTs), conceived as a heuristic tool (Mattoni 2024) useful to define the digital technologies adopted for anti-corruption purposes and their features at the material, symbolic, and relational levels, together with other key concepts such as "affordances" (see Gibson 1997; Hutchby 2001) and "sociotechnical imaginaries" (see Hess and Sovacool 2020; Jasanoff 2015). The focus then shifts to theoretical frameworks and conceptual lenses drawn from the research on the "outcomes" of social movements and collective action (Earl 2000; Meyer 2005; Giugni 2008), in conjunction with a new research frontier that considers the development of technologies as an outcome in itself, achieved by collective actors (James 2014; Romanos and Sabada 2016; Weisskircher 2019). This subfield represents a key research strand for this dissertation, also considering the research questions that guide this dissertation,

---

[18] The use of the term 'arena' in this thesis is equivalent to 'field', though without reference to the 'Players and Arenas' theoretical framework introduced by Jasper (2022). Concerning the term 'field' and its boundaries, it is used as a spatial metaphor to understand the process of hybridization between (data) journalism and (data) activism. Again, there is no reference to Bourdieu's field theory (1992, 2005).

which is mainly dedicated to investigating the impact of ACTs on the relational dynamics between grassroots actors and governmental or state actors. Indeed, this section highlights the debate around the "institutionalization" of social movement organizations (Amenta et al. 2010, 2018), also conceived as (failure) outcomes, thus "cooptation" (Gamson, 1975). Finally, this section clarifies the (empirical) "situated" approach (Mattoni 2021) chosen to study the phenomenon of anti-corruption in the digital age, looking at corruption studies and their approaches, after having highlighted a central concept extensively discussed in this field of studies: accountability and its various declinations (Joshi and Houtzager 2012).

1.2.1 *Datafication, platformization and hybridization: three analytical lenses through which looking at the grassroots struggle in the digital age*

This subsection presents key concepts and interpretative frameworks emerging from three interrelated processes: respectively datafication, platformization, and hybridization. In the context of this thesis, they are considered key analytical lenses for investigating the peculiarities of the grassroots fight against corruption in the digital age.

"Datafication" is conceptualized as "the process of rendering into data aspects of the world not previously quantified" (Kennedy, et al. 2015, 1), thus "the ubiquitous quantification of social life (Mayer-Schönberger and Cukier 2013, 78). According to the literature, datafication represents a turning point that affects the spheres of action of our societies (Hintz et al. 2018; Mayer-Schönberger and Cukier 2013; van Dijck 2014) – or the (data) agency due to its deep connection with the distribution of knowledge and power (Couldry 2014; Kennedy et al. 2015), and anti-corruption activism is not an exception.[19] Mayer-Schönberger and Cukier (2014) speak about a "data revolution", whereas

---

[19] With the concept of agency, here the section refers to "the longer processes of action based on reflection, giving an account of what one has done, even more basically, making sense of the world *so as* to act within it" (Couldry, 2014: 891)

Kitchin (2014) highlights the rise of "data infrastructures" built upon big data and open data.[20]

However, the concept itself is not immune to criticism: according to Pybus et al. (2015), datafication frames citizens as "primarily passive data producers". The authors instead point to the notion of "data-making", defined as "a strategic mode of agency that can emerge when the subjects of datafication are given tools to both understand and work with the data they produce" (2015, 4). As Kennedy and colleagues (2015) argue, it is only by adopting this "action-oriented" perspective that it is possible to 'critically leverage what Jenkins (2008) defines as "participatory culture" into the realm of datafication. In practice, this means giving prominence to "data literacy", which is seen as a constitutive component of data agency.

Looking at the paradigm shift of datafication from the perspective of civil society, Baack (2015) points out the specific connection between datafication and grassroots empowerment through open data, shedding light on both limits and potentialities. The author investigates how activists in the open data movement "reshape" the notions of democracy, participation, and journalism by bringing practices and values from open-source culture to bear on the creation and use of data.

Milan made a step forward, considering the "reshaping" of the notion of activism and theorizing the concept of data activism (2017) and "datafied activism" (Milan and Berlando 2024). In the earlier theorization, Milan defines data activism as an ensemble of "sociotechnical practices of engagement with data […] or the encounter of data and data-based narratives and tactics with collective action" (2017). The concept of narratives was then tied to the notion of "social imaginaries" (Lehtiniem and Ruckenstein 2019). According to Milan and colleagues, data are "mediators" that constitute the premise for practices as in the case of "data-enable activism" (2016) in which data politics represents the prerequisite for "contentious politics of data", thus datafication becomes an

---

[20] The centrality of the concept of "infrastructure" is even more evident considering the "platformization" lens, in which scholars point out the "infrastructuralization of technological platforms" to the point of speaking about an "infrastructural turn" also in Media Studies.

issue of conflict (Beraldo and Milan 2019). Then the authors focus on mutual shaping between activism and data: "We thus understand data activism as a critical relation with and towards data (Beraldo and Milan 2019, 3). This relation is perceived as a continuum between proactive or reactive practices along which activists position and reposition themselves and their tactics.

So far data activism constitutes more than a theoretical concept, but "a heuristic tool for the study of new forms of political participation and civil engagement with data ("proactive data activism", e. g. databased advocacy) and tactics of resistance to massive data collection ("reactive data activism", e. g. encryption practices)" (Milan and van der Velden 2016). Both proactive and reactive forms of activism are tied to processes of creation and implementation of a variety of technological platforms, in which a key role is played by "grassroots tech activists" (Hintz and Milan 2009), also called from an STS perspective as "tech-oriented social movements" (Hess 2005). These grassroots technologies represent "objects of intervention" (Milan and van der Velden, 2016, 67). This conception echoes the role played by 'boundary objects', capable of bridging gaps between social worlds in a more egalitarian mode of "intergroup communication" (Star and Griesmer, 1989). At the same time boundary objects become necessary "to negotiate areas of overlap between multiple social worlds": indeed they are embedded in very particular social contexts, and they are also located at the nexus of very specific relations of power (Bowker and Star 1999). [21]

Moving to the lens of "platformization", in "The Platform Society" (van Dijck et al., 2018), the authors offer a comprehensive analysis of a connective world based on a platform ecosystem "where platforms have penetrated the heart of societies - disrupting markets and labor relations, transforming social and civic practices, and affecting democratic processes", thus also the grassroots anti-corruption struggle. Moving forward, the authors highlight how plat-

---

[21] Recent research introduces the theoretical category of "data arenas" for defining the relational dynamics of actors involved in data activism, going beyond a conceptualization of "data infrastructure" and being able to capture issues of power dynamics between actors (Slosarski, 2023).

forms are conceptualized as infrastructures - "as a programmable architecture designed to organize interactions between users" - that affect society at three levels: the micro-level of individual platforms, the meso-level of the platform ecosystem, and the macro-level of platform geopolitics. According to Gillespie (2010), platforms are a combination of different aspects: computational architectural, figurative, and political. Focusing on the latter, the process of platformization highlights the tensions between users, commercialization, and regulation: so contentious relations and power dynamics are put in place. Moreover, Helmond defines platformization as "the rise of the platform as the dominant infrastructural and economic model of the social web and its consequences" (2015, 1).

A different perspective is introduced by Hutchinson (2019). The author maps the process of fragmented platformization, called "micro-platformization", to highlight that actors engaging in the practice of digital activism need to adopt similar strategies to their commercial counterparts, which means including strategies that reflect the successful practices of social media logic (van Dijck and Poell 2014).

Considering the theoretical implications tied to this process, recent research points out the "infrastructural turn in media studies" (Plantin and Punathambekar 2019), trying to reconstruct from a theoretical perspective how the concept of digital platforms may be tied to the infrastructural approach, speaking about the "infrastructuralization of digital platforms" (Plantin et al. 2018). Thus a growing number of scholars are re-focused their attention on the social, material, cultural, and political dimensions of the infrastructures (Mattern 2016; Parks and Starosielski 2015; Peters 2015; Plantin et al. 2018).

Then, the third lens is represented by "hybridization". This concept emerges within the debate on interactions among older and newer media logics (Altheide and Snow 1979), where logics consist of technologies, norms, behaviors, and organizational forms. Speaking about "hybridity dynamics" (Chadwick 2013, 2017) clarifies how digital media and technologies enable a whole range of different activities that previously weren't possible in the broadcast-dominated media system, and how changes in politics are linked to changes in

communication and information infrastructures and tools. This lens is strictly tied to what Chadwick (2013) defines as the "hybrid media system", which represents a theoretical framework based on the adoption of a holistic approach beyond dichotomies. This "holistic" focuses on the interstitial and liminal spaces between media, their logics, their practices, and the actors involved in media practices. At the same time, this theoretical framework represents a powerful mode of thinking about media and politics "because it foregrounds complexities, interdependence, ad transition. Hybrid thinking rejects simple dichotomies, nudging us away from "either r/or" patterns of thought and toward "not only but also" patterns of thought. It draws attention to flux, in-betweenness, the interstitial, and the liminal" (Chadwick 2013, 4).

However, the concept of hybridity is not immune to criticisms (Witschge et al. 2019) and dysfunctionalities (Chadwick 2017; Russell 2020): firstly and foremost the related risk of oversimplification instead of being a tool for depicting the ongoing changes in specific fields of studies.

Beyond the criticisms around the concept in itself, this "hybridity thinking" has also acquired a growing interest among scholars who deal with social movement studies, adopting a "media ecology perspective" (Mattoni and Trerè, 2016; Trerè, 2019. More specifically, an integrated conception of media ecology implies that "media and technologies, subjects, and socio-political forces co-exist in the same environment" (Scolari 2012, 10). This specific conception of media ecology may be employed also to shed light on the nexus between ACTs and grassroots collective actors in a context of multi-layered and hybrid media ecologies, in which the boundaries between the digital and the non-digital, the online and the offline, the mainstream and the alternative become increasingly blurred (Mattoni 2017; Trerè and Mattoni 2016).

Moving from hybridity dynamics between media to hybridity dynamics between actors and their main repertoire of actions (or practices), an emblematic case is represented by journalism and activism, which constitutes a prominent line of inquiry in itself (see Ahva 2017; Baack 2018; Deuze and Witschge 2020; Gray and Bounegru 2019; Hamilton 2016; Powers 2018; Russell 2016). Media and Journalism scholars speak about "blurring" or "shifting boundaries"

(Carlson and Lewis 2015; Loosen 2015), to point out this process of hybridization between journalism and other fields. Additionally, the blurring boundaries among fields (o arenas) may exacerbate contentious relations between the heterogeneous actors involved in journalism practices (Deuze and Witschge, 2020; Lewis 2012; Wall 2017). According to Gieryn (1983) the unstable nature of these relations depends on the different stages of negotiation between professional journalists - who try to exercise the boundary-drawing power (Chadwick and Collister 2014) - and alternative journalists (Atton 2009; Wall 2017). The main result is the increase in tension between professional control and open participation (Lewis 2012) from the center of the "field" to the periphery, as pointed out by Eldridge (2017). The author, applying the Theory of Field (Bourdieu 1992, 2005) as a conceptual lens, guides the reader through the tensions that cross both the center and the periphery of the journalistic field: Emerging from the disruption of digital technology, these new actors have been met with resistance by an existing core of journalism, who perceive them as part of a 'digital threat'.

These tensions also imply a reconfiguration of media power between hacktivism sensibilities and norms and practices of professional journalism, as pointed out by Russell (2016): "The media vanguard […] is made up of activists, technologists, and reporters whose work is informed on some level by hacker-activists sensibilities […] They are at the crest of a wave that is changing how media power is being negotiated in the hybrid media environment" (2016, 12). The author points out the process of recoding the media power considering a variety of social actors and new media tools as "vanguards" able to expand and distribute the grassroots power, pressing social issues. More precisely is the media competence the key arena of power. This process deals in particular with the tension between hacktivism sensibilities and norms and practices of professional journalism, which can also affect the relational dynamics between the various social actors involved in fighting corruption.

In sum, starting from these three analytical lenses, this first subsection has thus highlighted the main concepts and notions related to what are considered to be the three main processes associated with the more general phenomenon of

digitalisation, which inevitably has theoretical (and empirical) implications also for the phenomenon that this thesis seeks to investigate. Therefore, the choice to use these three analytical lenses constitutes a kind of premise for the further exploration of other concepts, notions, approaches and interpretive frameworks introduced in the following subsections.

1.2.2 *Defining digital technologies for anti-corruption purposes: unpack their features at the material, symbolic, and relational levels*

This thesis examines how different types of digital technologies are used by civil society organizations and, more generally, by grassroots actors to fight, prevent, detect or expose corruption. Concrete examples of these tools include open data portals, crowdsourcing platforms, social networking sites, specific apps, bots and other cutting-edge tools based on artificial intelligence. However, the rapid emergence of new ones, as well as the discontinuous use of these different tools, has made it extremely volatile to find a specific terminology that can capture them all (e.g. digital media, ICT). Moreover, each of these technologies is defined by specific "affordances" (see Gibson 1997; Hutchby 2001) and "socio-technical imaginaries" (see Hess and Sovacool 2020; Jasanoff 2015). Considering these terminological challenges, this research adopts the recent conceptualization provided by Mattoni (2024). The author proposes the term Anti-Corruption Technologies (hereafter ACTs) conceived as "socio-technical assemblages" resulting from the intertwining of three main dimensions: the material, the symbolic, and the social.[22]

The material dimension refers to the material objects and infrastructures of which ACTs are made, which also include their main affordances. Looking at Hutchby's definition of affordances, located between social constructivism and technological determinism and based on Gibson's conceptualization of the

---

[22] The three dimensions from which ACTs are composed refer to the intertwined dimensions that constitute a practice, intended as a "bundle of actions" (Schatzki 2002; Scott and Orlikowsky, 2014) The social dimension of practices refers to actions that are performed through interactions between social actors. The material dimension includes non-human actors, such as technologies and protocols. The symbolic dimension refers to the meanings that individuals assign to social actions and technological objects.

term (1977), the author states that affordances are real, are relational, and are directly and immediately perceived. Thus affordances "are functional in the sense that they are enabling, as well as constraining, factors in a given organism's attempt to engage in some activity. But at the same time, the affordances can shape the conditions of possibility associated with an action: it may be possible to do it one way, but not another" (Hutchby 2001, 448). Considering more recent discussions on the concept of technological affordances, scholars such as Baack (2018) and Nagy and Neff (2015) refer to "imagined affordances". This term goes beyond the intrinsic (material) properties of a technology, considering also designers' and users' (such as activists) perceptions of how that technology can be used.

The symbolic dimension, instead, refers to the imaginaries and perceptions associated with the fight against corruption, which include also the imaginaries associated with the technologies in themselves. This symbolic component resonates with the Jasanoff's conceptualization of "sociotechnical imaginaries" (2015). They correspond to "collectively held and normatively desirable visions animated by sociotechnical projects, including the forms of knowledge and materiality that underwrite them". This concept captures a tension between "national visions and local aspirations" (Huang and Westman 2021): indeed, according to Hess and Sovacool (2020) sociotechnical imaginaries - although they may be institutionalized in public policies - are located into the public consciousness, thus they often operate beyond the bounds of the state.

Finally, the social dimension considers the social actions performed through interactions between the social actors involved in the process of developing and maintaining ACTs. Looking at the main actors involved in the development and usage of specific technologies it is possible to distinguish between two main typs of ACTs. Indeed, Mattoni (2024) distinguishes between push and pull ACTs: from governmental institutions to civil society organizations (like public administration, top-down open data portals) in the first case; from civil society organizations to governmental institutions (like secure information leaking services that allow citizens to signal cases of corruption), in the second. As regards the so-called pull ACTs, the author points out a prelim-

inary typology of ACTs, distinguishing between ACTs for exposing corruption, organizing mobilizations, and sustaining participation (ibid.), that partially resonate with the main anti-corruption mechanisms introduced by Kossow and Dykes (2018).[23]

The effort behind the development (and maintenance) of ACTs by grassroots collective actors represents a social movement (or collective action) outcome in itself. As will be discussed in the following subsection, there is an emerging line of research that highlights how new technologies represent a neglected social movement outcome that needs to be explored further (Weisskircher, 2019).

1.2.3 *Looking at social movement and collective action outcomes: a key strand of research*

The study of social movement and collective action outcomes is a key strand of research for this dissertation in terms of concepts, approaches, and interpretative frameworks (Bosi and Uba 2021; Earl 2000; Meyer 2005; Giugni 2008). This section, therefore, looks at this specific subfield, tracing related concepts and theoretical frameworks from two main perspectives. First, it adopts a "relational" perspective to point out conceptual lenses capable to shed light on how different types of relational dynamics among a variety of actors may impact certain types of outcomes. In particular, adopting this second perspective, this subsection casts light on the shift from institutionalization as a process to institutionalization as an outcome. Second, it looks at the relationship between technology and social and political changes and to what extent the development of grassroots technology represents a social movement (or collective action) outcome in itself

Considering both perspectives and their implications at the theoretical level resonates with one of the main objectives of this research: exploring the consequences of the use of ACTs by grassroots actors in the anti-corruption arena.

---

[23] For an overview of the anti-corruption mechanisms introduced by Kossow and Dykes: see 1.1.

This main goal is then translated into specific research questions that look respectively at the different types of outcomes achieved by these actors and, even more crucial, how digital media (re)shapes the relationship between bottom-up and top-down anti-corruption efforts.[24]

Although social movement outcomes may occur beyond the realm of policy and, even, outside the political sphere (Giugni 1999), among the more "traditional" types of outcomes (i.e. cultural, biographical), the political consequences of social movement organizations represent the most populated area of contributions within this subfield (Amenta et al. 2010; Amenta et al. 2018; Amenta and Polletta 2019). Political consequences are generally defined as "those effects of movement activities that alter in some way the movements' political environment" (Giugni 2008, 1583). More specifically, most of the studies on the consequences of social movement activities have been concentrated on successful cases of political change, a further specification of political outcomes (Earl 2000). Additionally, looking at Meyer's studies on social movement outcomes, the author stresses the key role of the "narratives" about political change that activists construct and highlights the power that lies in these stories, starting from the main idea that "the process of claiming credit is analogous to that of establishing a reputation" (Meyer 2006).

Among the less traditional types of outcomes, the technological ones and their entanglements with political, cultural, or biographical are acquiring growing interest among scholars. Thus, adopting a "technology-oriented" perspective through which to look at the subfield of social movement outcomes means focusing on the relationship between technology and social and political changes (Milan 2013). This first perspective highlights conceptual lenses that come from pioneering studies that look at the role that may be also played by digital technologies in sustaining the achievement of grassroots actors during

---

[24] In Chapter 5 discussing the main findings, this thesis recombines these perspectives, shedding light on the relevance of the relational dynamics between grassroots and institutional actors precisely in the process of diffusion (or rather institutionalization) of a grassroots ACT, as in the case of whistleblowing ACTs, which in itself represents a crucial outcome achieved by the AC initiatives under study.

their fight (James 2014; Romanos and Sabada 2016; Weisskircher 2019), also against corruption (Mattoni and Odilla 2021).

Starting from the effort made by Milan (2013), she sustains that (communication) technologies are not just instruments that give social movements "a voice", but also these tools affect how these collective actors operate. Indeed, the author defines the main practices carried out by grassroots actors as "emancipatory communication practices", emphasizing how technological development may be tied to changes in the political culture, thus making a shift from practices to a form of activism, called "emancipatory communication activism". Additionally, Mattoni (2013b) points out that technologies impact social movements at instrumental (i.e. impact on mobilizing structures, organizational patterns, and protest activities), symbolic (i.e. impact on discourses about technologies and their role in societies), and material levels (impact on technological supports and devices that require competences and specific skills).

Looking at Science and Technology Studies, the work of Hess (2005) opened a promising line of research in this regard, pointing out a specific type of social movements: "technology and product-oriented movements". They are intended as civil society alliances, often in coalition with private actors, that pursue their goals through the production and support of alternative technologies and services. But is just with the main contribution offered by Weisskircher (2019) that the production of "alternative technologies or services" are conceived as outcomes of collective actions. The author has shed further light on the complex relationship between CSOs, technology, and social change by elaborating on a somewhat neglected topic in studies on the consequences of collective action: the production of new technologies by movements. Weisskircher sustains that "key collective volumes do not include chapters on the development of new technologies and never refer to new technologies as a possible outcome (Bosi et al. 2016a; Giugni, McAdam, and Tilly 1998; Giugni, McAdam, and Tilly 1999)" (2019, 61).

Thus, as for other social contentious issues, digital media and technologies are perceived as "a game changer" (Earl and Kimport 2011) and disruptive elements in the broad arena of contentious because have created new action rep-

ertoires (Van Laer and Van Aelst 2008; Salender and Jarvenpaa 2016), able to define "ground-breaking intervention model" for democratic innovations "as they have played an unprecedented role in fostering deliberative democratic processes, debate, interaction and decision-making" (Romanos and Sabada 2016,5).

Weisskircher goes one step further and theorizes the existence of four mechanisms that show how activists trigger the development of new technologies, involving different types of actors (2019). The more 'indirect' mechanism - where activists have the least control over the outcome - corresponds to the situation where the development of a technology coincides with a state response to protest. The author then identifies the case where it is the business sector that funds the development of a new technology as a result of a protest. A third scenario is characterized by cooperation between social movement actors, businesses, and the state to obtain funding for the development of a grassroots technology. Finally, in the last case, it is the social movement organization itself that uses its resources to develop a new technology. Additionally, shedding light on different development paths, the author points out also how the development of new technologies impacts relational dynamics among the grassroots actors involved, to the point of leading to divisions within social movements. Thus it seems increasingly evident that the two perspectives adopted in this subsection to highlight the key concepts and theoretical frameworks are closely interrelated.

Zoom-in in the framework of this thesis, it is relevant to consider methodological implications for this strand of research arose from the study on the role played by digital technologies in sustaining outcomes related to anti-corruption at the policy level (Mattoni and Odilla 2021). Mattoni and Odilla (2021) shed light on how the potentialities of digital media and technologies to foster social movement outcomes are reinforced in contexts in which their employment is not reduced to one type of tool or is not just coincided as an online effort only. This insight is strictly tied to the notion of "repertoire of communication" (Mattoni 2013a) that considers the broader communication strategies that activists decide to employ. Framed through a "media ecology perspective",

the repertoire of communication is composed of "a plethora of several communication technologies that include older and newer media, online and offline modes of communication, as well as a continuum ranging from independent and radical platforms to consolidated and still powerful mainstream media" (Trerè and Mattoni 2016, 300). An additional relevant insight coming from this research, confirms the relevance of cooperative efforts between CSOs and other anti-corruption actors for achieving better results (or outcomes) (Johnston 2012).

The relevance of cooperation or joint efforts between different types of actors in the fight against corruption introduces the "relational-oriented" perspective which looks specifically at how the relational dynamics influence the achievements of collective action.[25] Specifically let it let to introduce the debate around institutionalization, conceived both as a process and as an outcome. Considering the political outcomes achieved by social movement organizations, scholars point out how the study of the integration of social movement demands evolved into studies of how institutionalization affects social movement organizations in terms of influencing the government decision-making process (Lima 2021). Starting from what scholars refer to as institutional impacts from the grassroots, they talk about the institutionalization of movement demands (Amenta et al. 2010, 2018). Therefore, the process of institutionalization constitutes an outcome in itself.

At the same time, how engagement with political institutions affects the organizational structure of collective action represents a topic in itself (Lima 2021). Broadly speaking, social movements are seen as a political protest by outsiders or as non-institutionalized participation in political spaces (Gamson 1990; Jenkins and Klandermans 1995; Tarrow 2012), to the point to link the process of institutionalization to cooptation, and thus disempowerment. Indeed cooptation can be seen as a process of "incorporating new elements into the leadership or policy-making structure of an organization as a means of averting

---

[25] See Lo Piccolo (2023) for a recent study that adopts a relational approach based on the Players and Arenas framework (Jasper, 2022) to study social movement outcomes in anti-corruption struggles.

44

a threat to its stability or existence" (Selznick 1949, 34). Alternatively, it may be considered as an outcome of social movements in itself. Gamson (1975) sees cooptation as a movement outcome as opposed to "full response" (Gamson 1975), "in which challengers gain acceptance into the policy-making process but without achieving any or much of their actual goals". However, cooptation represents one modality of interaction with the state, together with cooperation, confrontation, and complementarity (Najam 2000). Indeed, other scholars adopt alternative perspectives, "conflictual cooperation" (Giugni and Passy 1998) as an effective mode of interaction between collective actors and the state. The goal may be to combine both contentious and cooperative political strategies. Indeed, employing only cooperation is more likely to lead to cooptation, and employing only contention risks polarisation and the dissolution of participatory practices altogether (Nylen 2011). Additionally, grassroots actors may decide to take advantage of their institutionalization and seek to exert influence within co-optation relationships (Burke 1969; Sunesson 1989).

While studies on social movement outcomes are crucial to define a "chunk" of the interdisciplinary conceptual perimeter within which this thesis is structured, studies on corruption offer not only key concepts but also crucial elements to define the empirical approach that this research adopts. The following subsection provides an overview of the theoretical background of the "situated" empirical approach adopted for investigating the role played by digital technologies for anti-corruption., which derives from a theoretical approach employed for looking at the corruption phenomenon.

1.2.4 *The theoretical background of the "situated" approach to investigate digital technologies for anti-corruption*

Starting with Mattoni's (2021) argument which links different ways of using digital media in anti-corruption to the more general interpretation of what corruption is, this subsection reconstructs the theoretical background of the empirical approach adopted in this dissertation. In doing that, it refers to the three approaches adopted for studying corruption: first, the "collective action"

approach, second, the "principal-agent" process approach, and third the "pragmatic" (or situated) approach.

As sustained by Mattoni (2021), looking at the relationship between digital media and the effort made by collective actors in the fight against corruption, it is possible to point out two leading roles that digital media may have: digital media may have the role of raising awareness around corruption topic, aiming to tackle corruption as a "collective-action problem" (see Mungiu-Pippidi 2013; Persson et al. 2013). Moving from what Olson (1971) argues through the "logic of collective action", corruption may be seen as closely linked to the phenomenon of free-riding, whereby collective interests are displaced in favor of pursuing personal interests, often through corrupted behavior and practices. Scholars who embrace this first approach argue that a greater awareness of what corruption is and its consequences for society could be a response to reduce the phenomenon of free-riding.

Otherwise, digital media could assist the activists in monitoring practices and amplifying the capacity to denounce (e.g. blowing the whistle) corrupted behaviors and wrongdoings (Mattoni 2021). According to this role, digital technologies contribute to fighting corruption as a "principal-agent problem" (Klitgaard 1988; Rose-Ackerman 1999).[26] This second approach problematizes the information asymmetries between the elected representatives (the principal), the citizens that elected them (the clients), and the public servants that are responsible for delivering the public services that the citizens demand (the agents).

Going back to the role played by digital media through the lens of this second approach, they are embedded in the practices of CSOs to increase the accountability of institutional actors. Indeed civil society interplays with e-governmental initiatives, trying to reduce these information asymmetries (Grönlund et al. 2010) exerting "social accountability", thus, going beyond a too-weak "vertical accountability" (Bauhr and Grimes 2017). Indeed, corrup-

---

[26] The principal–agent theory was developed by Rose-Ackerman (1978) considering mainly politicians and bureaucrats. Then Klitgaard (1988) revises this framework pointing out a principal–client–agent model in order to refer also to other types of interactions, as in the case of citizens and politicians.

tion is often conceptualized as "a problem of failing accountability" (Lederman et al. 2005; Peters 2007). "Social accountability" is considered an alternative or complementary mechanism of "vertical accountability", to the point of considering it as "the key mechanism of anti-corruption citizen engagement" (Bader et al. 2018: 7). Furthermore, some scholars speak about "diagonal accountability" (Bovens 2017) as a hybrid form of vertical and horizontal accountability. Grimes, instead, makes a distinction between social accountability, understood as the activation of horizontal accountability instruments by the citizenry, and "participatory accountability", understood as "institutional arrangements through which citizens associations participate directly in policy formation and implementation" (2008, 4). Thus, social or societal accountability is complemented by participatory declination. Although there is no consensus on how social accountability should be defined or what types of activities are included in it (Joshi and Houtzager 2012), a common element across different conceptualizations is represented by citizen participation (e.g., Malena et al. 2004; Schatz 2013).

Finally, going beyond both collective-action and principal-agent approaches to corruption, some scholars (della Porta and Vannucci 2012; Marquette and Peiffer 2015; Torsello 2016; Walton and Jones 2017) highlight also a third approach. As highlighted by Mattoni (2021) this new approach looks at the corruption phenomenon and – consequently at activists' digital media usage – from a pragmatic and situated perspective. Indeed, a situated understanding of ACTs, goes beyond the traditional distinction between principal-agent and collective action approach to corruption (Marquette and Peiffer 2015) to adopt, instead, a pragmatic perspective (della Porta and Vannucci 2012; Walton and Jones 2017; Torsello 2016). In practice, this means subscribing to the idea that also anti-corruption digital media should be considered situated " [...] because the situations in which activists imagine, develop, and then employ them are multiple, different from the others, and tied to various corruption scenarios" (Mattoni, 2021:10) and that to understand their impact "the connection between the type of digital media and the type of corruption would not tell the full story. The types of collective actors are also relevant" (Mattoni 2021, 11).

This third approach resonates with what some corruption scholars sunstain about corruption. According to Johnston (1996), this phenomenon is "normatively charged" and "context-dependent". Moreover, the contextual understanding of the fight against corruption starts from the entanglements within the main collective actors involved in that fight and the territories in which the bottom-up effort against corruption takes place, as sustained by Walton and Jones (2017). Heywood (2018) emphasizes the same point, speaking about the necessity to conceive "targeted" anti-corruption initiatives: "Increasingly, anti-corruption researchers and programmers are recognizing that the need to consider context means that initiatives need to be highly targeted, both in terms of scale and sectoral focus" (2018, 93). Thus this thesis adopts this situated approach trying to follow what Heywood suggests in its concluding remarks on a deep reflection on how tackling corruption in our century: "The argument I have sought to make is that if we want to make progress in tackling corruption, we need to make fundamental changes to our approach" (2018, 93).

Finally, this situated approach for studying both corruption and anti-corruption is in line with what scholars from Media Studies sustain as the right approach to studying digitalization and related processes. Indeed, looking at scholars who deal with the implication of digitalization and related processes such as the already mentioned "datafication" (see 1.2.1), Couldry and Powell (2014) highlight the need to ground studies of (big) data, datafication, data mining and analytics in real-world, everyday practices and contexts.

Conclusion

This chapter has achieved three main objectives. First, it has provided an overview of the variety of technologies employed in the grassroots fight against corruption, shifting from the employment of commercial platforms - such as social media to increase the visibility of the mobilization against corrupted elites) - to the development of dedicated and advanced technologies, as in the case of a bot for monitoring the public expenditure of Brazilian deputies. Second, it has highlighted the main gaps, under-explored issues, and open de-

bates that this dissertation seeks to address. Third, it has provided an overview of the main theoretical approaches, interpretive frameworks, and key concepts useful to unpack the main topic of this dissertation, highlighting how anti-corruption activism in the digital age represents a highly interdisciplinary object of study.

Considering the existing emerging but still fragmented literature on the main topic under investigation, the understudied role of digital technologies in civil society anti-corruption practices in a systematic way represents the first gap. Indeed, looking at the strand of the literature that examines the different anti-corruption practices, the types of instruments employed, and the distinct roles played by civil society organizations (Bader et al. 2019; Carr and Outhwaite 2011; Hollaway 2008; Huss et al. 2023), what has emerged is that the majority of scholars do not consider digital technologies as a type of instrument or tool, except for the case of open databases (Huss et al. 2023). Moreover, the few studies that look at the role of ACTs, consider at the same time both bottom-up and top-down efforts (Adam and Fazekas 2021; Chene 2016; Inuwa et al. 2019), ending up giving more prominence to the technologies implemented by the latter.

Then, although corruption and social movement scholars recognized the importance of including different types of civil society actors in grassroots efforts, there is just partially an explicit reference to the entanglements between activism and the field of journalism. However, as emerged in research close to media and social movement studies or media and journalism studies, seems that the proximity of these fields is more visible considering the leading role of digital media and technologies tied to data-related practices. Thus, the underestimated entanglements between journalism and activism in the fight against corruption become even more relevant when considering the role played by data-related practices (Mattoni 2017), which represents the second gap.

Finally, the current literature is characterized by the limited attempts to assess the impact (and outcomes) of digital technologies on grassroots anti-corruption efforts (Adam and Fazekas 2021), also because the majority of authors focus on the factors that may be more effective in terms of civil society's

anti-corruption efforts, without looking more specifically at the outcomes of social movements, and in which the role of digital skills and technological tools is (again) treated as marginal. This represents the third main gap.

Concerning the necessity of defining the interdisciplinary conceptual framework that characterizes this thesis, this first chapter has provided an overview of the main theoretical approaches, interpretive frameworks, and key concepts to unpack the interdisciplinary topic of this thesis, starting from the introduction of datafication, platformisation, and hybridization as three analytical lenses through which to view the grassroots anti-corruption struggle in the digital age. Then, it has provided key concepts to define the digital technologies used for anti-corruption purposes and their characteristics at the material, symbolic, and relational levels, adopting the definition of ACTs - Anti-Corruption Technologies (Mattoni 2024).

In tracing the interdisciplinary conceptual perimeter of this thesis, the chapter has then given prominence to a specific subfield of research that deals with the study of the outcomes achieved by social movement organizations. In doing so, the chapter has shed light on a new research frontier that considers the development of technologies as an outcome in itself, achieved by collective actors, and has given prominence to the institutionalization of social movement organizations and their demands when they are dealing with governmental institutions.

Finally, concerning the main approaches adopted in corruption studies, Chapter 1 has reconstructed the theoretical framework behind the so-called "situated" empirical approach chosen to study the phenomenon of anti-corruption in the digital age. The adoption of this situated approach affects some methodological choices, as will be shown in Chapter 2, which is devoted to presenting in detail the comparative cross-country research design and the main method(s) employed.

CHAPTER 2

RESEARCH DESIGN AND METHOD(S)

Introduction

This chapter casts light on the main methodological choices that shape the research project as a whole. First, it points out the type of research design adopted – a qualitative cross-country comparative research design – and then, it describes in detail the different phases of a research process based on the Constructivist Grounded Theory. Based on the interpretative approach in which the social reality is constructed (ontology), the knowledge is produced, co-created, and subjective (epistemology), this thesis aims to understand how civil society actors employ digital technologies in their fight against corruption across Italy and Spain and to shed light on the consequences of this usage.

As was already pointed out in Chapter 1– the literature on this topic is flourishing but it is too fragmented. Therefore, the research design is built around exploratory questions to investigate firstly, how grassroots actors adopt and embed "anti-corruption technologies" (i.e. ACTs), conceived as socio-technical assemblages of symbolic, material and social elements (Mattoni 2024), in their practices. Secondly, to cast light on how the employment of ACTs (re-) shapes the intersections and patterns of interactions between bottom-up and top-down efforts against corruption.[27]

To answer these research questions, this dissertation focuses on two types of anti-corruption initiatives. On the one hand, it looks at initiatives and pro-jects aimed at facilitating the whistleblowing process through the adoption and dissemination of a grassroots ACT based on the GlobaLeaks software. On the other hand, it focuses on initiatives aimed at preventing corruption by monitor-

---

[27] See the thesis introduction for a detailed outline of the main research questions and related sub-questions.

ing public actors through public (open) data. Both Italian and Spanish grass-roots collective actors involved in the whistleblowing process as potential recipients of wrongdoings or in monitoring practices for increasing transparency and accountability of public actors are those who tend to incorporate different types of digital tools and technologies in their fight.

In short, this dissertation aims to contribute to this flourishing field of study through the elaboration of concepts as heuristic tools that explain the opportunities, challenges and consequences of digital technologies in the fight against corruption, analyzing grassroots initiatives devoted to promoting the diffusion of specific technologies able to guarantee the anonymity of whistle-blowers or reducing institutional opacity through data-related practices for monitoring purposes.

Given the main objectives of this research, the most appropriate method is represented by a specific declination of the Grounded Theory, based on the Constructivist approach (see Bryant 2017; Bryant and Charmaz 2019; Charmaz 2014). The so-called 'Constructivist Grounded Theory' (CGT hereafter) adopts an abductive research strategy to discover concepts and develop a theory grounded in the data. Based on a rigorous analytical process corroborated by the triangulation of data sources, CGT, in continuity with the pioneering formulation of the grounded theory method, is suitable to produce knowledge on the meanings, practices and consequences of specific phenomena – such as the fight against corruption from below – focusing on the behaviors, intentions, and practices of the research participants. In this research project, the main actors involved are activists, ACTs developers, but also journalists and public servants and their interaction with digital socio-technical assemblage.

During the initial stages of the research process, this study adopts the Situational Analysis (Clarke et al. 2015, 2018, 2022), conceived as an extension of GT method (Clarke 2019). SA focuses on the ecologies of relationships that exist between actors and elements (distinguishing between human and non-human, but also between individual and collective actors) that define a situation (i.e. an anti-corruption initiative), considered the basic unit of analysis.

Chapter 2 is structured as follows: the first section (2.1) points out the main features and motivations for the adoption of a cross-country comparative research design, i.e. Italy and Spain. It also clarifies the criteria for the selection of the nine anti-corruption initiatives located in these two Southern European countries. The second section (2.2) presents the two methods employed in this dissertation: the Situational Analysis and the Constructivist Grounded Theory. The third section (2.3) reconstructs the main stages that define the empirical research process as a whole, considering the distinction between three different phases of coding: *open coding*, *focused coding*, and *theoretical coding*. It starts from the initial case(s) selection and moves through the iterative process of data gathering and data analysis, devoting particular attention to the stages related to the emersion of analytical categories from which arose the empirical and, then, the theoretical findings. Finally, in the conclusions, the chapter highlights how the research process as a whole and the methodological choices embedded in it, represent the basis for both chapters devoted to the background context of the case studies (i.e. Chapters 3 and 4) and for the empirical ones, dedicated respectively to whistleblowing (i.e. Chapter 5) and monitoring initiatives (i.e. Chapter 6).

2.1 *A qualitative cross-country comparative research design for studying anti-corruption*

This thesis is based on a cross-country comparative research design (see Baistow 2000; Gómez and Kuronen 2011; Hantrais 1999, 2009; Kohn 1989; Livingstone 2003; Quilgars et al. 2009) in which countries (i.e. Italy and Spain) represent contexts of study, rather than units of analysis or objects of study (Kohn 1989).[28] The unit of analysis, instead, is represented by each of the nine anti-corruption initiatives under investigation, respectively six whistleblowing initiatives, and three monitoring initiatives. Thus this is the case of a micro-

---

[28] Kohn (1989) distinguishes among four approaches to cross-national comparison within social science according to their primary focus: Nation as an object of study, Nation as a context of study, Nation as a unit of analysis, Nation as a component of a larger international or transnational system.

level comparison (small-scale study) including two countries and nine empirical case studies.

This cross-country comparative research design follows the "case-oriented comparison" as the main approach (Gómez and Kuronen 2011).[29] However, it incorporates some of the key elements that characterize the cross-cultural comparison approach (Mabbett and Bolderson 1999), aiming at analyzing the same phenomenon – i.e. the employment of digital technologies in the grassroots struggle against corruption – in different contexts (i.e. national or local), across different groups (i.e. activists, tech developers, journalists and public servants), systems, societies and nation-states (i.e. Italy and Spain). According to Mason (2006) the strength of qualitative comparison between cases - and not primarily across national or countries comparison) - lies in its holistic understanding of the dynamics, mechanics, and particularity of each case.

Furthermore, as pointed out by Gomez and Kuronen in their methodological discussion (2011), one of the main advantages of the small-scale qualitative cross-national approach (instead of large-scale multi-national comparisons) is that it enables the analysis of phenomena " 'from inside', in their cultural and social context, in actual local practices, and in people's everyday life" (2011, 685).At the same time the small-scale approach represents a challenge in itself due to some intrinsic limits: "It has been criticized for being able to cover only a small number of countries, or even certain localities within these countries, telling only about local and particular, and not allowing for generalizations.[30] However, as Smith (1988) argues, beginning from the local and particular can provide an understanding of the organization of broader social relations. The everyday world is 'a point of entry' into larger social processes. In this sense, studying the local and particular is not only revealing of the local and particular but also of the social relations and structures embedded in it (Smith 1988,

---

[29] According to Gómez and Kuronen (2011), Anttonen (2005) distinguishes four approaches in cross-national research: cross-national statistical comparison, regime theory development, case-oriented comparison, and cross-cultural qualitative comparison.
[30] For an overview of the overall advantages and pitfalls of the Qualitative research methods in cross-national settings see Mangen (1999) and Zulauf (1999).

157).[31] According to Livingstone: "Comparing similar countries, perhaps from the same geographic region, may miss the bigger picture of transnational differences, however, enables us to identify the fine-grain differences between the two (2003, 487)".

Finally, the use of a cross-national qualitative research design also has several implications for data collection and analysis, due to the methodological challenges in interpreting data collected across cultural and linguistic boundaries. Qualitative research is about interpreting phenomena in terms of the meanings that people bring to their natural situations or contexts (Denzin and Lincoln 2005; Patton 2002). The choice to compare two countries from the same geographic area - as in the case of southern Europe - seeks to address these challenges and mitigate their potentially distorting effects on the analysis of the data. Furthermore, the data (mostly interviews) were collected in the original language of the research participants (both in Italian and Spanish) and then coded in English, considering other challenges related to even partial translation during the coding process (van Nes et al. 2010).[32]

Thus, the choice to adopt a qualitative cross-country research design based on small-N case studies reflects the goal of this research, which addresses a more general gap, as relatively few studies seek to investigate how digital technologies are used to combat corruption and improve public integrity, transparency, and accountability. Therefore, the research design is based on exploratory questions about a phenomenon that has not been systematically researched so far. Thus, before addressing explanatory questions, this research seeks to explore the interplay between different anti-corruption actors by looking at emblematic case studies located in Italy and Spain in which the anti-corruption practices include the use of digital technologies.

In short, all of these features (and challenges) typical of a qualitative cross-national research design based on case studies shape this research as a whole,

---

[31] See also Smith (2005), especially Chapter 3.
[32] For a further discussion of the main challenges related to the type of qualitative data collected and their triangulation see section 2.3.

starting with the process of countries and case studies selection, as explored in the following subsections.

2.1.1 *Italy and Spain as the main contexts: why these two Southern European countries*

The selection of the two countries – which represent the main contexts in which the anti-corruption struggle from the grassroots takes place – has been made according to specific criteria that refer respectively to the level of control of corruption, the development of ICTs, and the presence (or not) of massive grassroots opposition to corruption that might trigger a subsequent bottom-up usage of digital technologies to tackle this social problem, as summarized in the following table. [33]

Table 2.1 - Comparing Italy and Spain: the main criteria

Main criteria	Italy	Spain
Level of control of corruption	Medium	Medium
Development of ICTs	Low	High
Presence (or not) of massive grassroots opposition to corruption	Absence	Presence

As regards corruption, this research considers three different types of measurements: how the two countries control corruption assessed through the *Index for Public Integrity* (IPI), which compares opportunities and constraints on corruption in both countries by looking at different indicators: budget transparency, administrative burden, judicial independence, press freedom, and e-citizenship. The second measurement deals with transparency, the *Transparency Index* (T-index), which distinguishes between de facto and the jure components of transparency. The third measurement, the *Corruption Risk Forecast* (Mungiu-Pippidi 2022), traces trends related to IPI's indicators: for Italy, the

---

[33] See Chapter 3 for a detailed analysis of each criterion and related measurements from a comparative perspective.

forecasted trend is stationary, instead of Spain, which is improving. Moreover, the comparison between Italy and Spain on corruption indicators considers also the *Global Corruption Barometer*, made by Transparency International. These different types of indicators converge in acknowledging that both countries are characterized by a medium level of control of corruption.[34]

Looking at the criterion related to the development of ICTs, this research considers the *Network Readiness Index* (NRI) of the Portulans Institute, which measures the willingness of countries to take advantage of the opportunities offered by information and communication technology considering four pillars: the availability and level of technology in a country; skills and resources of the population and organizations to use it; the features of governance in terms of trust, regulation, and digital inclusion. Finally, the growth and well-being of society and the economy. Moreover, the comparison between Italy and Spain in terms of digitalization considers also the 2020 *Digital Economy and Society Index* (DESI) which tracks the progress of EU countries in terms of digital performances by looking at the connectivity, human capital, use of the Internet; integration of digital technology; digital public services, in terms also of e-government status as measured by *Digital Government Index*. Thus, concerning ICTs development, Spain stands out for a high level, instead of a medium level for the Italian case.[35] Finally, the two southern European countries diverge not just in terms of ICT development, but also from the experienced grassroots opposition: Spain experienced massive mobilizations in which corruption was a prominent issue (Mattoni 2017, Taibo 2011). Italy had protests against corruption that were limited in their intensity, numbers, and scopes (Mattoni 2017). These peculiarities emerge more clearly considering the reactions of civil society after austerity solutions that were developed to overcome the economic and social impact of the 2008 financial crisis.

[34] For a complete overview of the main corruption indicators in both countries: see Table 3.2, Chapter 3.
[35] For a complete overview of the main indicators and measurements related to the development of ICTs in both countries: see Table 3.1, Chapter 3.

2.1.2 *The empirical case studies: why looking at whistleblowing and monitoring initiatives*

This research counts nine initiatives located in Italy (N=4) and Spain (N=5) that prevent and curb corruption including in their anti-corruption practices the use of digital technologies. Six of them aim at facilitating the whistleblowing process by developing and maintaining digital platforms based on the same open-source software (i.e. GlobaLeaks) for receiving leaks. The remaining three, instead, relate to monitoring practices based on the use of public data. As already mentioned in the introduction, in both southern European countries, the civil society organizations involved in supporting whistleblowers to expose wrongdoing or monitoring public actors, are the ones that tend to integrate into their fight against corruption (more or less advanced) digital tools and technologies.

This enhanced 'propensity' to adopt different ACTs represents one of the main criteria for the case study selection. The selected case studies remain in continuity with the chosen qualitative comparative case-study research design (Seawright and Gerring 2008), applied "to understand or interpret specific cases because of their intrinsic value" (Ragin 1987, 35).

Looking in more detail at the selection criteria for the case studies, the three monitoring initiatives were chosen to examine how they use the different digital technologies that they have adopted and developed over time. Thus, the monitoring initiatives coincide with the collective actor: respectively, the Italian *Fondazione Openpolis* and the *Progetto Common-Comunità Monitoranti*, together with the Spanish *Civio*.

As regards additional criteria for the selection of the whistleblowing initiatives, the choice fell on cases where grassroots actors played a decisive role in defining the type of anti-corruption technology used. In fact, the six whistleblowing initiatives are based on the same open-source software GlobaLeaks, developed by the Italian civil rights organization Hermes Center for Transparency and Digital Human Rights to implement digital platforms capable of guaranteeing security and anonymity to potential whistleblowers. In fact, in

this second case the whistleblowing initiatives correspond to the digital whistleblowing platforms and not with the collective actors involved: i.e. the *ALAC* service and the *WhistleblowingPA* project, both implemented by Transparency International Italia in conjunction with the developers of GlobaLeaks; the Xnet's *BuzonX*, which is the first digital whistleblowing platform used to leak data on a corruption scandal in Spain; *Buzón Ético y de Buen Gobierno*, *Buzon de denuncia anonimas*, and *Buzon de denuncias*, which represent three additional Spanish digital whistleblowing platforms adopted by public institutions thanks to the leading role played by Xnet and the developers of GlobaLeaks. These platforms were adopted respectively by the Municipality of Barcelona and the anti-fraud authorities of Catalonia and Valencia.

Moreover, focusing on these two types of anti-corruption initiatives represents an attempt to fill some gaps in the respective literature: indeed both research areas on whistleblowing and monitoring through open data are characterized by open debates and too unexplored areas, as will be discussed in the introduction of each empirical chapters, respectively Chapter 5 for whistleblowing and Chapter 6 for monitoring initiatives. This aim represents a third criterion to justify the case studies' selection.

Finally, in addition to the specific gaps in whistleblowing and open data research in general, although there are studies on some of the initiatives examined, and in some cases even comparative studies on some of them, a more systematic comparison of grassroots anti-corruption efforts in the two countries is still lacking, even if the role of technology and digital technologies is taken into account.

The main exception is the research conducted by Lo Piccolo (2023), which is dedicated to linking anti-corruption and social movement studies in Italy and Spain, focusing on social accountability, but without considering the role of digital technologies in the fight against corruption. Focusing on three specific campaigns in each country - the introduction of transparency laws, the adoption of whistleblower protection laws and the development of citizen monitoring projects, respectively - Lo Piccolo's work includes among other collective ac-

tors Common, Openpolis and Civio, together with Xnet, and the Barcelona City Council and the anti-fraud agencies of Valencia and Catalonia. The main goal of the research consists of shedding light on the strategies adopted by CSOs in their efforts to find positions of influence, as well as on the mechanisms through which relational models produce social change, understood as the achievement of political change, the increase of accountability in the system and the application of formal and informal sanctions when necessary.

In particular, the empirical research shows that integration with political elites can increase the likelihood of achieving policy change, while horizontal integration among civil society actors can increase their sanctioning potential: "Subscribing to a relational understanding of public corruption and accountability, the research has sought to empirically investigate how single players, organized groups, and institutions interact and craft those webs of relations and interdependence which represent the quintessential element to set in motion deep democratization processes that create systems to go beyond elections as a one-time mechanism of political participation and involve a multiplicity of players to participate in the constant and ongoing work of checking powerholders in the use of their delegated power" (Lo Piccolo 2023, 238).

Looking at the existing research on whistleblowing, there are just a few comparative researches on the two countries on grassroots anti-corruption campaigns in which Xnet (and BuzonX) played a leading role (Mattoni 2017), but no one specifically on whistleblowing in both countries. Xnet is often cited as emblematic in studies of whistleblowing, whether it is the case of BuzonX (Mungiu-Pippidi and Dadašov 2016; Walle 2020) or the implementation of the first digital channel thanks to the cooperation between Xnet and the municipality of Barcelona (Colvin 2018; Levi and Carles 2019) or on the leading role played by the Anti-Corruption Authority of Valencia (AVAF) also at transnational level (Huss et al. 2023).

With regard to ALAC, recent research highlights the prominent role of this service in the Italian context, as it has been a facilitating and supporting tool for anti-corruption whistleblowers since its creation, even before the adoption

of a comprehensive whistleblower protection law in Italy, thus providing "a crucial service at a time of legal uncertainty" (Di Salvo 2024).

Looking at the monitoring initiatives close to data journalism (i.e. Openpolis and Civio), the comparison between them represents innovative research in itself since few previous studies compare these two initiatives considered as "emblematic cases of informative activism initiatives" (Fubini 2023a), and, even more crucial, there is no prominent line of inquiry that compares Italy and Spain on the blurring boundaries between activism and journalism.

Among the few exceptions, it is worth mentioning the study on data journalism in Italy conducted by Porlezza and Splendore (2019) in which Openpolis appears among the selected case studies and it is classified as an example of data journalism and broadly defined as a "data journalism agency".[36] As regards Civio, in the analysis made by Magallon-Rosas and colleagues (2017), it was defined not as a data journalism initiative but as a civil society organization and a producer of civic technologies, as the other Spanish case studies under investigation. Sticking to the Spanish scenario, it is necessary to mention the research carried out by Appelgren and Salaverría (2018), in which the authors assess how legislation on Transparency was shaping the practice of data journalism in Spain and Sweden, interviewing journalists from newspapers, public television, and radio and some news start-up.

Finally, as regards the case of Common, in the previous studies is conceived as a systemic action for connecting citizenship with the public administrations (Rispoli 2022), adopting a "community based-monitoring approach", which is considered as a monitory form of civic action (Orlando 2020; 14).

2.2 *The main methods employed: combining Situational Analysis with Constructivist Grounded Theory*

This thesis adopts two abductive methods suitable to investigate underexplored areas of research (Richardson and Kramer 2006). Situational

---

[36] See Fubini (2024) for a single-case study research design based on Openpolis and its data-related practices in the grassroots struggle against corruption.

Analysis was employed during the early stages of data collection to guide the case studies' selection. The Constructivist Grounded Theory, instead, defines the research process as a whole: it is characterized by a constant back and forth between data collection and data analysis for pursuing different levels of abstraction in continuity with the logic of the theory building.

Both methods belong to the so-called 'second generation' of theories derived from Grounded Theory, a qualitative methodology to generate theory from systematically collected and analyzed data (Urquhart 2017).[37] Although both methodologies adopt a constructivist (or relativist) orientation, CGT and SA diverge in terms of their "guiding metaphor" (Clarke et al. 2018, xxiv). CGT is more inclined towards the "action-centered 'basic social process'", whereas SA instead focuses on the "situation" of the phenomenon and seeks to "understand the dense complexities" (Clarke et al. 2018, xxiv). The following sub-sections highlight the key features of both methods and how they are applied in this study.

2.2.1 *Situational Analysis: using SA maps as preliminary analytical tools*

SA is the first method used in this research. In fact, it was used in the early stages of data gathering and analysis to produce analytical maps to guide the selection of case studies, in conjunction with desk research and the collection of expert interviews. This method considers the use of maps not only as tools for describing the case studies but also as a preliminary stage of data analysis, allowing the identification of relevant relationships according to the RQs and objectives.

SA follows different mapping strategies, distinguishing four types of analytical maps: situational, relational, social arena and positional maps, corresponding to different modalities to focus on the ecologies of relations between

---

[37] The origins of GT can be traced to the Manifesto included in "Discovery of Grounded Theory: Strategies for Qualitative Research", published in 1967 by two American sociologists, Barney Glaser and Anselm Strauss, considered the first generation of GT scholars. The first formulation of GT and the so-called "second generations" of grounded theories represent a turning point for qualitative methods, as recognized by Katy Charmaz for CGT and Clarke for SA, although they move away from the positivism of classic grounded theory. For an overview of the genealogy of Grounded Theory and Situational Analysis: see Clarke (2019,18).

actors and elements that define and co-constitute a situation (Clarke and Star, 2008), including technologies. Indeed, this research uses SA due to the centrality gained by the so-called non-human actors - as cultural objects, technologies and media (Clarke et al. 2015) - in defining and shaping a "situation". According to Clarke "Nonhuman things (living and not)" became crucial elements in shaping a situation and for this reason, Clarke braids SA with STS studies. The author looks at both actor-network theory (Latour and Woolgar 1979; Latour 1987; Law and Hassard 1999) and material semiotics (Law 2009), emphasizing the relationality between the variety of elements (human and non-human) that define a situation.[38] According to Dewey, things have meaning only in relation to the situations in which they are found or occur (1938:66-68): indeed for SA the situation is considered the unit of analysis. The exploratory nature of SA allows going beyond the actions, focusing on the entire situation and its multiple complex elements, which are not merely contextual but conditional (Clarke et al. 2015). SA also relies on the CGT that 'turning away from acontextual description' (Charmaz 2006, 271). In fact, following Clarke's theorization, SA draws upon the concept of *situation* instead of context: "The conditions of the situation are in the situation. There is no such thing as 'context.' The conditional elements of the situation need to be specified in the analysis of the situation itself as they are constitutive of it, not merely surrounding it or framing it or contributing to it. They are it. Regardless of whether some might construe them as local or global, internal or external, close-in or far away or whatever, the fundamental question is 'How do these conditions appear—make themselves felt as consequential—inside the empirical situation under examination?' At least some answers to that question can be found through doing situational analyses" (Clarke 2005, 71–72)

Furthermore, SA brings new critical tools to "the constructivist grounded theory toolbox", analyzing implicated actors and actants (Clarke 2021) and ty-

---

[38] Clarke (2019) refers to a reconfiguration of relationality across the social sciences and humanities, manifest in both quantitative and qualitative methods. As regards qualitative methods, Clarks cites Bourdieusian field theory, Foucauldian discourse analysis, Foucauldian dispositive or apparatus, actor-network theory (ANT), assemblage theory, rhizomic analytics, and the hybrid method of SA.

ing them to the analysis of power. It emphasizes the analysis of "how power, oppression, and iniquities differentially affect, individuals, groups and categories of people" (Charmaz 2011, 361–362), not just through the arenas/words maps, but also highlighting the crucial role of "implicated actors": "they are discursively constructed by other actors with greater power in the situation for their (the other actors') own purposes [...] The capacity to analyze the presence of implicated actors, precisely how and for what purposes they are constructed by others, and the consequences of those constructions, provide SA with distinctively critical tools" (Clarke 2019, 17). Thus, SA looking at the "implicated actors" enables to analyze the "subtle as well as more blatant uses of power and their consequences" (Ibid.).

As regards the already mentioned "maps" employed as analytical tools during the early stages of data gathering and data analysis, the present work relies on three types of maps: respectively, situational maps, relational maps, and social arenas.[39] Each map was drafted and revised using data collected through desk research together with information gathered through expert interviews (i.e. mainly Corruption and Media Scholars). The final version of each map guides the first round of case studies' selection. In this research, each situation corresponds to an empirical case study. In practice, the preliminary stage of data analysis rests on these three types of maps realized for two initiatives per country: respectively, Common and Openpolis for the Italian scenario, and Xnet and Civio for the Spanish one.[40]

The situational map points out the key human and non-human actors and elements that shape situations, listing and positioning all of them in the form of a map: from human to non-human, from individual to collective, and from concrete to discursive elements).[41] Clarke et al. (2015, 2018) further distinguish between messy situational maps and ordered situational maps. Messy maps are drawn during the early stages of research, whereas their ordered version is pro-

---

[39] Position maps: single out the main issues, the positions on the central issues and the lack of positions that we can find in a situation (Clarke et al., 2018).
[40] Appendix 1 includes the most updated version of each map per case study.
[41] Appendix 1 includes an exhaustive list of SA elements, grouped into different categories distinguishing generic elements, structural elements, and different types of relationships between them.

duced immediately after by grouping the elements that emerged into ordered categories. Relational maps are instead produced starting from the messy situational map, capturing the various relations linking the situational elements – both human and non-human. An example of a relational map built upon the messy version is represented by Figure 2.1 which represents Openpolis' map, thus the "situation". As shown by Figure 2.1, relationships may occur not just between human actors, but also between human collective actors and legal elements, as in the case of ANAC, the Italian anti-corruption authority and the legal framework of public procurements or with non-human elements: indeed for specific data-driven platforms ANAC represents an institutional source of data, especially on public tenders.

Finally, this study employs the social world maps as a tool to point out "all of the collective actors and the arenas of commitment within which they are engaged in ongoing discourse and negotiations" (Clarke et al. 2018, 18). As for the previous example, Figure 2.2 shows the social world map related to Openpolis, distinguishing between three main spheres or arenas and related collective actors. The media/journalism sphere includes the European Data Journalism Network and Global Investigative Journalism Network as the main collective actors of these areas. As regards the civil society sphere instead counts some CSOs (e.g. Libera, the main collective actor related to the Common project) involved in a specific campaign for the adoption of FOI legislation in the Italian scenario, called "Foia4Italy". Finally, inside the political sphere are located non-human collective actors but specific data-driven thematic platforms developed by Openpolis during the time, listed in the previous map below the label "non-human element" / Data-driven web apps, thus a specific digital technology for monitoring purposes (i.e. Open Parlamento and Open Politici).

Figure 2.1 - A relational map drawn upon the messy situational map: the case of Openpolis
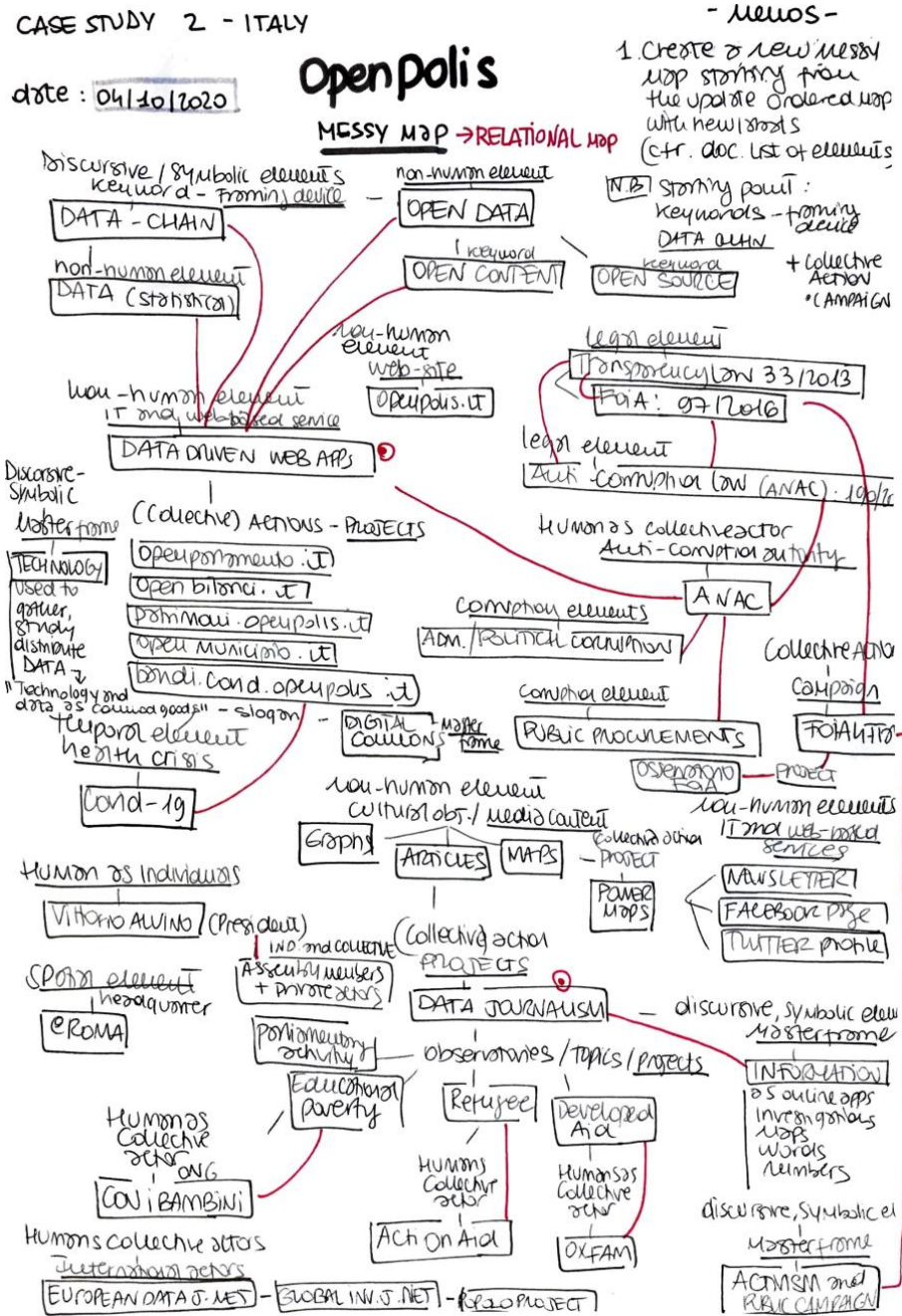
Figure 2.2 - An example of a social world map: the case of Openpolis
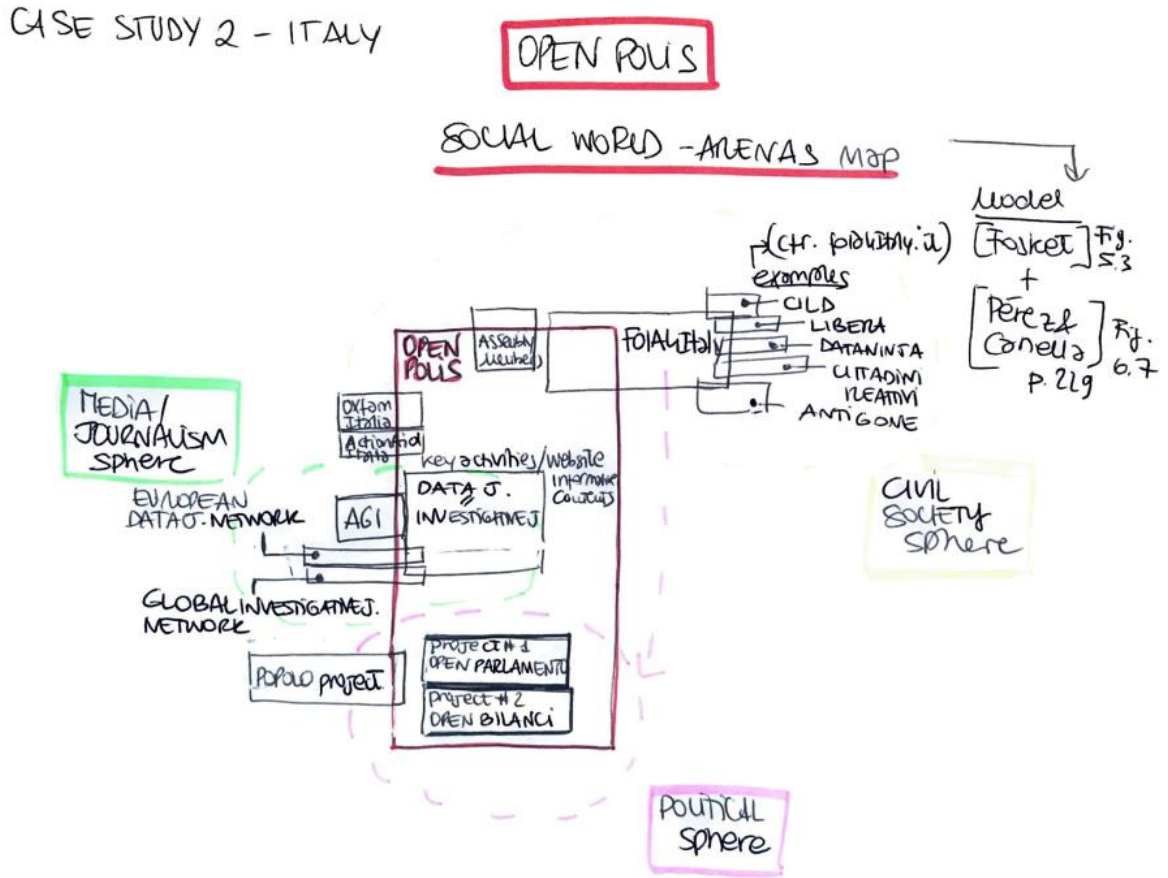
2.2.2 *The Constructivist Grounded Theory for studying the grassroots struggle against corruption*

Based on a rigorous and flexible analytical process, CGT is an abductive method (Richardson and Kramer 2006) suitable to investigate underexplored areas of investigation, as in the case of the main object of inquiry of this dissertation. Indeed this method "does not generally seek to test hypotheses or to put at work preconceived concepts, constructs and models. Due to this aspect, scholars often employ it to explain emergent phenomena on which there is limited knowledge or to provide different explanations of phenomena on which existing literature cannot be applied (Mattoni 2020, 268-269). Thus, this thesis employs CGT for producing conceptual knowledge on the meanings, practices,

and consequences of how grassroots actors embed digital technologies, tools, and media for anti-corruption purposes focusing on the interactions not just between people, but also between people and technologies (e.g. Alonso-Díaz and Yuste-Tosina 2015). Moreover, while grounded theory is usually employed to investigate case studies within the same country, this thesis experiments with it in a cross-country comparative research design.

The constructivist approach partly stays in continuity with certain defining components of grounded theory and partly adopts its specific features. Regarding the elements of continuity with the first formulation of GT (Glaser and Strauss 1967), CGT is characterized by a simultaneous involvement in data collection and analysis. The constant back and forth from data gathering to data analysis is finalized to the construction of analytic codes and categories from data, and not from preconceived logically deduced hypotheses. Indeed, codes in grounded theory are not simply attached to the data: they are first and foremost transitional and generative. Thus, data analysis moves from one stage of coding to another producing more abstract categories and focusing on the relationship between them. CGT stays in continuity with GT because it is intrinsically a comparative method, which involves making comparisons during each stage of research. Indeed it is the constant comparison that fosters advancing theory development during each step of data collection and analysis.

Looking at a sampling of case studies is also aimed toward theory construction, and not finalized to population representativeness. (Charmaz 2006, 5-6). In practice, the researcher will move from initial sampling to theoretical sampling of case studies. Sampling is conceived as "a procedural tool that is integral to the entire research process, to attain excellent data that enables to development and verification of an abstract and generalizable theory" (Bryant 2019, 5). Finally, CGT – as the other declinations of grounded theory – gives prominence to memo-writing to elaborate categories, specify their properties, define relationships between categories, and identify gaps.

Considering, instead the peculiarities of CGT, the role of the participants and researchers in the process of generating knowledge represents a key element that characterizes Charmaz's approach to CGT. Where classical GT as-

serts that theory emerges from data, and is drawn out by the researcher in a detached, yet reflexive scientific observer, CGT fully implicates the researcher in generating data and theory. In CGT, participants are active in the construction of knowledge, a knowledge that Charmaz (2014) argues is strengthened when the process of construction is acknowledged. In turn, the knowledge generated is posited as constitutive of an interpretive portrayal. For Charmaz, "the pragmatist foundations [of CGT] encourage us to construct an interpretive rendering of the worlds we study rather than an external reporting of events and statements" (Charmaz 2014, 339)" (Timonen et al. 2018, 3).

An additional divergence is represented by what Timonen and colleagues (2018) consider a false myth of GT: conducting the literature review just after the data analysis for pursuing an independent analysis.[42] Again, following what Charmaz sustains about CGT, conducting a preliminary literature review prior to the study is feasible, just if it is this then put aside and "allowed to lie fallow" until the researcher has begun to develop categories during analysis (2014, 166)". At the same time the author (2006,48) invites the researcher to reflect around what Dey (1999, 251) sustains about researchers' prior ideas and skills: "There is a difference between an open mind and an empty head." This "open mind" perspective affects especially the initial stage of coding, the so-called "open" or "initial coding", as explained further in the following section (see 2.3). However, it may be maintained during each stage of the research process, characterized by a peculiar recursive logic based on the abductive strategy that connects sampling of case studies, data gathering, and coding stages with the logic of theory building.

Moving from the main features of (C)GT at the theoretical level, the adoption of the constructivist approach defines the research process as a whole. According to Urquhart (2017), the CGT method follows different rounds of sampling (i.e. data-gathering) and different types of coding (i.e. data analysis). In

---

[42] For Timonen and colleagues GT is characterized by "false myths". (i) GT must produce fully elaborated theory, (ii) engaging with the literature and existing theory spoils GT; (iii) data collection and analysis must always happen in tandem, (iv) coding the GT way is excessively time-consuming (2018, 4-9). For an overview of the debate around the timing of literature review in GT see Giles et al. (2013).

practice, Urquhart distinguishes seven steps that characterize a research process using CGT, respectively (i) the initial case selection, (ii) a first round of data gathering, (iii) a preliminary data analysis called "initial/open coding", (iv) a second round of data gathering, called "theoretical sampling", (v) followed by a revision of the "open codes" in "focused codes". Then, the focused coding stage is followed by (vi) a third and last round of data gathering (i.e. theoretical sampling). The research process ends with (vii) a third type of coding process, called "theoretical coding". As regards this dissertation, the division proposed by Uruhquart provides a compass to be adapted to this specific research, thus this research process revolves around nine stages grouped in three main phases that correspond to the main types of coding (i.e. open coding, focused coding, and theoretical coding), which are described in detail in the following section.

2.3 *The empirical research in practice: reconstructing the different stages of data gathering and data analysis*

As was already pointed out in the previous section, the research execution is characterized by an iterative process of data gathering and data analysis traced by memo-writing. The steps indicated by Urquhart (2017) – listed above – provide a compass for this thesis. Indeed in the framework of this dissertation, the research process revolves around nine specific stages, as summarized in Table 2.2. The table provides an overview of the research as a whole, highlighting the overlaps with Urquhart's steps and pointing out the main "output" of each stage, considering both empirical and theoretical insights.

The nine stages can be subdivided into three main phases of the research, according to the main type of coding process adopted: the first phase is characterized by the *initial coding* and counts three steps mainly devoted to preliminary data gathering and data analysis. The second phase deals with the shift from initial to *focused coding*, and its ends with the definition of the data-driven coding scheme. Then, the third phase is pinpointed by *theoretical coding* and counts two core stages for defining the main empirical and theoretical contributions of this dissertation.

Table 2.2 The empirical research in practice: reconstructing the different stages

Phase		Research stage	Main output
Phase 1: *Initial Coding*	(i)	(**aim**) **Familiarize with countries' contexts and map potential case studies** (**how**) Combining Desk Research with Experts' interviews	Experts' interviews
	(ii)	(**aim**) **Visualizing the initial cases** (**how**) A preliminary analysis through SA Maps	SA Maps for the "initial" case studies selection (i.e. Common, Openpolis, Xnet, Civio, N=4)
	(iii)	(**aim**) **1st round of data collection and analysis** (**how**) Collecting in-depth interviews and creating open codes	(N=5) interviews with both initiators, activists and tech developers, documents, short-term offline and online part.obs.
Phase 2: *Focused Coding*	(iv)	(**aim**) **Towards focused coding** (**how**) Cluster codes in semantic areas	(N=20) semantic areas
	(v)	(**aim**) **2nd round of data collection and data analysis** (**how**) Theoretical Sampling followed by focused coding	(N=5) New case studies: ALAC (TI-Italy), Whistleblowing PA (TI-Italy), *Buzones* of Ay.Barcelona, AVAF, AOC / Collecting new data
	(vi)	(**aim**) **Finalize focused coding** (**how**) Merging, renaming, or discarding codes from an evolving coding scheme	The final version of the coding scheme
	(vii)	(**aim**) **3rd round of data collection and data analysis**: (**how**) Theoretical Sampling followed by focused coding	Collecting new data: documents, short-term offline part.obs., additional interviews
Phase 3: *Theoretical Coding*	(viii)	(**aim**) **Towards theoretical coding**: (how) Searching for categories through visual tools (Code Maps and MAXMaps Two-Case Model, both available on MAXQDA Plus 2020)	Code maps and MAXMaps for whistleblowing initiatives MAXMaps for monitoring initiatives
	(ix)	(**aim**) **From categories to *empirical and theoretical* findings** through Theoretical coding: • find out connections between categories • connect categories with extant literature	(N=4) types of infrastructures based on *Infrastructural activism*
Phases 1-2-3		**Memo-writing**	Document and code memos on MAXQDA 2020 Plus

A transversal research activity across all the stages (and common to both methods) is represented by "memo-writing". For the research execution and also for the reliability of the process in itself, memo-writing represents a core function: indeed, the transition between the various stages is documented through the production of informal analytic notes, called "memos", which connect the process of data gathering and data analysis. The logic of constant memo writing and memo revision is in continuity with the abductive strategy that characterizes the whole research process. Indeed, as already pointed out in the previous sections of this chapter, the adoption of CGT and SA based on an abductive strategy affects the iterative process of data collection and data analysis, which ultimately leads to the production of conceptual models or frameworks (rather than theories).

As highlighted by Blee (2019), the abductive strategies force the researcher to move back and forth from the field for data collection to data analysis. This iterative process is also characterized by a retrospective exploration of abductive possibilities in the field notes and interviews, but also, according to CGT, in the memos.

Memo-writing prompts the researcher to analyze data and codes early in the research process and keep track of the various changes that emerge during the analysis, as in the case of the evolution of open codes into focused codes: here memos trace the processes of merging or discarding some of them. The same for the case of in-vivo codes, then renamed to be more functional for the focused coding and then theoretical coding. The majority of memos deal directly with the different coding stages, however, this research employs memos also attached to specific portions of texts to highlight links between different types of data (e.g. a document mentioned during an interview and the document in itself) or between different case studies, pointing out differences and commonalities between them, in continuity with the comparative research design.

2.3.1 *Data gathering: triangulating three qualitative techniques*

Before presenting each stage of this research, it is useful to provide an overview of the main techniques adopted for data collection and the total amount of qualitative data gathered and then analyzed. As mentioned above, data collection was articulated through several stages of sampling, which consist collecting data on the already selected case studies or selecting additional initiatives as new empirical case studies (i.e. grassroots AC initiatives). This thesis adopts different techniques for collecting data. The iterative process of data collection is based on a triangulation of qualitative data sources as the main strategy for data reliability, which combines semi-structured interviews (N=34), multi-sited short-term participant observations both offline (N=5) and online (N=6), and documents (N=20).[43] The multi-technique approach also counts desk research and expert interviews (N=6), both employed in the preliminary stage of the research to single out relevant ACTs projects in both countries.[44]

Although this research employs different types of qualitative data, the in-depth semi-structured interviews represent the core of the entire dataset. Indeed this type of data is more suitable for grasping the meanings that civil society organizations associate with their (anti-corruption) actions (Blee and Taylor 2002) that count both the creation and usage of ACTs. Semi-structured interviews were collected involving different categories of research participants. As regards grassroots actors, this research counts activists, journalists, and tech developers of digital platforms. As regards the whistleblowing initiatives, in-depth interviews were collected also among public servants. Both judgment sampling and snowball sampling were applied, according to the different categories of interviewees. The interviews were conducted both online (using the Jitzi platform) and in person. The questionnaire was structured around different

---

[43] For a complete overview of the whole dataset: see Appendix 1 (Table 2 - List of (N=34) semi-structured interviews; Table 3 - List of (N=5) short-term offline participant observations; Table 4 - List of (N=6) short-term online participant observations; Table 5 - List of (N=20) documents)

[44] Expert interviews count as "background information": see Appendix 1, Table 6.

sections that correspond to the RQs. A first section deals with 'imaginaries' to collect data on perceptions of ACTs. Then, the section dedicated to 'materiality' was finalised to capture the role of ICT and other non-human elements and content production. This section is partly linked to the questions dedicated to the "user perspective". Then, an additional section is dedicated to the study of "relational dynamics" with other actors, both grassroots and institutional, to conclude with the main "results" (perceived or concrete) linked to each initiative, intended as an evaluation of use,outcomes, future perspective. [45]

This core type of qualitative data is then combined with multi-sited ethnography. This second technique is employed for developing a dense understanding of social processes across countries, also when it comes to the study of how digital media and advanced technologies are employed by CSOs in the framework of social movements (Barassi 2015). Multi-sited ethnography includes both offline and online participant observation. In practice, gathering rich qualitative data consists of conducting short-term ethnography field trips (Pink and Morgan 2013) or internet-related ethnography (Postill and Pink 2012). The fieldwork diaries represent the main empirical material used for data analysis purposes, complemented by printed materials such as programs of the events attended, posters, or books collected during the fieldwork activities or provided in some cases by the research participants themselves after the interviews manually or by email. Each fieldwork diary was fully transcribed, reorganized in three main stages (i.e pre-fieldwork, during-fieldwork, post-fieldwork) and then coded with focused codes.

Finally, semi-structured interviews and fieldworks diaries are triangulated with a variety of documents retrieved online on the main websites of the initiatives under investigation. In this research documents are considered an extremely important source of data (Prior 2003). The most relevant ones are represented by internal reports and charts of ethics that enable grasping the symbolic dimension of anti-corruption struggles as well as the initiators' perception of the consequences of creating, using and diffusing ACTs. Looking at other

---

[45] Appendix 2 contains the outline employed for the semi-structured interview.

types of documents, this research relies on both textual (articles, specific web pages as in the case of the section "about us") and visual materials (such as screenshots of ACTs interfaces from the digital platforms, images and photos collected during the participant observations and included in the fieldwork diaries), but also video almost retrieved from the YouTube channels or directly found on the website of each civil society organization.

All textual data are stored and analyzed through MAXQDA Plus 2020. This software is suitable for dealing with heterogeneous types of data, as well as for the method of grounded theory (Rädiker 2023), almost because it integrates different functions related to memo-writing, it offers a flexible code system that can be organized in hierarchies and in clusters of codes – called "sets of codes", and it provides different visual tools to figure out potential relations between codes and categories, in forms of maps. Beyond the already cited situational maps created during the early stage of data gathering and data analysis, this research employs two types of maps available on MAXQDA (i.e. MAX-Maps and Code Maps). These maps are used for spotlight categories from the coded material of both monitoring and whistleblowing initiatives, as will be described in the following sub-sections.

Table 2.3 summarizes the different techniques used and the corresponding amount of data collected. [46] This table refers to the so-called 'core dataset' used only for phase 3 of the research process, that corresponds to the 'theory building phase'. The so-called 'core dataset' contains - compared to the main dataset - a reduced number of interviews (26 out of 34), a reduced number of fieldwork diaries written during offline participant observation (3 out of 5), and a reduced number of documents (14 out of 20). Concerning the whole dataset (see Appendix 1, Tables 2-5), it was employed in the previous phases for identifying semantic areas and refining the coding scheme in its final version.

This methodological choice responds to the need to base the most critical part of the analysis (i.e. phase 3) on similar quality and quantity of data for each of the initiatives studied. Phase 3 consists of searching for categories us-

---

[46] For a comprehensive list of data collected and analyzed during the whole research process according to each case study see Tables 2-5 in Appendix 1.

ing visual tools (i.e. phase viii), discovering the links between the categories, and also linking the categories to the existing literature, and then moving from the analytical categories to the findings (i.e. phase ix).

Finally, it should be pointed out that the various data gathering stages - especially those concerning the selection of additional case studies - are partly based on additional interviews and one offline short-term participant observation that were collected and transcribed but not analyzed with MAXQDA and therefore constitute useful material employed as 'background information' (see Table 6, Appendix 1).

Table 2.3 - The core dataset: main techniques and corresponding data

Main technique	Corresponding data
Semi-structured interviews (N=**26** out of 34) N=14 interviews related to whistleblowing initiatives N=12 interviews related to whistleblowing initiatives Between December 2020 and May 2023, 26 interviews were conducted online and offline, fully transcribed and coded.	The main categories of research participants: • Initiators-Activists (N=13) • Initiators-Tech Developers (N=5) • Journalists (N=4) • Public servants (N=4)
Offline participant observations (N=**3** out of 5) Between September 2020 and October 2022, 3 offline participant observations were conducted to collect data on the main Italian anti-corruption initiatives and collective actors (i.e. Common/Libera, Openpolis, TI-Italy). Each fieldwork diary was fully transcribed, organized in three main stages (i.e pre-fieldwork, during-fieldwork, post-fieldwork), and coded.	The annual training event "Scuola Common": attended in person: • Sept.-Oct. 2020 • Sept.-Oct. 2021 • Oct. 2022
Documents (N=**14** out of 20) All the documents were retrieved online on the main websites of each initiative and then stored and coded between March 2020 and September 2023.	• Activity Reports: (N=9) • Webpages (written content/Pdf): (N=3) • Other docs: (N=2)

The methodological choice to triangulate different types of qualitative data partly outweighed the uneven distribution of data collected for the different case studies. This unevenness is mainly due to the limited access to the different fieldwork sites, mainly due to the main challenges associated with data collection, data analysis and data storage, partly exacerbated by COVID-19 restrictions. Indeed, conducting qualitative research during the COVID-19 pandemic limits the quantity and quality of data collected in person. The first round of data collection consists of semi-structured interviews within the Italian initiatives, mainly conducted online. In the case of Spain, on the other hand, the data collection - and in particular the semi-structured interviews - was carried out in person at each headquarters to collect background information and to facilitate snowball sampling. However, during the fieldwork in the three different cities where the initiatives are located (i.e. Barcelona, Valencia and Madrid), the constraints of the COVID-19 restrictions have limited the possibility of conducting short-term offline participant observations. On the contrary, the majority of the offline participant observations were conducted in the Italian context to try to balance the divergences between offline and online collection of semi-structured interviews.

An additional challenge in terms of data gathering and access to the field is tied to the main object of inquiry of this dissertation: doing research on anti-corruption implies both methodological and ethical choices to guarantee the safety of both researcher and research participants. These choices correspond in practical terms to the production of specific documents able to define a clear protocol of action to follow during the research process, thus considering the stages of data gathering, data analysis, and data storage. Thus, taking into account the main topic of this research project, all data gathering techniques, data analysis, and dissemination have to deal with ethics and safety issues. Therefore, since the early stages of data gathering the research protocol was defined by the following documents useful for the fieldwork activities. First, the information sheets and written consent forms for the research participants (both in Italian and Spanish), distinguishing among different categories of research participants according also to the data-gathering techniques (i.e. semi-structured

interviews and both offline and online participant observation, except for public events that do not require a formal consent). In some cases, the research participants were available for an informal conversation as background information, instead of accepting to be interviewed and recorded to facilitate the transcription and the coding process.

The fieldwork activity rests also on the production of a risk assessment: it includes all the necessary information to establish the overall risks of conducting research in both countries (e.g. location risk evaluation, hazards identification, and mitigation measures also related to the research participants). Related to the risk assessment, the research protocol rests on three additional documents: first, the standard operating procedures, which enhance the security of researchers and research participants and prevent the risk of enhancing vulnerability/stigmatization of individuals/groups that will participate in the research; second, the incidental unexpected findings policy: this policy deals with what to do and whom to contact in the case of incidental/unexpected finding. The third document points out alternative strategies to conduct fieldwork: a short outline, that introduces the alternative strategies already set in place both in the Standard Operating Procedure and in the Risk Assessments, and deals with the global pandemic of the COVID-19.

Finally, the research process is based on a charter of ethics, that points out the overall principles that the researcher (as a member of the BIT-ACT research team) seeks to respect when doing fieldwork and interacting with research participants: it outlines the ethical principles in carrying out a cross-country comparative research at the intersection of corruption studies, social movement studies, and science and technology studies. The charter of ethics complements the documents cited above.

As already stated in the introduction to this section, the research process is characterized by different rounds of data collection and data analysis, following an abductive strategy that characterizes the research process as a whole. In terms of data analysis, CGT distinguishes between three coding processes that correspond to the three phases: open coding, focused coding, and theoretical coding, as summarized in Table 2.2. The following subsections present the nine

stages of this research process, grouped according to the main type of coding process.

2.3.2 *Setting out the open coding phase: the initial stages of data collection and analysis*

The first phase of this research process characterized by the *open coding* process, counts three main stages: (i) Familiarize with countries' contexts and map potential case studies combining desk research and expert interviews, (ii) Visualize the initial cases: a preliminary analysis through the situational maps, and (iii) A first round of data collection and analysis: collecting in-depth interviews and starting with Open Coding.

As regards the *first stage*, it consists of familiarizing with the Italian and Spanish contexts conducting desk research, and collecting expert interviews to map potential grassroots anti-corruption initiatives as initial case studies. In practice, desk research consists of collecting information on several potential dimensions of analysis, such as the main corruption features in both countries, the legal anti-corruption framework, or the level of digitalization in both countries.[47] The collection of experts' interviews, instead, integrates the background information for the initial case studies' selection and the other stages of theoretical sampling.[48]

Thus, the main output of this initial stage consists of selecting four grassroots AC initiatives as the initial empirical studies under investigation: Common and Openpolis from the Italian scenario, Xnet, and Civio from the Spanish one. Common, created by Libera and Gruppo Abele, was selected for the leading role played by its creators – Libera and Gruppo Abele - in fighting corruption and other crimes as Mafia. Xnet was selected for its leading and pioneer-

---

[47] This first round of desk research constitutes the basis for Chapter 3.

[48] The interviews with experts involve scholars with different backgrounds and different expertise in one or both geographical areas: respectively, were conducted interviews with corruption scholars (N=2) to collect information on grassroots anti-corruption struggles in the Italian and Spanish contexts, looking in particular at the relationship between CSOs and local efforts (i.e. the case of Libera within the Italian scenario). Interviews with media scholars (N=3) grasp, instead, the main features of journalism arena in both countries, looking also at the media coverage of corruption. Finally, an interview was conducted with an academic expert on digital whistleblowing (N=1).

ing role in combining mobilization protests and adopting an innovative ACT for facilitating leaks during an emblematic Spanish corruption scandal. On the contrary Openpolis and Civio were selected for their pioneering use of technologies for the collection and analysis of public data and the employment of (data) journalistic practices although both origine as associations and not as newsrooms.

Once the initial case studies' selection is completed the research process enters its *second stage* which consists of a preliminary analysis of each initiative through the creation of the already introduced "situational", "relational" and "social world" maps. These analytical tools typical of SA are used to visualise (and analyse) the main actors and actants of each initiative, their relationships across different social arenas, and possible comparative dimensions of analysis between the four CSOs, which will be further elaborated in the questionnaire for the semi-structured interviews. For Openpolis, Civio and Xnet, the issue of digital technologies seems to define not only their anti-corruption practices but also their collective identity. In the case of Common, on the other hand, its collective identity is less technology-oriented and closely linked to the leading collective actor within the anti-corruption and anti-mafia scenario in Italy, i.e. Libera. This 'dependency' emerged even more when looking at the relational maps and the social world maps, which respectively show the relational dynamics and the interconnections between different collective actors and the related social world arenas (see Appendix 1 for a complete overview of each map).

After the initial case selection and their visualization through SA maps, what follows is a first round of data gathering and analysis, thus the *third stage*. It consists of a first round of online interviews with the initiators of three out of four initiatives, giving more prominence to the role of tech developers.[49] Once the interviews were transcribed and stored in MAXQDA the data analysis followed the open coding process. Open coding consists of assigning codes to the interviews, following the *line-by-line approach*. In practice, this means creat-

---

[49] As regards the case of Civio, data collection counts just documents rather than interviews. Civio's interviews were conducted in person at its headquarter in Madrid in may 2022.

ing codes for each line of each interview using gerunds, rather than applying pre-existing coding schemes (e.g. of open codes: Increasing transparency through technology, Adopting journalistic hallmarks, Adopting open-source software, Anti-corruption as monitoring). Indeed for CGT the open codes are grounded in the data and are action-oriented (Charmaz, 2014). Open coding ends with a list of provisional "open codes" that need to be revised to facilitate the emersion of a more structured code system, thus, the main output of the second phase of this research, characterized by the focused coding process, as explained in the following sub-section.

2.3.3 *From open to focused coding phase: clustering codes in semantic areas and defining the coding system for the whole dataset*

The second phase of this research, characterized by the *focused coding* process, counts four additional stages: respectively, (iv) Towards focused coding: clustering codes in semantic areas, (v) A second round of case studies selection, data collection, and data analysis: doing Theoretical sampling followed by focused coding, (vi) Finalizing focused coding: an evolving coding scheme, and (vii) A third round of data collection and data analysis: doing theoretical sampling followed by focused coding.

Considering the copious list of open codes as a starting point to enable the emersion of a code system, the *fourth stage* consists of revising the open codes and clustering them into broad and provisional semantic areas, to then defining the analytical categories (see phase 3). Thus, through this intermediate phase, the analysis makes a further shift toward the focused coding stage. Charmaz (2006) introduces the "focused coding" stage instead of "selective coding" proposed by Strauss and Corbin (1990) highlighting the necessity to look at the plurality of potential categories and the relationships between them, and not just on a selected "core category" too close to an independent variable. Indeed in this research, the transition between open coding and focused coding implies exploring the linkages between the different codes and trying to arrange codes in clusters before defining potential categories. The revised codes are rear-

ranged into 20 semantic areas that constitute the basis for the coding scheme employed for analyzing the whole dataset.[50] The following table provides a list of the most relevant semantics areas tied to both whistleblowing and monitoring actions and some concrete examples of associated codes. The emersion of focused codes and their clusterization in semantic areas represent a crucial stage in defining the data-driven codebook and an intermediate step to let then emerged categories, defined as relations between codes. In practice, the main output of the focused coding process is the creation of a list of codes generated directly from the data (interviews, documents, fieldwork diaries). The list of focused codes represents the coding system then used to code the remaining qualitative data collected.

Table 2.4 - Key semantic areas and some associated codes

Semantic area	Associated *codes*
Definitions/Interpretations of AC: it captures the multiple definitions and interpretations of the anti-corruption struggle given by the interviewees/contained in documents	e.g. *Anti-Corruption as monitoring*, *Anti-Corruption as a risky action*, *Anti-Corruption as increasing transparency*
Imaginaries and Perceptions of Technologies: it refers to the values (symbolic dimension) associated with the use of technologies	e.g. *Seeing technology as a tool to empower citizens*, *Recognising tech poses security challenges*
Imaginaries and Perceptions of Data: it refers to the values (symbolic dimension) associated with the use of data	e.g. *Seeing data as tool to increase transparency, Seeing AC action as creating open database*
Consequences and Effects of Using Tech: it refers to the consequences of using digital technologies for an AC initiative	e.g. *Technology enabling security and anonymity, Technology enabling data generation*
Repertoire of Contention and Collective Action: it refers to the different repertoires of contentions used by CSOs	e.g. *Pressuring government for reaction, Employing advocacy, Blowing the whistle*

---

[50] The coding scheme counts 20 semantic areas, then used for creating key sets of codes in the third phase of the research process: (1) Definitions/Interpretations of Corruption, (2) Definitions/Interpretations of AC, (3) Imaginaries and Perceptions of Democracy, (4) Repertoire of Contention and Collective Action, (5) Roles and Relationships, (6) Imaginaries and Perceptions of Technologies, (7) Data-Related Imaginaries and Perceptions, (8) Data-Activism and Data-Related Practices, (9) Consequences and Effects of Using Tech (sub-category: Technology and Platforms as a Structuring Agent), (10) Creation and Development of Digital AC Initiatives, (11) Knowledge Related Practices (12) Outcomes (13) Funding and Resources, (14) Organizational Aspects (15) Construction and Perception of Users (16) Motivation to Engage, (17) Goals Wanted to be Reached (18) Journalism and Journalists (19) Transnational Dimension (20) User's Perspectives.

Roles and Relationships: it highlights both roles or relational dynamics between different AC actors	e.g. *Collaborating with public authorities, Building bottom-up partnerships, Collaboration btw different actors facilitate whistleblowing, Acting as an alternative to the institutional actor, Conflictual relationships with public authorities.*
Goals Wanted to be Reached: it refers to the main objectives that trigger the origin but also the maintenance of the AC initiatives	e.g. *Willing to reduce data opacity, Willing to support anti-corruption institutions, Willing to change legislation*
Outcomes: it refers to concrete outcomes achieved or their narratives by the various initiatives over time	e.g. *Triggering data reuse, Developing ACTs an outcome in itself, Diffusion of ACT among national public authorities, Contributing to new legislation*

After the definition of the semantic area, what follows is a second round of case study selection, data collection, and data analysis, i.e. the *fifth stage*. The selection of five additional anti-corruption initiatives (i.e. both grassroots and institutional whistleblowing platforms) and the collection of new data using different techniques (i.e. documents, fieldwork diaries) represent the core of the so-called "theoretical sampling" process. In practice, considering what has emerged from the previous stages, and taking into account the RQs, the RD, and the main goal of this dissertation, the research includes other initiatives related to whistleblowing both grassroots and institutional ones. On the one hand, this implies looking at an additional Italian CSO as TI-Italy and its digital whistleblowing platforms (i.e. ALAC and Whistleblowing PA).

On the other hand, looking at the Municipality of Barcelona and two anti-corruption agencies operating in Valencia and Catalunya regions. The choice to include also institutional platforms was dictated by what emerged from the interviews and documents collected with activists from Xnet and with the tech developers of the GlobaLeaks software, in particular during the fieldwork activities carried out in Spain (between February and May 2022). What has emerged from the data was the exceptional dynamic of the bottom-up diffusion of whistleblowing platforms, facilitated by a strong collaboration between the grassroots and institutional actors, in

the Spanish anti-corruption arena. Theoretical sampling also involves collecting other types of data on the previous cases, such as new reports on Openpolis and Civio monitoring activities, writing and analyzing the fieldwork diaries of two participating observatories for the Common case, and new interviews for the Xnet case.

Once the additional data has been collected, transcribed, and stored, the coding process rests on the existing list of focused codes already clustered in semantic areas, then revised as necessary, thus the *sixth stage*. Indeed the list of focused codes represents an evolving coding scheme until the analysis reaches the last level of abstraction, thus shifting from focused to theoretical coding. During this second phase, the coding scheme is constantly revised and expanded: in practice, this may imply merging some codes, splitting them in two, creating new ones, moving them into different semantic areas, or renaming them to give more homogeneity to the whole dataset.

One emblematic example of the codes' revision is represented by the in-vivo code "Territorial activism". This code was created during the coding of interviews and documents (as well as fieldwork diaries) of Common, where the dimension of activism linked to territories and local level is closely linked to the collective identity of Libera. It is Libera itself that uses the term 'territories' with a very specific valence. It is Libera's activists and educators, present in the different Italian territories (regions and municipalities), who take part both in the training sessions called "Scuole Common" and who may become part of "monitoring communities". Hence the creation of the in-vivo code "Territorial activism". However, the code was revised to avoid overlapping with already existing and make it a less case study-oriented code.

If the final coding scheme constitutes the main output of the sixth stage, the review of the focused codes represents, broadly speaking, the first step towards a process of greater abstraction, aiming not only at the emergence of relations between codes - i.e. the categories - but then at the identification of relations between categories, and subsequently at the

presentation of the main findings, both in terms of empirical and theoretical (or, in this case, conceptual) contribution. The gradual shift from codes to categories and from categories to findings, corresponds to the third and final phase of the research process based on theoretical coding, as explained below.

Before moving on to theoretical coding, the research process includes a final round of data collection, i.e. the *seventh stage*, both to incorporate documents related to new monitoring activities carried out during 2023, specifically by Common and Openpolis, and to balance the discrepancies between the different case studies in terms of data collection. In fact, in some cases, the lower number of interviews was complemented by the analysis of some additional documents, mostly annual reports, as in the case of ALAC and Whistleblowing PA or Civio. All these new data are coded extensively with focused codes.

Once the focused coding of the entire dataset has been completed, the analysis moves on through *theoretical coding*. In practice, this means improving the analysis to cast light on the categories that recur quite systematically in the data set and evoke more general themes around which the analysis develops (Charmaz 2014). Indeed, CGT seeks to identify analytical categories to point out the empirical findings and theoretical concepts capable of providing insights into the phenomenon under investigation. These final stages – performed on the so-called "core dataset" (see Table 2.3) – are presented in more detail below.

2.3.4 *The theoretical coding phase: from the analytical categories to the empirical and theoretical findings*

The third and last phase of this research, characterized by the *theoretical coding* process, counts two additional stages: respectively, (viii) Towards theoretical coding: searching for categories using Code Maps and MAXMaps, (ix) From categories to empirical and theoretical findings: Producing concepts through theoretical coding.

As regards the *eighth stage*, the data analysis rests on visual tools available on MAXQDA Plus 2020.[51] The main output of these tools constitutes the starting point for the surface of the main analytical categories and the relationships between them. [52] The visual tools employed for this stage are respectively the so-called "Code Maps", a code-oriented model of maps used for whistleblowing initiatives, and "MAXMaps", a case-oriented model used for the analysis of both monitoring and whistleblowing initiatives.[53]

Figure 3.2 represents a concrete example of the first type of map, obtained through the "Code Maps" tool. In practice, it shows the links between the codes employed for analyzing the data related to the Italian whistleblowing initiatives.[54] This visual representation of the coding process displays the different codes according to their similarity. The more two codes overlap – the more similar they are in terms of their use along the dataset – the closer they are placed together on the map. [55] The use of

---

[51] For MAXMaps Two-Case Model: https://www.maxqda.com/help.php?version=mx22&pdf=1&id=100110. For Code Maps: https://www.maxqda.com/help.php?version=mx22&pdf=1&id=100104

[52] See Appendix 1 for visualizing all the maps: Figures 9-10 correspond to Code Maps of whistleblowing initiatives. Figures 11-12 correspond to MAXMaps of whistleblowing initiatives. Finally, Figures 13-14-15 correspond to MAXMaps of monitoring initiatives.

[53] This second type of map diverges from the previous one because it corresponds to a case-oriented model (and not to a code-oriented model) and is based on sets of documents (instead of sets of codes).

[54] Creating Code Maps rests on the selection of key sets of codes. This entails the selection of more meaningful semantic areas (8 out of 20) and more meaningful codes within each semantic area, without considering just their frequency of use. Indeed, the criteria behind the selection of key sets of codes are consistent with the recursive logic of CGT. In practice, this implies looking at the insights that emerged through the memo-writing which engages the researcher in each step of data analysis, rather than looking at the frequency of each code to point out their relevance. Moreover, considering how this research is conducted in terms of data collection, codes' frequency is not significant: the interviews, although semi-structured, do not guarantee a sufficient degree of internal homogeneity in terms of the coverage of certain themes in favor of others.

[55] MAXQDA Plus 2020 distinguishing between the co-occurrence of codes within the same segment (overlapping), paragraph (proximity), or document (co-presence). In this research the 'Code Maps' function has been set up to look at the relationships between codes in terms of proximity within the same paragraph, coherently with the coding style of the entire dataset, characterized by the use of multiple codes for the same paragraph. In practice - setting the proximity level as "zero" - the Code Map shows the proximity of codes in the same paragraph, instead of looking at their intersection (overlaps) in a single segment: The criterion of overlapping between codes was discarded because it produced meaningless maps for one of the two countries (i.e. Italy).

this visual tool (i.e. Code Map) provides a starting point for searching for clusters of codes, and corresponding sub-categories, which then require further analysis to define the main analytical categories of the initiatives under study. Table 2.5 provides a complete list of key codes, corresponding clusters, subcategories and then categories. Figure 2.3, on the other hand, provides a visual representation of the codes grouped into clusters and the three corresponding subcategories by delineating the boundaries of each cluster with rectangles of different colours (orange for the clusters of codes related to the sub-category 'relational dynamics in the anti-corruption arena', blue for the sub-category 'institutional recognition in the anti-corruption arena', green for the sub-category 'characteristics of whistleblowing technologies'). The same types sub-categories and slightly different clusters of codes are visually represented in the code map related to Spanish whistleblowing initiatives (see Appendix 1, Figure 10).

Considering what is shown in Table 5, two main analytical categories can be identified: 'social drivers of whistleblowing' and 'technological drivers of whistleblowing'. The first category is a combination of two sub-categories and corresponding clusters: i.e. relational dynamics in the anti-corruption arena and institutional recognition in the anti-corruption arena. The second category, on the other hand, counts clusters of codes that belong to only one sub-category: i.e. Features of whistleblowing technologies, distinguishing between "Technology means security and anonymity" and "Technology as a structuring agent".

Table 2.5 - Categories related to Italian whistleblowing initiatives

CATEGORIES	SUB-CATEGORIES (clusters of codes and key corresponding *codes*)
SOCIAL DRIVERS of whistleblowing	(1) **Relational dynamics in the anti-corruption arena** (1.1.) **Collaborative relational dynamics between CSOs** (e.g. *Building up bottom-up parternships, Motivated to serve society with own expertise*) (1.2) **Collaborative relational dynamics between CSOs and public authorities** (e.g. *Assisting public actors in whistleblowing process*) (1.3) **Conflictual relational dynamics between CSOs and public authorities** (e.g. *Conflictual relationships with public authorities, CSOs filling in the role of institutions*)
	(2) **Institutional recognition in the anti-corruption arena** (2.2) **Looking for institutional recognition** (e.g.*Acting as an institutional channel without inst. Recognition, Be perceived as a referent for whistleblowing phenomenon*)
TECHNOLOGICAL DRIVERS of whistleblowing	(3) **Features of whistleblowing technologies** (3.1) **Technology means security and anonymity** (e.g.*Tech enabling user security, Tech enabling user anonymity, Technology as leverage to upscale anti-corruption initiatives*) (3.2) **Technology as a structuring agent** (e.g.*Tech enabling whistleblowing, Control over the platforms structuring activities*)

Figure 2.4, instead, represents a concrete example of the second type of map used in this case for the emersion of the analytical categories of the monitoring initiatives from a comparative perspective.[56] Indeed, the so-called "MAXMap Two-Cases Model" map shows a comparison between the main codes - from which derived common or divergent topics - associated respec-

---

[56] As regards the analysis of monitoring initiatives, the sets of documents were organized according to each case study, and then compared two-by-two to triangulate shared and divergent topics between Common, Openpolis and Civio.

tively with the Italian Openpolis and the Spanish Civio. [57] This map was then compared with other two similar maps to triangulate shared and divergent topics also with the third monitoring initiative: Common. On the contrary, in the case of whistleblowing initiatives, the same tool shows a comparison between different categories of interviewees, activists on the one hand and public servants on the other hand (see Figure 11 for the Italian initiatives and Figure 12 for the Spanish initiatives in Appendix 1).[58] So, the case-oriented maps were employed for sharpening and redefining the main analytical categories and their relations emerged through the first type of map. In practice, this tool allows a type of analysis that is complementary to Code Maps: it explores the coded material - specifically the interviews - by moving from an overall analysis of the entire dataset to a more targeted analysis that focuses on the multiple (and sometimes convergent) perspectives of the research participants on the whistleblowing phenomenon.

What has emerged from the analysis of common and divergent topics between Openpolis and Civio is summarized in the following table that casts light on the relationships between categories (i.e. two types of monitoring strategies), subcategories (i.e. each single strategy), and related distinctive codes. Here the analytical categories refer to the main monitoring strategies performed by both CSOs oriented toward prevention or reaction. Indeed, when institutional data opacity comes into play, CSOs react by adopting a second type of strat-

---

[57] Narrowing down the centrality of the frequency of code usage also affects the use of the second type of map. In this case, the creation of each map has been set to include just selected key codes - the equivalent of creating sets of codes as for the previous type of map and selecting the highest number of codes in terms of frequency, (i.e. 20). This leads to a selection of codes also for the monitoring initiatives as well, thus the selection of more meaningful semantic areas (13 out of 20) and more meaningful codes within each semantic area: (1) (Concrete) Outcomes and their narratives, (2) Roles and Relationships, (3) Definitions/Interpretation of Anti-corruption, (4) Motivations to engage in AC initiatives and Goals, (5) "Repertoire of Contention", (6) "Imaginaries and Perception of technologies", (7) "Consequences and Effects of Using technologies" (8) Data-related imaginaries and perception, that counts also codes related to technology instead of data, (9) Data Activism and data-related practices; (10)Journalism and journalists /meets activism; (11) Organizational Aspects; (12) Knowledge related practices; (13) Construction of Users.
[58] The "MAXMaps Two-Cases Model" of whistleblowing initiatives are drawn based on the same sets of codes used to draw the Code Maps and on two sets of documents: interviews with activists and tech developers on the one hand, and interviews with public servants on the other hand.

egy to overcome the obstacle that hampers their monitoring purpose. The strategies to prevent institutional data opacity adopted by Openpolis and Civio are the following: Produce news articles adopting data journalism practices, based on public data and/or their data-driven platforms. Lack of public data in terms of their availability and accessibility triggers CSOs to adopt a variety of "reactive" strategies: respectively, adopt legal instruments to obtain public data and/or exert pressure on public institutions, join advocacy campaigns to quest public data and/or do lobbying, publish news claiming a lack of public data in terms of availability and/or accessibility, implement (open) databases and, finally develop data-driven platforms reusable by external actors. The definition of each strategy is based on a co-presence of certain key codes (focused codes), as shown in the following table. It should be noted that some codes are cross-cutting and therefore common to the different strategies, while others are specific and therefore characteristic of a particular strategy and even further to a specific case study.[59] Table 2.6 provides a list of both of them.

---

[59] For a comprehensive comparative analysis of the similarities and differences in how the three monitoring initiatives combine the different strategies: see Chapter 6.

Table 2.6 - Categories related to monitoring initiatives: Openpolis and Civio [60]

CATEGORIES	SUB-CATEGORIES	Related initiative(s) and corresponding *codes*
PREVENTIVE STRATEGY to curb institution opacity	**Produce news articles adopting data journalism practices, based on public data and/or their own data-driven platforms**	**Both Openpolis and Civio:** • *Producing new information from data-related practices* • *Adopting data journalism as an analytical approach* • *Activists adopt journalistic hallmarks* • *Seeing data as the bases for producing information* • *Be recognized as a valuable source of news/data* **Just Civio:** • *Activism as a subsequent action to journalism*
REACTIVE STRATEGIES to curb institution opacity	**Adopt legal instruments to obtain public data and/or exert pressure on public institutions**	**Both Openpolis and Civio:** • *FOIA as an ally to access data*
	Join advocacy campaigns to quest public data and/or do lobbying	**Both Openpolis and Civio:** • *Employ advocacy* **Just Civio:** • *Lobbying with public/political actors as activism*
	Publish news claiming a lack of public data in terms of availability and/or accessibility	**Both Openpolis and Civio:** • Pressuring government for reactions
	Create /Implement (open) databases	**Both Openpolis and Civio:** • *Creation of open databases* • *Data processing happening internally*
	Develop data-driven platforms reusable by external actors	**Both Openpolis and Civio:** • *Maintaining databases is extremely time consuming* • *Striving to increase citizen engagement* **Just Openpolis:** • *Data curation as the core of ACT* • *Tech becoming obsolete requiring changes* **Just Civio:** • *Dismiss platforms for thematic data journalism*
Transversal topics (codes)		**Both Openpolis and Civio:** • *Seeing data as tool to increase transparency* • *Motivated by ensuring transparency* • *Motivated by the need of advocating for open data* • *Data-related practices for monitoring purposes* • *Collaborating with other CSOsBuilding bottom-up partnerships*

---

[60] Some codes are cross-cutting and therefore common to the 7 different strategies, while others are specific and therefore characteristic of a particular strategy. This table provides a list of the main "distinctive" codes.

Figure 2.3 – An example of a Code Map of the Italian whistleblowing initiatives (own elaboration based on MAXQDA Plus 2020)
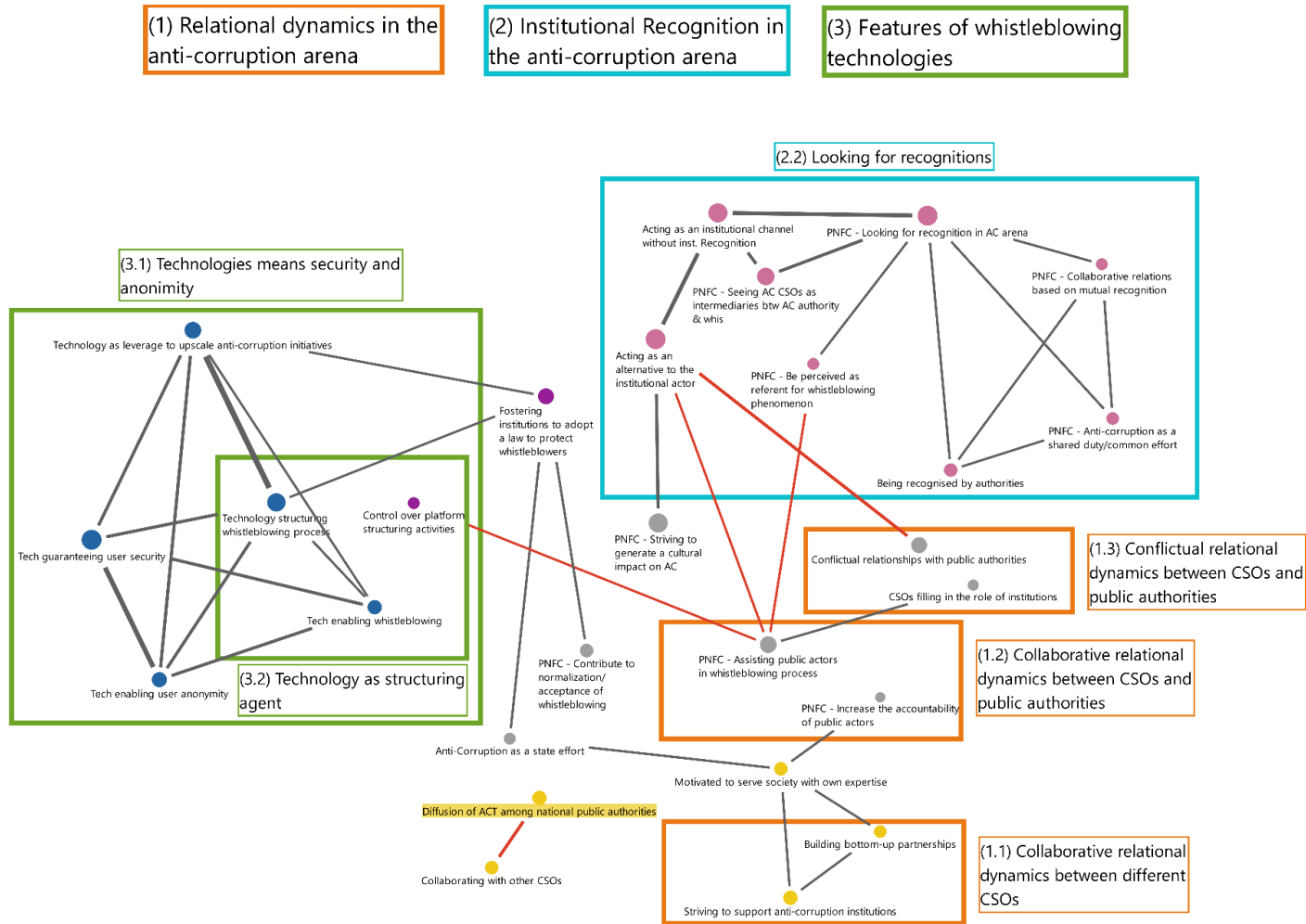
Figure 2.4 - An example of a Two-Case Model: shared and diverged codes between Openpolis and Civio (own elaboration based on MAXQDA Plus 2020)
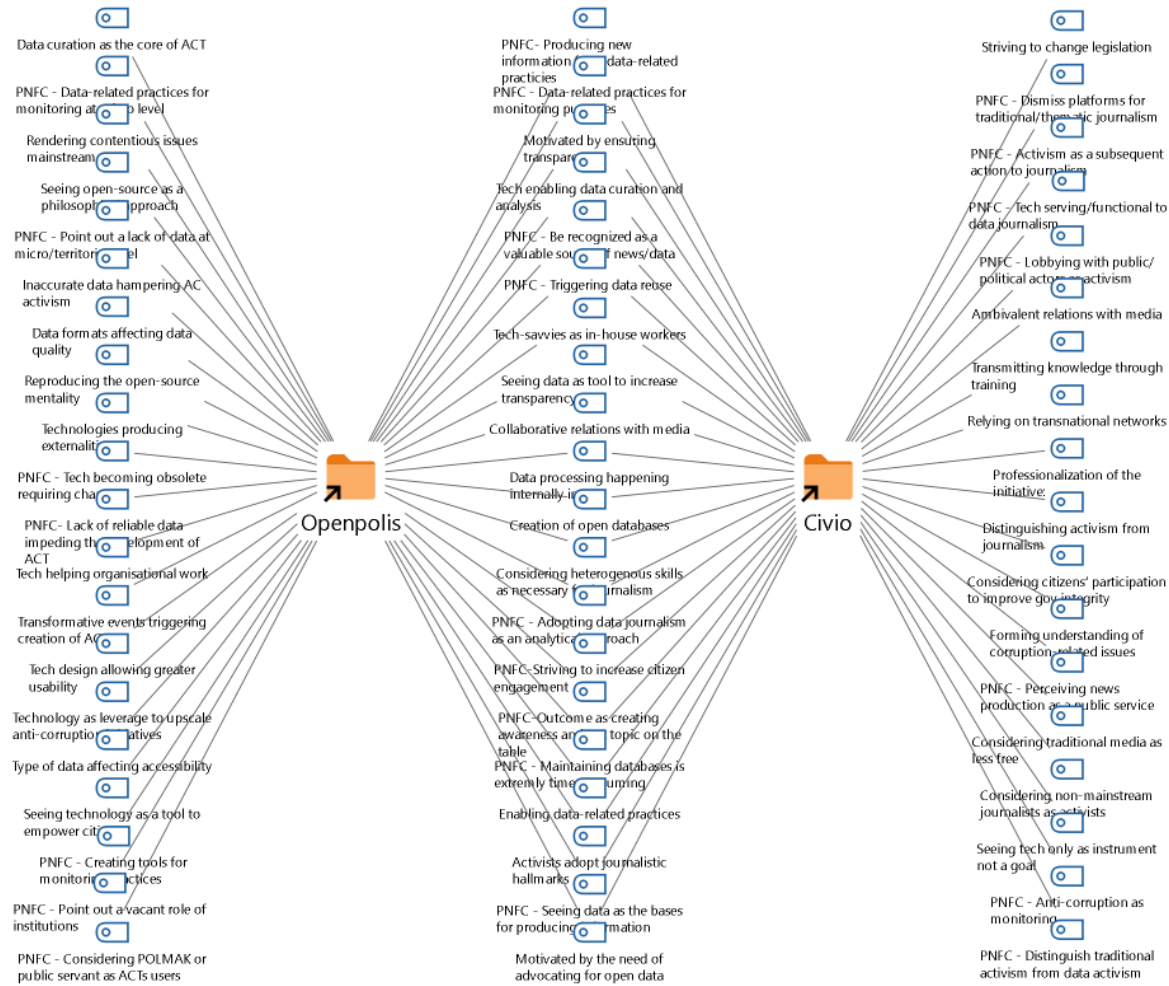
The main output of the previous stage is represented by the emersion of categories for both monitoring and whistleblowing initiatives. If categories are essentially relationships between codes, findings instead rest on the relationships between categories. The shift from analytical categories to empirical and then theoretical findings constitutes the last stage of this research process: the *ninth stage*.

Table 2.7 briefly summarizes the shift from categories to empirical first and then to theoretical findings. First, it lists the main empirical findings of both types of initiatives. Looking at the whistleblowing ones, the analysis casts light on two main types of processes fostered by the conjunction between specific social and technological drivers: on the one hand, what has emerged is a process of diffusion of grassroots ACT among peers, and on the other hand, instead of diffusion, the main outcome is represented by the institutionalization of the same ACT among public authorities, public administrations, and anti-corruption agencies. As regards monitoring initiatives, the empirical findings correspond to the different preventive and reactive strategies put in place for contrasting institutional data opacity, thus in this case the empirical findings correspond to the sub-categories presented above.

A further step in terms of abstraction from empirical to theoretical findings consists of pointing out the existence of four anti-corruption infrastructures: two for facilitating whistleblowing and two for monitoring purposes. All these infrastructures represent the main output of a specific type of activism, labeled *infrastructural activism*, which corresponds to the conceptual (theoretical) finding of this dissertation. As regards the whistleblowing initiatives, the analysis distinguishes between *grassroots* and *institutional(ized) whistleblowing infrastructures*. The difference between the two will be discussed in Chapter 5. Considering the monitoring initiatives, instead, the table distinguishes between *Platform-based and Community-based monitoring infrastructures*. Both infrastructures rest on a combination of different strategies aimed at preventing or reacting to institutional (data) opacity. As will be extensively discussed in Chapter 6, the combination of different "strategic choices" depends on the col-

lective identities, the data-related skills of the grassroots collective actors involved, and consequently, the type of technology employed.

In sum, what has emerged from the data analysis is a commonality across all the initiatives under investigation. Indeed they represent different declinations of *infrastructural activism* for anti-corruption purposes, which represents the main conceptual contribution of this dissertation.[61] At the same time, this specific type of activism represents a "precondition" for the development of the so-called "institutional(ized)" infrastructures as in the case of the Spanish top-down initiatives devoted to facilitating the whistleblowing phenomenon. The term *infrastructural activism* emerged specifically from the theoretical coding stage (Urquhart, 2017) and represents the main conceptual contribution that emerged from the overall research process based on CGT. Indeed, if the emersion of key categories and the relations between them produces new insights related to the phenomenon under investigation, the surfacing of a new concept such as *infrastructural activism* represents the first step for identifying what Bryant calls "models or frameworks or conceptual schemas" (2017, 99). The different declinations of *infrastructural activism* both for monitoring and whistleblowing are discussed in detail in the following chapters.[62]

---

[61] The term *infrastructural activism* was already used by Maharawal (2021) to define the rise of "Google bus blockades"—a form of protest against gentrification, growing inequality and a housing crisis linked to the economic impacts of the technology sector between 2013 and 2018, in the San Francisco Bay Area.

[62] See Chapters 5 and 6 for a detailed description of the four types of infrastructures: respectively, whistleblowing infrastructures discussed in Chapter 5 and monitoring infrastructures, discussed in Chapter 6. For a detailed discussion of the concept of *infrastructural activism*: see the general Conclusion of the dissertation.

Table 2.7 -From categories to empirical and theoretical findings: spotlight Infra-structural Activism

	Categories	Empirical Findings	Types of AC infrastructures	Theoretical Finding
Whistleblowing Initiatives	*Social* drivers of diffusion *Technological* drivers of diffusion	*Diffusion* of grassroots ACT among peers	***Grassroots* whistleblowing infrastructures**	*Infrastructural Activism*
	Social drivers of institutionalization *Technological* drivers *of institutionalization*	*Institutionalization* of a grassroots ACT	***Institutional(ized)* whistleblowing infrastructures**	
Monitoring initiatives	*Preventive* strategies based on *data-driven practices*	- Produce news articles based on data journalism practices typical of "Informative Activism"	***Platform-based* monitoring infrastructures**	
	Reactive strategies based on *data-driven practices*	- Develop (and maintain) data-driven platforms - Publishing news claiming a lack of public data		
	Preventive strategies based on *local activism*	- Facilitate the development of civic monitoring communities	***Community-based* monitoring infrastructures**	
	Transversal *Reactive* strategies	- Create and implement open databases - Adopting legal tools from Transparency Law - Join advocacy campaigns and lobbying to demand public data	Both types of monitoring infrastructures	

Conclusion

This chapter has reconstructed the methodological choices that define the research process as a whole, considering first and foremost the exploratory nature of this research due to the fact the phenomenon under investigation is still scarcely explored in the literature, and then the peculiar recursive logic of the main method employed: the constructivist grounded theory. Thus, the research is based on a cross-national comparative research design that counts both monitoring and whistleblowing initiatives located in two Southern European countries: Italy on the one hand and Spain on the other. Each initiative represents an empirical case study in itself, thus the main unit of analysis.

In terms of methodology, this research combines the Situational Analysis and the Constructivist Grounded Theory, both suitable for explorative research questions. The former method is used mainly in the early stages of the research, guiding the selection of the initial empirical case studies. The latter, instead, shapes the entire research process, which is characterized by an iterative transition from data collection to data analysis, following the logic of theory (or conceptual) building. The constant back and forth from collecting new data and coding them is finalized to the construction of analytic codes and categories from data, and not from preconceived logically deduced hypotheses. Indeed it is the constant comparison that fosters advancing theory development during each stage of this research. Indeed, due to the centrality gained by the CGT in defining the research process, the chapter attempts to reconstruct the different stages, grouped into three different coding phases: respectively open coding, focused coding, and theoretical coding.

To conclude, providing an overview of how the research was conducted in its entirety, this chapter seeks to explain in detail the multiple actions and methodological choices made by the researcher, starting from the selection of the two southern European countries such as Italy and Span, to then pointing out the nine anti-corruption initiatives, distinguishing among those finalized to facilitating whistleblowing, and those aimed at contrasting institutional data opacity through monitoring actions. Thus, all these methodological choices in-

evitably shaped the main empirical and theoretical findings, well introduced and discussed in both Chapter 5, dedicated to monitoring initiatives, and Chapter 6, related to whistleblowing initiatives, and finally in the Conclusion of the entire dissertation.

The following chapters are dedicated respectively to cats light on the specificities of the two Italian and Spanish scenarios (Chapter 3) and to provide an in-depth introduction to the monitoring and whistleblowing initiatives, the concrete object of study of this research (Chapter 4).

CHAPTER 3

THE FIGHT AGAINST CORRUPTION IN ITALY AND SPAIN: THE BACK-GROUND OF THE EMPIRICAL CASE STUDIES

Introduction

The main purpose of Chapter 3 is to reconstruct the background context of the nine empirical initiatives under investigation. Considering the features of corruption as "normatively charged and context-dependent" (Johnston 1996), the understanding of the fight against corruption starts from the entanglements within the main collective actors involved in this fight and the territories where the bottom-up anti-corruption efforts take place, as claimed by Walton and Jones (2017). Providing comparable information on the two scenarios constitutes the starting point for a detailed discussion of what will be presented as empirical findings, to understand how and why the collective actors involved in anti-corruption initiatives in the two countries have incorporated specific digital technologies in their repertoire of contention.

To shed light on the main differences and similarities between the Italian and Spanish anti-corruption arenas, this chapter considers four dimensions of analysis able to depict the two scenarios from a comparative perspective: (i) the level of digitization and development of ICTs, to assess how technological diffusion may provide preconditions for promoting government integrity and accountability by increasing transparency, and, on the other hand, the access and diffusion of technologies for civil society actors. For this first dimension, the evidence relates to the *2022 NRI Index*. (ii) the main features of corruption, considering how corruption is measured. Thus, the level of control of corruption in the two countries as assessed by the *Corruption Risk Forecast*, the opportunities and constraints for corruption as estimated by the *Index of Public Integrity*, the perception of corruption as evaluated by the *Global Corruption*

Barometer, and finally the extent of corruption within the countries and the main areas of opportunity for corruption, as well as the models and manifestations of corruption; (iii) the legal framework, looking at the main domestic laws that directly address the issues of preventing and combating corruption, transparency laws and the regulation of the whistleblowing phenomenon. Finally, the comparative analysis considers (iv) the main actors involved in the anti-corruption arenas, to shed light on the relationship and power dynamics between them. All these dimensions converge in defining both the opportunities and the constraints on corrupt behavior, as well as in determining the corruption risk within these countries. As argued by Mungiu-Pippidi and Dadašov (2016) and then mentioned on CorruptionRisk.org, "Corruption risk results from an equilibrium between opportunities for corruption (such as discretionary power and material resources, e. oil or non-transparent public funds) and constraints that autonomous organizations (e. g. judiciary, media), groups (civil society) and individuals (voters, whistleblowers) can use to prevent those in power from abusing their office in their own interests" (CorruptionRisk.org, 2023).

The chapter is structured as follows: the first section (3.1) outlines the level of digitization and development of ICTs, highlighting a core difference between the two southern-European countries. The second section (3.2) reviews the main characteristics of corruption, comparing the different "measurements" of corruption. The third section (3.3) provides an overview of the legal anti-corruption frameworks at the domestic level in both scenarios. Then, the fourth section (3.4) describes the different and similarities between the main anti-corruption actors involved in both countries.

3.1. *The level of digitalization and development of ICTs*

This section compares the Italian and Spanish digital societies in terms of ICT development, access and investment in the two countries. The comparison relies mainly on three indexes: the Digital Economy and Society Index (DESI),

the Network Readiness Index (NRI) and the Digital Government Index (DGI). The main aim is to shed light on how technology and digitalization can support transparency processes, e-participation and government accountability. The following table provides an overview of the key values that co-occur in defining the level of digitalization and ICT development from a comparative perspective.

Table 3.1 - Comparing the level of digitalization and development of ICTs in Italy and Spain

Index	Main parameters	Italy	Spain	EU
DESI 2020 Digital Economy and Society Index	Ranking	25th out of 28 EU Member States	11th out of 28 EU Member States	
	- Connectivity	50	**60.8**	50.1
	- Human capital	32.5	**47.6**	49,3
	- Use of internet services	44.5	**60.8**	58.0
	- Integration of digital technologies	31.2	**41.2**	41.4
	- Digital public services	67.5	**87.3**	72.0
NRI 2022 Network Readiness Index[63]	Ranking	32nd out of 131 countries	26th out of 131 countries	
	Technology:			N.A.
	- Access to technology	23rd	15th	
	- Access and Investments in emerging technologies	25th	24th	
	People			
	- How individuals use technology and leverage their skills	46th	29th	
	- How governments use, invest in, and deploy ICT for the benefit of the general population	37th	23rd	
	Governance	46th	33rd	
	- Trust: safety of individuals and firms in the context of the network economy	28th	27th	

[63] https://networkreadinessindex.org/wp-content/uploads/reports/nri_2022.pdf

	- Regulation: the extent to which a government promotes participation through regulation, policy, and planning. - Inclusion (vs. digital divide and related inequalities) Impact - Quality of life: The social impact of participating in the network economy	37th 48th	16th 33rd	
DGI (2019) *Digital Government Index*	Ranking	15th out of 33 countries	**7th** out of 33 countries	
	- Digital by design (rank) - Data-driven public sector - Government as a platform - Open by default - User-driven - Proactiveness	21st 13th 24th 11th 10th 5th	4th 4th 8th 23rd 12th 4th	N.A.

3.1.1 *The Italian and Spanish digital societies from a broad perspective*

The first step for mapping the state of the digitalization process in the two countries is to explore their positions and look at the general trends affecting the other countries in Europe and beyond. [64] Looking at the pathways for Europe's digital transformation, the Digital Compass 2030 identified the main objectives to be achieved in the next decade: a digitally literate population and highly skilled digital professionals, secure and extensive digital infrastructures, digital transformation of enterprises and digitization of the public sector.[65]

In addition, the 2020 Digital Economy and Society Index (DESI) summarizes Europe's digital performance and tracks the progress of EU countries. [66] Each country's ranking is based on five indicators: first, connectivity, i.e. fixed

---

[64] As regards the International Digital Economy and Society Index (I-DESI): EU countries outperform their global counterparts in terms of digital skills, from basic to advanced, but they consistently lag behind in the digitization of public services.

[65] https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/europes-digital-decade-digital-targets-2030_en#multi-country-projects
https://digital-strategy.ec.europa.eu/en/node/157/printable/pdf

[66] https://digital-strategy.ec.europa.eu/en/policies/desi

broadband penetration, fixed broadband coverage, mobile broadband and broadband prices; second, human capital, i.e. internet user skills and advanced skills; third, internet usage, i.e. citizens' use of internet services and online transactions; fourth, digital inclusion, i.e. digitization of enterprises and e-commerce; finally, digital public services, i.e. e-government. As shown in Figure 3.1, Italy - followed by Romania, Greece and Bulgaria - has one of the lowest scores on the index. Spain, on the other hand, scores higher in almost all four indicators, with a large gap in the digitization of public services. As reported by DESI, Italy's main gaps relate to human capital, understood as advanced digital skills: "These gaps in digital skills are reflected in the low use of online services, including digital public services. Only 74% of Italians use the Internet regularly. Although the country ranks relatively high in the provision of e-government services, public take-up remains low" (DESI, 2020, 3).

Figure 3.1 – Comparing the digital performances of Italy and Spain (DESI 2020,14)

Source: DESI 2020, European Commission.
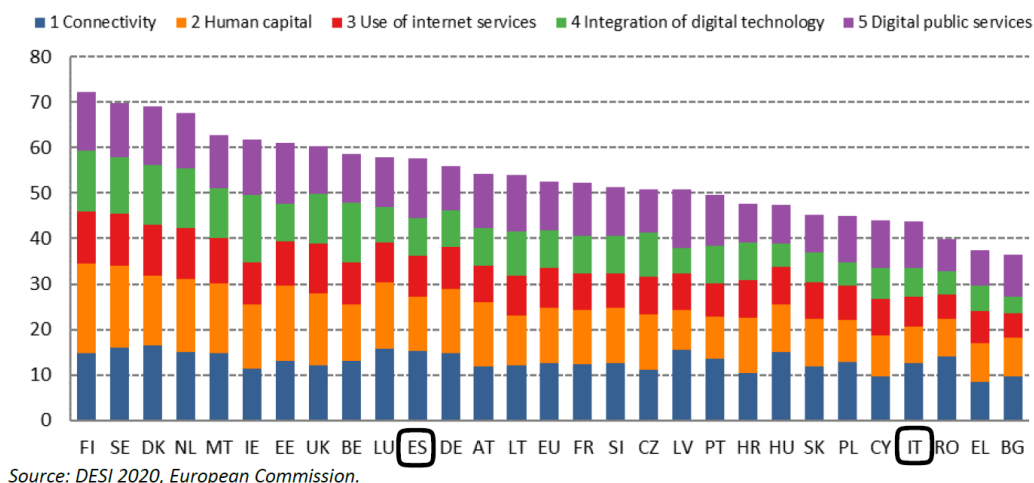
Spain's status is quite different when compared to the progress made by states in terms of DESI growth between 2015 and 2020: "Spain ranks 2nd in the EU in terms of digital public services, thanks to the timely implementation of a digital-by-default strategy throughout its central public administration [...][it] ranks 13th in terms of integration of digital technologies; its score is in line with the EU average". However, as in the Italian case, Spain is below the EU average in terms of human capital indicators: in fact, half of the Spanish population still lacks basic digital skills and 8% have never used the Internet (DESI, 2020, 3).

Figure 3.2 shows the evolution of the level of digitalization of the economy and society over the last 5 years. Ireland has made the most progress, followed by the Netherlands, Malta and Spain. These countries are also well above the EU average as measured by the DESI score. In fact, Spain, unlike Italy, shares with these other countries robust policies and targeted investments in all areas measured by this index.

Figure 3.2 - Member States' progress between 2015-2020 (DESI 2020, 13)
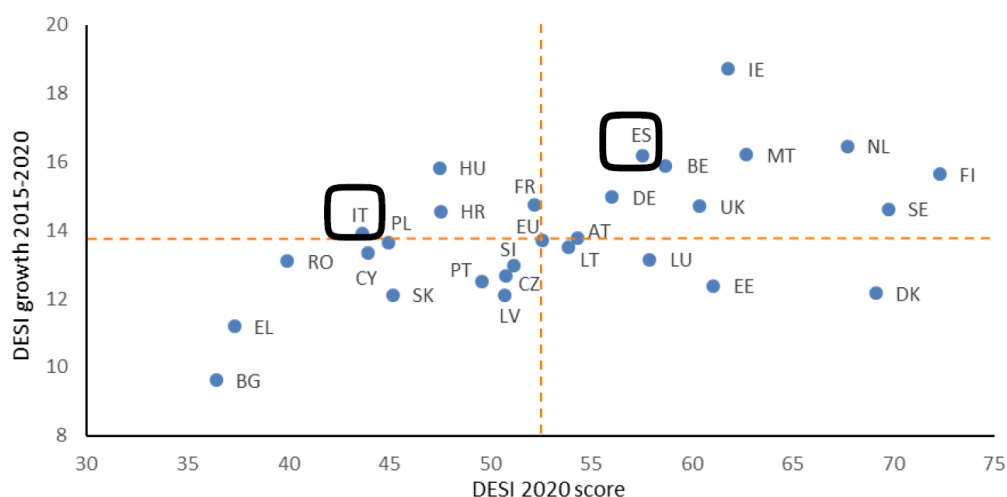
As for the third indicator of the DESI index, which deals with the use of internet services, it can be complemented with additional data on the use of digital media in both countries, provided by Hootsuite. According to the *Global State of Digital Report 2020*, Italy counts 49.48 million internet users, with

an increase of 1.2 million (+2.4%) between 2019 and 2020. Internet penetration reaches 82%. There are 35.00 million social media users and the most used social media platforms are respectively, YouTube (88%), WhatsApp (83%), Facebook (80%), Instagram (64%) and Twitter (24%).[67] As for Spain, it counts fewer million internet users (42.40), with an increase of 1.8 million (+4.3%) between 2019 and 2020. However, internet penetration is higher at 91%. The number of social media users is lower than in Italy (29.00 million) and the most widely used social media platforms are practically the same, with the sole exception of Twitter, which is more than twice as popular as in Italy: YouTube (89%), WhatsApp (86%), Facebook (79%), Instagram (65%) and Twitter (53%).[68]

3.1.2 *The development of ICTs, their access, and related investments*

To measure the readiness of Italy and Spain to take advantage of the opportunities offered by ICT, and how the different levels of development of ICT, their modes of access and investment in new technologies might affect transparency, this chapter considers key dimensions of the Network Readiness Index (NRI), in which Italy ranks 32 out of 131 countries in 2022 and Spain ranks 26 out of 131.[69] The main dimensions considered to shed light on the differences between Italy and Spain are technology availability, technological skills and literacy, e-government resources and trust in government. About the availability of technology, this chapter looks at technology in terms of access (Italy scores 75.66 vs. Spain 78.63) and the level of technological development in a country, i.e. the adoption of new technologies (65.18 vs. 68.80) and related investment (Italy 41.00 vs. Spain 43).[70] In terms of ICT skills, NRI provides data on ICT skills in the education system (Italy 51.78 vs. Spain 44.67) and

---

[67] https://datareportal.com/digital-in-italy

[68] https://datareportal.com/digital-in-spain

[69] For an overview of recent data available on the Network Readiness Index see 2022 NRI Report (p.133 for Italy and p.186 for Spain).

[70] See also data available on AI Watch and EOCD report on artificial intelligence's investiments.

adult literacy (Italy 99.19 vs. Spain 98.22). Another dimension relates to the so-called "resources", which are intended as government data on online government services (Italy 82.42 vs. Spain 88.48), the publication and use of open data (Italy 61.76 vs. Spain 73.53) and government support for investment in emerging technologies (Italy 35.66 vs. Spain 38.08).

One of the most important emerging technologies - also used, albeit still on an experimental basis, in the fight against corruption - is artificial intelligence (AI). This is a fast-growing sector that requires large investments. Therefore, in order to assess how much the two countries decide to invest in AI, this chapter looks at what is reported by AI Watch and EOCD - two actors that aim to monitor the development, adoption and impact of AI in Europe. In Italy, the Ministry of Economic Development published a draft version of its national AI strategy in October 2020, which includes the following actions: improving AI education at all levels, promoting AI research and innovation to increase the competitiveness of companies, establishing an ethical regulatory framework for sustainable and trustworthy AI, supporting (international) networks and partnerships, developing data infrastructure for AI applications, and finally, improving public services through wider adoption and use of AI systems.[71] In Spain, the government published its National Strategy for AI in December 2020, adopting a multidisciplinary approach in defining its main objectives: to promote the development of human capital in AI by developing a large base of qualified jobs, providing training and educational opportunities; to develop solid scientific excellence in AI to promote Spain as a leading country in AI in the creation of tools; to promote the adoption and use of AI technologies in both the public and private sectors; and, finally, to ensure inclusion in the AI-driven economy.[72] The last dimension of the NRI index deals with trust in technological governance in terms of secure internet servers and cyber security (79.29 vs 79.63 and 96.6 vs 98.49), ICT regulatory environment and regulation of emerg-

---

[71] https://www.mise.gov.it/images/stories/documenti/Strategia_Nazionale_AI_2020.pdf and at https://knowledge4policy.ec.europa.eu/ai-watch/italy-ai-strategy-report_en
[72] https://www.lamoncloa.gob.es/presidente/actividades/Documents/2020/021220-ENIA.pdf and https://www.oecd-ilibrary.org/governance/digital-government-index_4de9f5bb-en;jsessionid=XvMKensKNSc2Yw_9pNser-Bq.ip-10-240-5-166

ing technologies (100 vs 81.18, 61.84 vs 65) and digital inclusion, looking at the e-participation scores: 81.48 vs 83.95).

3.1.3 *The e-government status*

A key parameter for assessing the development of ICTs to increase transparency and accountability in both countries is the status of e-government, using data from the 2019 Digital Government Index (DGI) and the 2020 United Nations E-Government Survey (EDGI). The DGI measures the level of digital government maturity in OECD member and partner countries, representing the digital transformation and shift of e-government strategies. The assessment is based on six dimensions of a fully digital government that make up the OECD's Digital Government Policy Framework: digital by design, government as a platform, data-driven public sector, open by default, user-driven and proactive. Figure 3.3 provides an overview of how countries currently score on each of these dimensions. According to the DGI, the two southern European countries have repeatedly scored: Italy 0.534, Spain 0.612 (OECD 0.51) as the value composite score. Looking at the rankings, the OECD places Spain (7th out of the 33 countries surveyed, instead of Italy, which is 15th) among the leading countries in digital government, with the most highly rated features being bottom-up digital design, use of data and proactivity of online public services.

Figure 3.3 – Comparing Italy and Spain (DGI Composite Results,2019, 53)
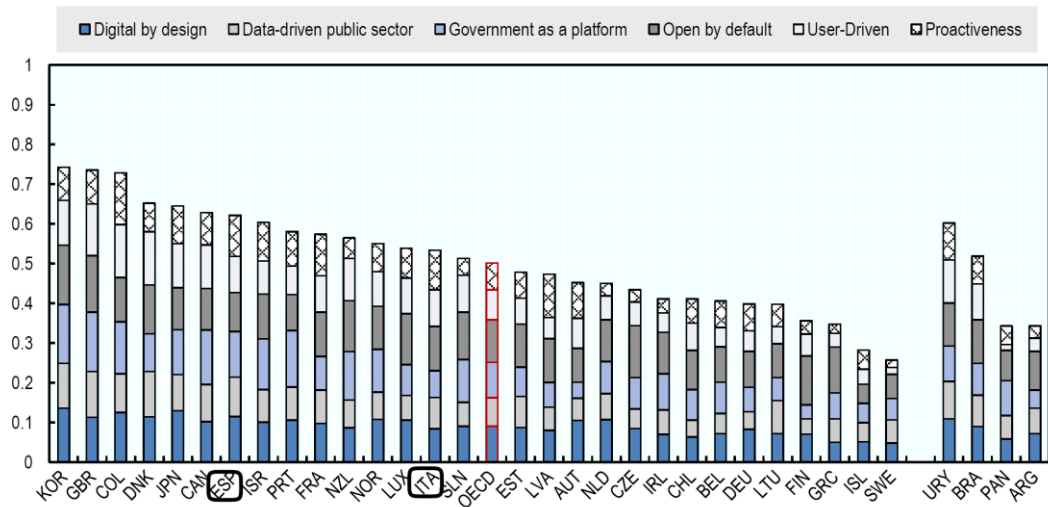
Source: OECD Survey on Digital Government 1.0.

Looking instead at the United Nations E-Government Survey (EDGI), Spain ranks 17th instead of Italy (37th).[73] Moreover, in a section dedicated to the development of local e-government, the report highlights Madrid as one of the highest-ranked cities: since 2015, the city has launched "Decide Madrid", a virtual participation platform based on the principles of inclusion, neutrality and privacy services, which allows sectors of the population affected by the digital divide or other difficulties to make their voices heard. In addition, the platform received a United Nations Public Service Award in 2018 in recognition of its success.[74]

3.2 *Contextual corruption features*

The assessment of the contextual characteristics of corruption affecting the two countries is based on a comparison of (i) measures of corruption, (ii) models of corruption, (iii) and diffusion of corruption at the geographical and economic levels. In addition, the analysis of the two contexts, taking into account

---

[73] https://www.un.org/development/desa/publications/publication/2020-united-nations-e-government-survey
[74] https://decide.madrid.es/

the historical period in which the research took place, includes a reflection on how the multiple crises related to the COVID-19 health crisis are shaking up the fight against corruption.

3.2.1 *Measurements of corruption*

The comparison between Italy and Spain in terms of corruption is based on how the two countries control corruption to shed light on long-term trends and predictions, as measured by the Corruption Risk Forecast (Mungiu-Pippidi 2022), which looks at different trends of specific components of the Index of Public Integrity (IPI) (7.66 for Italy vs. 7.96 for Spain). The IPI measures the capacity to control corruption (Mungiu-Pippidi et al. 2016), taking into account the level of judicial independence (5.74 vs 5.97), administrative transparency (both 7.75), online services (8.24 vs 8.84), budget transparency (8.93 vs 8.71), e-citizenship (7.39 vs 8.22) and press freedom (7.91 vs 8.28).[75]

According to the forecast (Mungiu-Pippidi 2022), Italy has made some progress over the past decade, but its performance in e-government and transparency remains well below its capabilities. Among the main constraints, the Corruption Risk Forecast identifies "too close a relationship between interest groups and supposedly autonomous key actors such as the judiciary or the media". At the same time, "while the quality of regulation has improved somewhat and the administrative burden has decreased, political parties remain too involved in the appointment of public officials and the handling of large public contracts". For the Spanish scenario, on the other hand, "the lack of full autonomy of the judiciary from party interests is the main IPI component dragging Spain down", although it has made progress in terms of administrative burden and e-Citizenship, meeting European requirements. To sum up, the expected trend for Italy is stationary, while for Spain it is improving.

---

[75] For the older editions of IPI (2015 - 2019), the components of "Administrative Burden" and "Trade Openness" were considered instead of "Administrative Transparency" and "Online Services"

As regards the Transparency Index (T-index), which measures the existence of free and accessible information on key public websites and represents the availability of public data in a country (Italy scores 14.50 against 17.50). The T-index distinguishes between the de facto (Italy 9.50 vs. 12.50) and the jure components of transparency (same scores): the de facto components refer to the online availability, accessibility and coverage of public data in selected relevant areas, such as public procurement portals or business registers. Italy (instead of Spain) lacks available data on current expenditure (budget tracker), the schedule of hearings of the Supreme Court and building permits in the capital. Instead, de jure components consist of the existence of formal transparency commitments, all of which are available for both countries: i.e. Freedom of Information Acts (FOI), Open Government Partnership (OGP), United Nations Conventions Against Corruption (UNCAC), Financial Action Task Force Against Money Laundering (or equivalent) and plurinational transparency agreements (EITI, OECD, WTO GPA or CPTPP).[76]

Looking instead at measures of corruption perception, the comparison between the two Southern European countries is also based on the results of Transparency International's 2022 Global Corruption Barometer (GCB). It's a survey that highlights the experiences of everyday people confronted with corruption in 180 countries around the world. In both Italy and Spain, 34% of people believe that corruption has increased in the last 12 months, and only 3% (2% in Spain) of public service users have paid a bribe. The chapter takes into account the GCB data, bearing in mind the limitations of measuring individuals' perceptions and the broad debate on the subject: indeed, individuals' perceptions are often based on their experiences, may be largely unspecific and tend to measure trust in government rather than corruption (Mungiu-Pippidi 2022).

The same limitations apply to the Corruption Perceptions Index (CPI), which is produced annually by Transparency International. The CPI measures how corrupt each country's public sector is perceived to be by experts and

---

[76] See subsection 3.3 for an overview of the legal anti-corruption framework in both countries.

business people, looking at specific forms of corruption such as bribery, mis-appropriation of public funds and nepotism in the civil service.[77] Looking at data available for 2022, Italy ranked 41st place vs. Spain 35th out of 180: the corresponding score is respectively 56/100 and 60/100 compared to the European Union and Western Europe's average regional score (i.e. 66/100).

As regards Spain, the *CIS barometer* 2018 points out that corruption and fraud are perceived as the second problem for Spaniards (24.7%), only surpassed by unemployment and the political parties and politics in general. [78] Still at the level of perceived corruption, Flash Eurobarometer 457 - Businesses' attitudes towards corruption in Italy (2017) compares the perception of corruption in public procurement managed by national authorities vs. regional/local ones. Corruption in public procurement managed by national authorities is perceived as "fairly widespread" by half of respondents (52%) compared to regional/local ones (47%), "very widespread" (28% vs. 32%), "fairly rare" (9% vs. 11%), "very rare" (3% vs. 2%).[79] In Spain, corruption in public procurement managed by national and regional/local authorities is perceived as "fairly common" by 39% of respondents, "very common" (32% vs. 34%), "fairly rare" (14% for both) and "very rare" (7% vs. 2%). Finally, this chapter looks at differences and similarities between the two countries through the Worldwide Governance Indicators (WGI) 2022, which focuses on a key dimension of governance called 'voice and accountability'. It captures perceptions of the extent to which a country's citizens can participate in the election of their government, as well as freedom of expression, freedom of association and a free media. Italy and Spain scored almost the same: 1.07 vs. 1.01 (governance -2.5/+2.5), with higher scores corresponding to better governance.

---

[77] For an exaustive list see: https://www.transparency.org/en/news/how-cpi-scores-are-calculated
[78] http://www.cis.es/cis/opencm/EN/11_barometros/index.jsp
[79] https://data.europa.eu/euodp/data/dataset/S2177_457_ENG

Table 3.2 – Measuring corruption in Italy and Spain: main values

Index /Other	Scope	Main parameters	Italy	Spain
IPI 2022 *Index for Public Integrity*	country's ability to control corruption	score	7.66	7.96
		- judicial independence	5.74	5.97
		- administrative transparency	7.75	7.75
		- online services	8.24	8.84
		- budget transparency	8.93	8.71
		- e-citizenship	7.39	**8.22**
		- press freedom	7.91	**8.28**
T-index 2022 *Transparency Index*	what public data national governments are sharing	Ranking	32nd out of 131 countries	**26th out of 131 countries**
		- *de facto* components of transparency (i.e. online availability, accessibility, and coverage of public data in selected relevant domains)	9/14	**12/14**
		- *de jure* components of transparency (the existence of formal transparency commitments in relevant selected domains)	6/6	6/6
Corruption Risk Forecast	forecasting of trends at a country level	See IPI	Stationary	**Improving**
CPI 2022 *Corruption Perception Index*		Ranking	41st out of 180 countries	**35th** out of 180 countries

3.2.2 *Models of corruption*

In Italy, the complexity of the corruption phenomenon is tied to the heterogeneity of the actors involved, which allows us to speak of the "systematic nature" (or model) of the phenomenon, which involves and reinforces the relationships and interactions between the main systems of society that shape a

complex network of corrupt exchanges (Vannucci 2017,2020).[80] The main actors involved may include politicians, bureaucrats, managers, intermediaries, entrepreneurs, mafias, voters and customers. With regard to the main types of exchange according to the types of actors and systems involved, it is possible to distinguish between bribes, money and economic resources; protection and guarantee of compliance; information; political consensus and support; public decisions that provide an advantage. An element of continuity in recent corruption events, compared to those that emerged with the main Italian case investigation, "Mani Pulite", is the persistent evidence of an "institutionalised" practice of corruption (della Porta et al. 2015).

As far as Spain is concerned, corruption in this country is also perceived as "systemic" and intertwined with politics. According to Johnston (2005), who distinguishes between different "syndromes" of corruption according to the political and economic opportunities offered by different types of regimes, this nexus is "neither unique nor unusual" and could be defined as "elite cartel corruption" (consolidating or reforming democracies) and, at the same time, "influence market corruption" (mature democracies), taking into account the (recent) Spanish experience of transition from dictatorship to democracy. In addition, with regard to the politicisation of corruption in both countries, Heywood (2007) speaks of the "instrumental use of corruption", referring to "the politics of scandal and the role of the mass media" for the Spanish scenario. Although Italy is also characterised by the "politicisation of corruption" (see Vannucci 2020), scholars also speak about the "politicisation of anti-corruption" in the context of criminal prosecution and how this phenomenon increases the polarisation of opinions, interests and values, which are then strategically reinforced by parties, political leaders and the media (Sberna and Vannucci 2013).[81]

---

[80] Italy is characterized by three main models that characterize the current manifestation of corruption: the pulviscular model, the systemic model and the "organized" model. The latter is related to organized crime and Mafia (Sberna and Vannucci 2019; Vannucci 2017).
[81] See MIUR PRIN 2017 – 2017CRLZ3F: "PolitiCanti. The Politicisation of Corruption and Anticorruption Strategies in Italy" and it follows the path of the ANTICORRP.

3.2.3 *Diffusion of corruption*

One of the main sources for reconstructing the spread of corruption in Italy are the reports of the National Anti-Corruption Authority (ANAC, 2019, 2021). Looking at the evolution of corruption from 2016 to 2019, the overall picture that emerges from the relevant report indicates that, despite the disappearance of corruption from the public debate, it is a deeply rooted and persistent phenomenon.[82] The prevalence of public procurement in the dynamics of corruption concerns deregulation mechanisms: since the adoption of the Severino Law (2012), interventions in this domain have been numerous and fruitful. The need for a combined action of preventive and repressive instruments is underlined. More specifically, this report highlights the extent of corruption in the country and the main areas that provide opportunities for corruption. In terms of the main geographical areas involved, all regions of Italy are involved, with the exception of Friuli Venezia Giulia and Molise. In terms of the main sectors involved, the report highlights the management of public procurement (74%), the waste cycle (22%) and the health sector (13%). Looking at the main types of exchange, the workplace seems to be a new form of bribery. This can be translated into a trend of "dematerialisation" of the bribe. However, money remains the main instrument of illicit agreements.[83]

As for Spain, according to GRECO's evaluation report (2018), many corruption cases have emerged in recent years revealing that corruption risks are tied to the mismanagement of public procurement at the local level, especially in urban planning and construction. [84] Indeed, looking at the 2017 Transparency Index Of Municipalities (ITA)[85], a tool that measures the level of transparency of 100 Spanish local councils towards citizens and society, it can be seen that around 44% of local councils do not reach the rating of ninety out of one hundred, which is the minimum that should be achieved by all these institu-

---

[82]https://www.anticorruzione.it/portal/public/classic/Comunicazione/News/_news?id=d92b7f9 c0a778042565ef9095ee63e8d
[83] For data on corruption diffusion considering the court statistics: see Vannucci 2010
[84] https://www.coe.int/en/web/greco/evaluations/round-5-new
[85] https://transparencia.org.es/objetivos-y-caracteristicas-basicas-ita-2017/

tions. [86] Public procurements represent one of the major areas offering opportunities for corruption within the Spanish scenario. [87] Alleged corrupt practices, particularly bribes, are endemic in the construction and waste management sectors. In the urban planning and construction sectors, numerous cases of fraud, bribery and money laundering have emerged since the end of the Spanish construction boom in 2008 (EUACR 2014).

3.2.4 *The complementary risks of an unexpected crisis: how the COVID-19 crisis facilitates corruption practices*

Given the historical period in which the research took place, the analysis of corruption contexts takes into account how the multiple crises related to the COVID-19 health crisis are shaking up the fight against corruption in both Southern European countries. [88] The crisis context has introduced additional risks in both countries, such as the facilitation of corruption practices as a result of the lack of availability of data on public procurement tenders during the health emergency, as investigated by the OCCPRP. [89] In Italy in particular, OCCRP reporters discovered that government contracts were being allocated to companies whose directors had been accused of fraud and embezzlement of public funds. [90] According to the Anti-Corruption Research Centre, Italy was involved in corruption in COVID-19-related health procurement. In addition, high-level politicians in Spain have been implicated in corruption scandals related to COVID-19. Another red flag is the prolonged suspension of access to public data through FOI. In the case of Italy, during the first wave of the pandemic, Decree-Law No. 18/2020 of 17 March suspended all administrative

---

[86] Índice de Transparencia de los Ayuntamientos (ITA) 2017

[87] https://www.ganintegrity.com/portal/country-profiles/spain/

[88] https://www.u4.no/topics/covid-19-and-corruption/basics

[89] See Report 1: https://www.occrp.org/en/coronavirus/europes-covid-19-spending-spree-unmasked. Report 2: https://www.occrp.org/en/coronavirus/in-europes-scramble-to-buy-COVID-19-supplies-anti-corruption-measures-fall-away. Report 3: https://www.occrp.org/en/37-ccblog/ccblog/11905-cocaine-corona-how-the-pandemic-is-squeezing-italian-crime-groups

[90] https://www.occrp.org/en/daily/12007-italy-grants-covid-19-public-contracts-to-alleged-fraudsters

procedures in Italian public administrations, including those related to the so-called "generalised" citizen access requests (unless they were urgent). Although a statement on 27 March 2020 indicated that requests for information on the pandemic and health emergencies were excluded from the suspension, it was not clear whether COVID-19-related requests were being processed. In Spain, the management of access to information during the COVID-19 disease was also opaque: through Royal Decree 463/2020, the government suspended procedural deadlines for public sector entities.[91]

Subsequently, the consequences of the pandemic crisis were translated into a temporary European economic recovery and resilience instrument to reverse the losses caused by the COVID-19 crisis, which was officially launched on 21 July 2020, following the deliberations of the European Council. It is known as the "Next Generation EU" or the "EU Recovery and Resilience Facility (RRF)" and includes six main areas for investment: green transition; smart, sustainable and inclusive growth; social and territorial cohesion; health and economic, social and institutional resilience; digital transformation; and next generation policies. EU countries' national RRF plans must then be submitted by 30 April 2021 and approved within three months of that date. Italy is the first beneficiary country with the highest amount of funds: 122.60 billion in credits and 68.88 billion in grants.[92]

On the other hand, Spain, the second largest beneficiary, only requested decisions in the form of grants totaling 69.51 billion euros. However, since the drafting of the plans, government sources have been characterised by institutional opacity when it comes to the expenditure to be covered by these funds. With regard to the management of these EU funds, the Open Procurement EU Coalition has examined both the RRF Regulation 2021/241 and the national RRF plans of the Member States: its assessment shows that "there are no clear commitments to go beyond routine government control mechanisms to ensure

---

[91] https://www.rti-rating.org/covid-19-tracker/
[92] For updated information about recovery and resilience plans per country, see https://commission.europa.eu/business-economy-euro/economic-recovery/recovery-and-resilience-facility/country-pages_it

proactive publication of information and engagement with wider stakeholder groups to plan and monitor RRF spending".[93]

International organizations (e.g. United Nations, OECD) and European ones (e.g. Council of Europe, European Union) have identified an increased risk of corruption and other criminal phenomena associated with the financial measures taken by governments to boost the economy in the aftermath of the COVID-19 pandemic, including the possible involvement of organized crime - and have suggested timely and appropriate counter-measures, ranging from prevention to prosecution (Csonka and Salazar, 2021). The authors stated that "While the urgency of stimulating the economy convinced governments to take decisive action and invest public funds in sectors that have suffered, e.g., transport, tourism, or the service industry, the availability of public funding simultaneously increased the risk of misuse, including fraud and corruption, particularly in public procurement procedures" (Csonka and Salazar, 2021: 113).

Nevertheless, "Crisis is always an opportunity for governments to review their policies and adapt them to the new reality" (Ibid.). At the same time crisis context may also facilitate the review not just of policies but also laws or directives on specific issues or facilitate joining efforts between grassroots and institutional actors, as exemplified by many initiatives launched in the immediate aftermath of the pandemic crisis (see 3.4.4). The following section outlines the main legal frameworks at national level in both countries and concludes with a brief reconstruction of the debate on the implementation of the EU Whistleblowing Directive, which has been delayed despite pressure from civil society and the recognition of whistleblowing as an indispensable weapon for exposing corrupt behaviour and wrongdoing, especially in times of crisis.

---

[93] https://www.access-info.org/wp-content/uploads/RFF_transparency.pdf

3.3 *Legal anti-corruption framework*

The assessment of the scenarios also includes an analysis of the anti-corruption legal framework, looking at the main domestic laws and international transparency commitments. The analysis of key domestic laws covers anti-corruption legislation aimed at preventing and combating corruption, with a focus on transparency and freedom of information (FOI) laws, as well as the state of implementation of the EU Whistleblowing Directive in both countries. The analysis also considers some formal transparency commitments in relevant selected areas, such as the Open Government Partnership (OGP), the United Nations Conventions Against Corruption (UNCAC), the Financial Action Task Force Against Money Laundering (or equivalent) and plurilateral transparency agreements (EITI, OECD, WTO GPA or CPTPP): all of which have been ratified by both Italy and Spain.[94]

3.3.1 Legal anti-corruption framework at the domestic level

With regard to the main national laws that directly address the issue of preventing and combating corruption, in the case of Italy, the outlines are based on three "pillars": anti-corruption plans, transparency and the impartiality of public officials.[95] The most important laws relate to: first, measures to combat crimes against the public administration, as well as the statute of limitations of the crime and the transparency of political parties and movements (Law No. 3/2019). Second, provisions for the prevention and punishment of corruption and illegality in the public administration (Law No. 190/2012, known as the "Severino Law"), which aims to implement the relevant international conventions, in particular the 2003 UN Merida Convention (ratified by Law No. 116/2009) and the 1999 Criminal Law Convention on Corruption (Law No. 110/2012). Thirdly, the competences of the National Anti-Corruption

---

[94] These transparency commitments represent the indicator at the basis of the Transparency Index (De Jure), already introduced in 3.1.2.1 Measurements of corruption

[95] https://www.avvisopubblico.it/home/home/cosa-facciamo/informare/documenti-tematici/

Authority (ANAC) (Decree-Law No. 90/2014 and Law No. 229/2016). And finally, the transparency obligations of public administrations and the right of access (Legislative Decree no. 33/2013), which aims to ensure that citizens are aware of information on the organization and activities of public administrations, through Civic Access (art. 5), through the obligation to publish data: integrity, constant updating, ease of consultation and compliance with documents (art. 6), in accordance with art. 13, which specifies the information that public administrations must publish on their institutional website.

The Spanish legal framework for preventing and combating corruption includes the following sections: firstly, domestic bribery (private to private): bribery of private entities or individuals is regulated by Article 286-bis of the Spanish Penal Code. This crime was introduced by an amendment to the Criminal Code in December 2010. Secondly, corruption of foreign public officials: the regulation of domestic bribery includes the corruption of foreign public officials, as they are also considered public officials for these purposes under Section 427 of the Spanish Criminal Code.[96]

The turning point in terms of laws or sentences against corruption in both countries was reached in different time periods, but was fostered by similar contextual conditions (Mattoni 2017). In the case of Italy, the turning point is the reform of article 416-ter of the Penal Code, the so-called "Spazzacorrotti" law adopted in 2014 (Rispoli 2022). In the case of Spain, the tipping point is the verdict in the Bankia corruption scandal, in which the president and 64 other members of Bankia were found guilty, in 2017.

The similarities between the two crucial events relate to the context of the economic crisis and the related austerity measures to overcome the crisis, as well as the roots of these turning points: "they are rooted in two long-lasting grassroots campaigns in which hundreds of thousands of citizens participated: Senza Corruzione…Riparte il Futuro […] in Italy, starting in 2013, and 15MpaRato in Spain, starting in 2012. As such, they are both the outcomes of bottom-up efforts to activate institutional powers — the legislative in the Ital-

---

[96] https://globalcompliancenews.com/anti-corruption/anti-corruption-in-spain/

ian case and the judiciary in the Spanish case — to prevent or punish crimes that might be ascribed to the wide sphere of political corruption" (Mattoni 2017: 3).

3.3.2 *Transparency Law and FOI*

As regards the *Transparency laws*, Italy counts on the Law 97/2016 - Transparency Decree. Legislative Decree no. 97 of 25 May 2016, amending Legislative Decree no. 33 of 14 March 2013, introduced the institute of "generalized" civic access (so-called FOI). [97]

The Spanish Transparency law and related governmental initiatives (such as the Transparency Portal[98] and the IV Spanish Open Government Plan[99]) deal with Transparency, Access to Public Information, and Good Governance.[100] The legal framework for citizen's rights concerning data and information access and use corresponds to the Law on Transparency, Act 19/2013.[101] This law has a "triple purpose": to increase and strengthen government transparency, to recognise and guarantee citizens' right of access to information, and to establish good governance obligations for public officials and the legal consequences of non-compliance.

Looking at the data available on EuroPAM, a primary data collection effort on transparency and accountability in the legal frameworks of European countries, it is possible to obtain comparable insights on freedom of information and other key issues related to anti-corruption regulation (i.e. political financing, financial disclosure, conflicts of interest, public procurement procedures). EuroPAM reports that "Spain's access to information regime is estab-

---

[97] See: Global Right to Information Rating : https://www.rti-rating.org/
[98] https://transparencia.gob.es/transparencia/en/transparencia_Home/index.html
[99] a set of actions to be developed from the second half of 2020 onwards, to which the General State Administration is committed, in collaboration with other public administrations and civil society, to make progress in the Open Government
https://transparencia.gob.es/transparencia/en/transparencia_Home/index/Gobierno-abierto/ivPlanAccion.html
[100] https://transparencia.gob.es/transparencia/transparencia_Home/index/MasInformacion/Ley-de-Transparencia.html
[101] https://joinup.ec.europa.eu/collection/nifo-national-interoperability-framework-observatory/document/spains-transparency-portal

lished by its Constitution (1978) and Law 19 on transparency, access to public information and good governance (2013). The executive is covered by the FOI law; however, the government is excluded. The legislative and judicial branches are only subject to the law and obliged to supply information about activities subject to Administrative Law".[102] In Italy "The Law on the obligation of public administration to ensure the public availability and transparency of information (2013, amended 2016) sets out the access to information regime in Italy. Public authorities are covered under the scope of the law, which includes the executive, parliamentary, and judicial branches of government, as well as private firms".[103]

3.3.3 *Whistleblowing Legal Framework*

The treatment of the whistleblowing phenomenon is facing potential structural change in both countries due to the transposition of the *EU Directive 2019/1937* of the European Parliament and of the Council of 23 October 2019 for improving the whistleblowers' protection.[104] The main objective of this EU Directive was to harmonize the protection of whistleblowers in the different countries of the Union, strengthening the strategies for the protection of potential whistleblowers through a transposition at national level. In fact, before this EU Directive, the legal framework for whistleblowing in Italy referred to D.Lgs. n. 165 del 2001, which stipulates that a public employee who reports unlawful conduct of which he or she has become aware by his or her employment relationship shall not be sanctioned, dismissed or subjected to any discriminatory measure. To this end, the confidentiality of such reports is guaranteed (article 54 bis). Law No. 179/2017 strengthened the protection of public and private employees: "Provisions for the protection of whistleblowers who report offences or irregularities that have come to their attention in the context

---

[102] For an overview of Spain: https://europam.eu/?module=country-profile&country=Spain#info_FOI
[103] For an overview of Italy: https://europam.eu/?module=country-profile&country=Italy#info_FOI
[104] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32019L1937

of a public or private employment relationship". Furthermore, the law distinguishes between four main official reporting channels: employees can report a violation to four main actors, and there is no hierarchy between them: the public administration official in charge of the prevention of corruption and transparency (i.e. the RPCT), the National Anti-Corruption Agency (ANAC), the judicial authority and the accounting authority.

In Spain, on the other hand, before the EU Directive, there was no uniform whistleblower protection regime, but only fragmented sectoral legislation. However, there are still some regional laws in force in the autonomous regions (e.g. Catalonia and Valencia), and some sectors were subject to certain provisions on internal reporting channels and procedures. As reported by GRECO in 2018, Spain did not have a comprehensive whistleblower protection law, but only a draft law - the Anti-Corruption and Whistleblower Protection Law - which provides for the establishment of an Anti-Corruption Agency and stricter provisions on financial transparency, post-employment, lobbying and sanctions.

Thus, the national transposition of the EU Directive 2019/1937 represented a "window of opportunity" to introduce important improvements, even if the actual implementation later failed to meet some expectations, almost from grassroots actors involved in the anti-corruption fight. As far as Italy is concerned, Transparency International Italy has seen this Directive as an opportunity to guarantee the anonymity of whistleblowers, avoiding the distinction between the private and public sectors.[105] In Spain, Xnet has taken a leading role in the transposition of the Whistleblowing Directive, to the point of proposing a draft law on the full protection of whistleblowers in 2019 and publishing its response to the public consultation on the transposition of the Directive by 17 December 2021.[106] Xnet members aimed to make Spain the first EU country to adopt the Whistleblowers Directive. [107] The new rules were sup-

---

[105] https://transparency.it/images/pdf_pubblicazioni/report-whistleblowing-2019.pdf
[106] Both Xnet and TI-Italy are collective actors under investigation: see Chapter 4 for a complete overview.
[107] https://xnet-x.net/en/roundtable-whistleblowers-protection-european-union/

posed to be implemented by 2021, but there were still no working tables on the directive in most member states.[108]

On this theme, the Whistleblowing International Network (WIN) together with Transparency International published in 2021 a Report on the Transposition of the EU Directive in each country.[109] WIN also launched the "EU Whistleblowing Meter" to track the progress of the implementation of the EU Whistleblower Directive in real time. In the case of Spain, WIN's report described the transposition process as "opaque", detailing the few steps taken by the Ministry of Justice, which represent limited progress: "In June 2020, the Ministry of Justice, in charge of the transposition process, created a working group to develop a draft bill by December 2020. However, the process seems behind schedule, as the Ministry launched a public consultation "prior to the elaboration of text" in January 2021. In parallel to this process, three bills on whistleblower protection were introduced into Parliament by Members of Parliament in 2019. One was rejected in June 2020. The other two are still going through the parliamentary process" (WIN, 2021, 30).

The situation in Italy was slightly different: firstly, Italy has had whistleblower legislation since 2017 (Law 179/2017), but in terms of progress in implementing the EU Directive, the report highlights that: "The transposition process of the Directive is still in its very inception phase and will therefore likely involve a significant delay, especially in light of the resignation and change of government in February 2021" (WIN, 2021,26). The Italian government on Dec.9, 2022 approved the legislative decree to transpose EU Directive 1937/2019 on whistleblowing. On the implementation process, Transparency International Italia stated negatively: "the process for the transposition of the Directive was neither as transparent nor as participatory as it could and should have been. Our invitation had been to open an inclusive process, with at least a public consultation on the outline of the directive, to consult the many promot-

---

[108] https://www.transparency.it/parlamento-europeo-approva-la-direttiva-tutela-dei-whistleblower/
[109] https://www.transparency.org.ro/sites/default/files/2021_eu-governments-whistleblower-protection_english.pdf

ers who have had direct experience on the issue in recent years.[110] Italy had to restart the transposition process in September 2022, after the legal mandate to implement the EU law expired: a new draft law transposing the EU Directive on whistleblowing was adopted in Italy on 10 December 2022.[111]

In Spain, although a preliminary law was approved by the government on 14 September 2022, Spanish members of WIN and several other organizations - 20 members of the Coalición Pro Acceso and 5 international organization's - have sent a decalogue of recommendations to strengthen this preliminary law.[112] In the end, this directive was adopted in both countries only in 2023: in Italy in March 2023 and in Spain in February 2023. During the transposition process and immediately after the publication of the law in the official gazettes of both countries, several concerns were expressed not only by some civil society actors, but also by the Italian National Anti-Corruption Authority (ANAC) and some Spanish regional anti-fraud authorities, such as those of Catalonia or Valencia. As will be discussed in the following section, anti-corruption actors include both grassroots and institutional (governmental or public) actors, as well as those from the media and journalism sector.

3.4 *The anti-corruption collective actors*

This sub-section highlights the main collective actors involved in the fight against corruption in Italy and Spain: anti-corruption agencies and courts, civil society organizations and their main (digital) anti-corruption initiatives launched in recent years, and news media actors. With regard to the latter type of actor, the chapter looks not only at the issue of media coverage of corruption, but also at specific journalistic projects and initiatives carried out by non-mainstream media, often characterized by the use of digital media and technologies. Finally, this sub-section looks at the initiatives and networks that have

---

[110] More information on TI-Italy on whistleblowing are published in the Report - Whistleblowing 2021: https://www.transparency.it/images/pdf_pubblicazioni/report-whistleblowing-2021.pdf
[111] https://www.whistleblowingmonitor.eu/country/
[112] https://www.access-info.org/2022-09-15/civil-society-spanish-government/

emerged against the multifaceted crisis of corruption, which implies cooperation between institutions and collective actors from civil society. As mentioned above (see 3.2.4), the focus on the pandemic's impact - not only in terms of how the COVID-19 crisis facilitates corruption practices, but also in terms of the emergence of new initiatives and networks - is a crucial element in outlining the main context in which this research has been carried out.

3.4.1 *Fighting corruption from a top-down perspective: the role(s) of agencies, courts, and public institutions*

As concerns Italy, according to the Global mapping of anti-corruption authorities (GRECO 2020), the already mentioned National Anti-corruption Authority (ANAC) represents the main institutional actor within the Italian scenario. [113]ANAC was created to implement Article 6 of the United Nations Convention against Corruption (UNCAC). Law 190/2012 initially limited ANAC's mandate to the following: firstly, the establishment of a preventive strategy against corruption; secondly, the monitoring of its implementation by each public entity through the adoption of the so-called "Three-Year Plan for the Prevention of Corruption"; thirdly, the monitoring of the transparency of public entities; fourthly, the integrity of public officials and the dissemination of a culture of integrity and legality. Apart from these tasks, ANAC is not granted any powers regarding the prevention of corruption in political bodies. Subsequently, Law 114/2014 introduced new anti-corruption measures by incorporating the oversight of public contracts into the corruption prevention system.

This legal framework concentrates the entire anti-corruption strategy in the hands of a single institution. The creation of an independent authority such as ANAC, both for the protection of legality in the public sector and for the supervision of public procurement, was an attempt to control a highly economic and strategic sector more exposed than others to the risk of illegality and mal-

---

[113] https://www.coe.int/en/web/greco/-/global-mapping-of-anti-corruption-authorities

administration. ANAC has been accredited in the Directory of the United Nations Office on Drugs and Crime as an independent - both politically and financially - national authority for the prevention of corruption. ANAC thus pursues its administrative (and non-judicial) objectives through a regulatory activity, an advisory function and a supervisory activity, as well as some inspection and sanctioning powers. More specifically, we can distinguish between regulatory powers through soft laws, supervisory powers over public procurement and the proper functioning of the public administration, supervisory powers over the anti-corruption system, including through inspections that can be delegated to the financial police, and sanctioning powers for failure to comply with obligations by public administrations. Finally, as already mentioned in the section on the legal framework, ANAC is one of the external channels for potential whistleblowers: it deals with the phenomenon of whistleblowing and the management of reports of illegal behaviour through its digital whistleblowing platform.[114]

In contrast to the Italian case, the Spanish institutional anti-corruption scenario appears more fragmented and pluralistic. According to the Global mapping of anti-corruption authorities (GRECO 2020), Spain distinguishes between actors at the national and the regional levels. [115] As regards the national level, the main authority is the Fiscalía contra la Corrupción y la Criminalidad Organizada, followed by the El Consejo de Transparencia y Buen Gobierno and the Office for Conflicts of Interest. As regards the special court with jurisdiction over corruption, Fiscalía Anticorrupción: is a special prosecutor's office, integrated into the State Prosecutor's Office (Ministerio Fiscal) and dependent on the State Attorney General (Fiscalía General del Estado). It has jurisdiction throughout the country and investigates and is aware of trials of particular relevance relating to corruption offenses committed by public officials in the performance of their duties. It also has jurisdiction over economic crimes committed by organized groups, unless they fall under the specific jurisdiction of other offices (e.g. the Drugs Prosecutor's Office or the National Court Pros-

---

[114]https://servizi.anticorruzione.it/segnalazioni/#/)
[115] https://www.coe.int/en/web/greco/-/global-mapping-of-anti-corruption-authorities

ecutor's Office)[116]. The Fiscalía Anticorrupción was established in 1995. Its headquarters is in Madrid. In addition to this, there are delegated offices in twelve cities, including Malaga, Valencia, Seville, Alicante, Almería, Cadiz, Murcia and Barcelona.[117]

The Fiscalía contra la Corrupción deals mainly with crimes against public finances, social security and smuggling; crimes of prevarication; crimes of abuse or misuse of privileged information; misappropriation of public funds; fraud and illegal collection; crimes of smuggling of influence; offenses of corruption; negotiations prohibited to public officials; price alterations in public tenders and auctions; corporate offenses; crimes of corruption in international business transactions; corruption offenses in the private sector. [118]

El Consejo de Transparencia y Buen Gobierno (Transparency and Good Government Council) is an independent body responsible for promoting transparency in public activity, ensuring compliance with public disclosure requirements, guaranteeing the exercise of the right of access to public information and ensuring compliance with the rules of good governance. The Council for Transparency and Good Governance is an independent public body with its own legal personality and full capacity to act in the public and private sectors. The Council for Transparency and Good Governance is governed by the provisions of Law 19/2013, of 9 December, on Transparency, Access to Public Information and Good Governance, as well as the provisions that develop it and its statutes, approved by Royal Decree 919/2014, of 31 October.[119]

The regional level, on the other hand, is characterized by the increasing presence of anti-corruption (or anti-fraud) agencies. The first region to have an anti-corruption agency at regional level was Catalonia, followed by the Autonomous Community of Valencia. Both have adopted and maintain a digital

---

[116]https://www.mjusticia.gob.es/BUSCADIR/ServletControlador?apartado=buscarDetalleEnte
G&ente=0000072006000&lang=es_es&origen=&tipo=
[117]https://www.camera.it/leg17/561?appro=le_autorit__nazionali_di_contrasto_della_corruzion
e__in_francia__germania__regno_unito_e_spagna
[118]https://www.camera.it/leg17/561?appro=le_autorit__nazionali_di_contrasto_della_corruzion
e__in_francia__germania__regno_unito_e_spagna
[119] https://www.consejodetransparencia.es/ct_Home/en/consejo/funciones-principios.html

whistleblowing platform based on the GlobaLeaks software. [120] More recent examples are the agencies in the Balearic Islands or the case of Andalusia, which owes its origin in part to the collaboration of these pioneering agencies, which provide advice and assistance. In the case of Madrid, there is the Oficina Municipal contra el Fraude y la Corrupción at local level.

3.4.2 *Fighting corruption from below: the role(s) of the civil society organizations*

In order to unpack the main features that characterize civil society organizations and their initiatives in both countries, this chapter looks at the main anti-corruption mechanisms that shape the types of practices and the main objectives behind each initiative. In practice, a distinction is made between monitoring, participating and protesting. A second dimension is represented by the relational dynamics, i.e. the potential networks between a variety of grassroots actors who (also) deal with anti-corruption in their daily practices, also considering the level at which initiatives operate, distinguishing between national, regional and local. Finally, similarities and differences between Italian and Spanish civil society can be identified by looking at recent mobilizations and anti-corruption campaigns.

Within the Italian scenario, we can distinguish two leading collective actors: the case of Libera, in which the fight against corruption also intersects with the fight against mafia organized crime, and the Italian chapter of Transparency International. Libera is deeply rooted at the national, regional and local levels. The rest of the panorama, which deals with associative realities, is made up of smaller realities that are directly or indirectly linked to Libera, as in the case of Gruppo Abele. These two collective actors combine their efforts for the creation of Common, a project aimed at the development of civic monitoring

---

[120] Both anti-fraud agencies of Catalunya and Valencia regions with their digital whistleblowing platforms, constitute empirical case studies under investigation: see Chapter 4 for a complete overview.

communities at the local level.[121] Other minor actors, such as the already mentioned OpenDataSicilia, seem to be far from Libera's networks.

Concerning the Italian chapter of TI-Italy, it is also well rooted within the Italian context both within the business sector with the Business Integrity Forum, with other CSOs, such as Actionaid Italia and with relatively less structured initiatives such as Ondata. Finally TI-Italy has co-developed whistleblowing initiatives together with the activists involved in Hermes Center for Transparency and Digital Human Rights, an Italian civil rights organization active also at the transnational level, and the tech developers of GlobaLeaks.[122] Thus, TI-Italy, together with the Openpolis Foundation, is one of the main AC actors using a high-tech repertoire of contention. This initiative is almost involved in monitoring practices based on open (public) data, well structured within thematic data-driven platforms (e.g. Osservatorio COVID-19 on public procurement during the pandemic; Open PRNRR developed to monitor the use of EU funds).

Focusing on the specific mechanisms to fight corruption, in Italy there are grassroots organizations that prevent corruption by monitoring practices based on open data exclusively at the local (regional) level (e.g. OpenDataSicilia); other specific projects (e.g. Common) that cross the national and local dimension are at the same time part of more structured civil society organizations (e.g. Gruppo Abele and Libera). Fighting and preventing corruption in the Italian scenario also means the use of monitoring actions that go beyond education and awareness actions on the anti-corruption legal framework (e.g. Avviso Pubblico: acts as a mediator between institutional realities and citizens), but can also include realities related to training and support projects (e.g. RE-ACT), or count on including journalistic practices in their repertoire of contention (e.g. Openpolis). Other initiatives focus on specific themes such as environmental protection (e.g. Cittadini Reattivi) or the recovery and resilience

---

[121] Common – Comunità Monitoranti is an empirical case study under investigation: see Chapter 4 for a complete overview.
[122] The digital platforms implemented by Transparency International Italy thanks to the collaboration with GlobaLeaks, an open source software developed by Hermes Center corresponds to an empirical case studies of this thesis; respectively, ALAC for whistleblowers' assistance and Whistleblowing PA for public administrations. See Chapter 4 for further details.

plan (e.g. Libenter).[123] On the contrary, there are initiatives that deal with data-related practices, but they do not deal with anti-corruption practices, although they cooperate with leading actors such as Libera for specific projects and topics, such as the case of dealing with data on confiscated goods of mafia members (i.e. Confiscati Bene 2.0).

Looking at the level at which initiatives operate, civil society actors who are fighting corruption and increasing transparency in Italy tend to structure their actions at both local and national levels. The shift from national to local is closely linked to existing networks that define the relational and power dynamics between the different AC initiatives, distinguishing between leading actors recognized at national level (i.e. Libera and Transparency International Italia) and smaller initiatives that are almost interrelated with the previous ones. The relational dynamics also tend to shape the participation of different collective actors in recent mobilization campaigns around specific anti-corruption issues, as in the case of the FOI law through the "Foia4Italy" campaign. The case of the more recent e-petition "DatiBeneComune" shows how networks and collaborations can also emerge around common issues: this e-petition on the topic of transparency and accessibility of public data during the COVID-19 crisis involves a variety of collective actors not necessarily belonging to the anti-corruption arena.

Looking at the structure of the grassroots anti-corruption arena, Spain differs from the Italian one, which is almost based on the so-called "duopoly", operating both at national level (i.e. TI-Italy) and at both national and local level (i.e. Libera). In fact, the Spanish scenario is defined by a regional distribution of anti-corruption initiatives, characterized by different levels of digitalization, as in the case of anti-corruption agencies. In Catalonia, the Observatori Ciutadà Contra la Corrupció (O3C) plays an active role. In the region of Valencia, three main civil society organisations are involved in the fight against corruption: Observatorio Ciudadano contra la Corrupción , Acción Cívica contra la Corrupción and Fundacion por la Justicia. These regional initiatives, based in Bar-

---

[123] Cittadini Reattivi originated as a civic journalism project in May 2013, in January 2015 it became an association for the promotion of social innovation related to environmental issues.

celona and Valencia respectively, are characterized by a low level of digitalization.

Consider instead the more established and digitized collective actor Xnet, an association that emerged from the 15-M movement against corruption. Despite its national leadership in previous mobilizations against corruption scandals and in the implementation of digital whistleblowing platforms, Xnet is currently involved in areas related to digital rights and democracy, and its dissemination and training activities take place almost exclusively in Catalonia, especially in Barcelona. At the national level, the main actor corresponds to the Spanish chapter of Transparency International, which is involved in various commitments such as the transversal project "Integrity Watch" but differs from the Italian chapter on the issue of whistleblowing and the use of advanced digital technologies. Among the less leading anti-corruption initiatives using digital technologies for transparency purposes, we can mention the "citizen-driven transparency-based digital platforms" (Alonso-Muñoz and Casero-Ripollés, 2017): Deba-t.org for public debate, Kuorum.org, OpenKratio in relation to open government; Osoigo to promote accountability. Most of them are no longer active.

Finally, similarities and differences between the two countries emerge when focusing on recent mobilizations and anti-corruption campaigns. In the Italian scenario, the main ones are Corrotti (2010-2012) and Senza Corruzione...Riparte il Futuro (2013-2015). Both aimed to raise public awareness of the consequences of corruption for Italian society and directly involved Libera and Gruppo Abele. The "Corrotti" campaign was launched in December 2010 by Libera, together with the network of Avviso Pubblico, with two demands: the ratification of international treaties against corruption and the extension of the confiscation and social reuse of assets not only in the case of the mafia but also for the corrupt (based on the provisions of Law 109/96). After a year of mobilization, the campaign ended in January 2012 with the collection of 1.2 million signatures. As far as Riparte is concerned, Il Futuro was developed with a specific objective: to amend article 416-ter of the Italian Penal Code (reformed in April 2014), and at the same time represents a hybrid campaign due to the ex-

tensive use of digital media and, in particular, e-petitions. In 2016, it became an association to support other anti-corruption campaigns and then ceased its activities, only partially merging with The Good Lobby Italia in 2019, while some of the people involved in the organization remained in Gruppo Abele and Libera.

These two Italian campaigns constitute "awareness campaigns" rather than demonstrations, as in the case of the two recent Spanish anti-corruption mobilizations known as 15M (2011) and 15MpaRato, although all these campaigns emerged in similar contextual conditions in terms of low trust in democratic institutions, as a consequence of the economic crisis and the deepening of austerity measures (Flesher Fominaya 2017), which trigger a wave of anti-austerity protests, more intense in Spain and more fragmented in Italy (Mattoni 2017).

With regard to the 15M movement, it represents a turning point not only for mobilizations (also) against corruption scandals, but also for the use of digital media by activists and the main consequences of its use in terms of reconfiguring power relations and promoting the exercise of countervailing power by the people (Castells 2009). Scholars consider this protest as an example of a new social movement (Haro-Barba and Sampedro, 2011), also because of its movement between the squares and the Internet, mixing both (Sampedro and Sánchez-Duarte 2011). 15M, also known as the Spanish Revolution, emerged in 2011 in many Spanish cities with the aim of promoting participatory democracy, renewing the political system and countering the dominance of banks and financial institutions (Castells 2012).

According to Micó and Casero-Ripollés (2014), the centrality of 15M depends on the fact that it is" a technologically mediated movement", it "originated from and is driven by digital technologies" also with consequences offline, and "it made a profound impact both on Spanish society and internationally, as it influenced subsequent movements such as #Occupy" (2014, 859). Moreover, the case of 15M sheds light on the relational and power dynamics between activists and mainstream media, considered "ambiguous and contradictory": "Journalists blame them for stopping them from doing their job. But

the 15M movement has criticized reporters for not talking before they act and not understanding their essence.

However, the better-educated activists, especially graduates in fields linked to the Communication Sciences, knew that they needed the media as much as the media needed them" (2014, 868). Going beyond this ambiguous relationship, some scholars (Casas et al. 2016) shed light on the ability of activists involved in the15M movement, to place their demands on the media agenda and maintain control over their own discourse and to assess to what extent "this "connective" movement was able to convey its demands to the mass media". The results show that "the media gave coverage to all the demands of the 15-M movement, and this coverage did not influence the content of activists' discussion in the squares" (2016: 87).

Turning to the case of 15MpaRato, this campaign was rooted in 15M and fostered by a huge corruption scandal involving the Spanish bank "Bankia" and, in particular, its president Rodrigo Rato (sentenced to 4 years and 6 months in prison in February 2017). A leading role in the development of 15MpaRato was played by Xnet, which promoted citizen participation not only in terms of mobilisation, but also in the collection of relevant documents related to the Bankia scandal through digital tools: a whistleblowing platform (i.e. Buzon X) and a crowdfunding campaign hosted by the Spanish platform Goteo. If the intensive use of digital media was a feature of 15M, in the case of 15MpaRato, digital technologies were specifically entangled with the fight against corruption, facilitating the collection of documents while guaranteeing the anonymity of sources.

3.4.3 *Fighting corruption (also) from the (non-mainstream) newsrooms: the role(s) of journalists*

Other key actors who can play a crucial role in the fight against corruption are those involved in (news) media systems. Indeed, both legacy or non-mainstream media and journalists are involved in reporting on corruption (i.e.

133

the issue of media coverage of corruption) and in specific journalistic projects, as in the case of investigative journalism.

According to Hallin and Mancini (2004), both Italy and Spain fit perfectly into the polarized pluralist media system characterized by high political parallelism, low newspaper circulation, low professionalism of journalists and high levels of state intervention. The strong link between media groups and political parties also affects media coverage of certain issues, such as political corruption (Chaqués-Bonafont and Baumgartner 2013; Palau and Davesa 2013; Palau and Palomo 2021). Through the ANTICORRP project, which, among a variety of topics, focuses on the relationship between the media and corruption through the analysis of journalism and the coverage of corruption scandals between 2004 and 2013, an instrumentalization of media coverage of corruption has emerged, particularly in the Italian context.[124] This 'biased coverage' of corruption - also due to the fact that corruption is an issue more suitable for instrumentalization (Mancini 2018) - confirms the historical proximity of Italian legacy media to the political system (Hallin and Mancini 2004). In fact, the media cannot always be seen as an effective tool for curbing corruption (Vaidya 2005).

In a comparative study of British, French and Italian news articles on corruption-related topics, the authors considered the level of press freedom to assess the influence of the media system (namely commercialization and market segmentation), the target audience and the relationship between the news media and politics in each country (Mancini et al. 2017). Corruption coverage was more widespread in Italy than in France and the UK. It was also more focused on local politicians and used as a vehicle for partisan newspapers to defend political allies and attack competitors in a dramatic tonal style.[125]

Looking at the research made within the Spanish news media context, scholars investigate how the two main daily newspapers in Spain (*El País* and

---

[124] Anticorruption Policies Revisited: Global Trends and European Responses to the Challenge of Corruption (ANTICORRP) was a research project funded by the European Commission's Seventh Framework Programme. The project consists of twenty research groups in fifteen EU countries, including Italy but not Spain. For more details on the media coverage of corruption: see Work Package 6.
[125] https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2019-

El Mundo) "emphasized official sources, and coverage of dominant parties prevailed, particularly in times of economic crisis and during elections" (Baumgartner and Bonafont 2015, 12)".[126] The Spanish media system is one of the most polarised, with each party allied with one of the main news outlets. The research by Palau and Davesa (2013) focuses on the media coverage of corruption scandals in Spain between 1996 and 2009, provided by El Pais and El Mundo, through the analysis of the front pages. The results show that the variable of political orientation influenced the coverage of corruption scandals, with the former giving more prominence to scandals involving the PP and the latter to the PSOE: "The analysis of the agenda fragmentation shows the strategies used by both newspapers in making visible the scandals involving the party that they are opposed to" (Palau and Davesa 2013, 118). Regarding the impact on citizens' perceptions of corruption, the study points out that the media impact is high and occurs in the short to medium term.

Moving from the tendency towards political parallelism to the conditions under which the media could contribute to creating and maintaining an atmosphere that discourages corrupt practices, it seems that Spanish newspapers do not promote a "substantive frame" (Entman 2004) or a pluralistic debate that includes the main actors in corruption-related articles, such as the judiciary and political actors (Palau and Palomo 2021). As Mungiu-Pippidi (2006) argues, the effective control of corruption requires credible actors to denounce it, actors who speak on behalf of those who lose from corrupt practices, although civil society actors are the most relevant for generating public pressure against corrupt practices (Palau and Palomo 2021).

Moving from the media coverage of corruption to the journalistic initiatives that are to some extent involved in curbing corruption, in both countries it is possible to identify some journalistic initiatives that are almost related to the whistleblowing phenomenon, which can be traced back to different categories. In the Italian context, we can distinguish between (mainstream journalism: reference is made to the whistleblowing platform on the website of the AGI - Ital-

---

[126] https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2019-

ian News Agency: ItaliaLeaks; investigative journalism: reference is made to the IrpiLeaks platform implemented by IrpiMedia; or realities that cannot be directly attributed to the field of journalism, but are engaged in wide-ranging monitoring practices, mainly based on the use of open data: the aforementioned Openpolis, already mentioned above for the widespread use of data-driven platforms, OnData and Dataninja. Looking at the Spanish scenario, we can distinguish between experiences of data journalism rooted in the field of activism, as in the case of Civio, an independent non-profit organization that monitors public authorities through public data; "cooperative" journalism, as in the case of La Directa, a Catalan-language media with a vocation to contribute to social transformation, which wants to play the role of denouncing abuses and injustices; or whistleblowing platforms directly linked to news media, as in the case of Filtrala.org, based on GlobaLeaks software, but no longer active.

3.4.4 *Reacting to the multifaceted COVID-19's crisis: a common effort between top-down and bottom-up actors*

In the fight against corruption, as in other contentious social issues, many types of actors are involved in collaborating and sometimes co-creating joint initiatives: from public authorities to activists, from technology developers to journalists. These entanglements become even more evident in the context of an emergency such as the COVID-19 pandemic. Indeed, at the peak of the public health crisis, several new initiatives and networks emerged, also thanks to a joint effort between top-down and bottom-up efforts.

With regard to the main international actors and initiatives, Transparency International proposed a joint declaration signed by the national chapters of Transparency International in France, Italy and Spain: "*Against the health crisis, more transparency and democracy.* [127] Citizens report COVID-19 corruption with the ALAC system".[128] Moreover, it realized a report on how to

---

[127] https://transparencia.org.es/ti-espana-francia-e-italia-firman-propuesta-conjunta-para-defender-la-transparencia-durante-la-crisis-del-covid-19/
[128] https://www.transparency.org/en/citizens-report-covid-19-corruption

prevent the abuse of power during a global health pandemic.[129] The European Federation of Journalists (EFJ) has urged governments during the pandemic to ensure full transparency about the pandemic and to guarantee the capacity of journalists to act in the public interest, without any limitation.[130] The civil society members of Open Government Partnership's Steering Committee have released a statement on COVID-19 and its risks to open government.[131] Focused on democratic values, the statement was a call to action for governments, donors,s and international organizations. The Italian civil society organizations involved were, among the others, The Good Lobby, Ondata. For Spain, OpenKratio and Xnet.

Looking at the initiatives developed by civil society organizations at the national level, in Italy there was the already mentioned case of the e-petition "#datibenecomune" to require access to public data on COVID-19 disease, which counts more than 140 promoters, starting from the leading role played by OnData.[132] In terms of individual initiatives on public data, Open Data Sicilia drafted an open letter to the Sicilian Region in March 2020, asking for the publication of data in machine-readable format on COVID-19.[133] Other actors produced reports on organized crime and COVID-19, such as the one made by Avviso Pubblico on COVID-19 and Mafia.[134] A more structured action has been taken by Openpolis through the development of a data-driven platform for the collection and analysis of public data on public procurement, called "Osservatorio Bandi Covid", available from March 2020.[135] Looking at Spain, in May 2020 Transparency International Spain shared recommendations for transparency and prevention of corruption in the public and private

[129] https://www.transparency.org/news/feature/corruption_and_the_coronavirus
[130] https://europeanjournalists.org/blog/2020/03/25/covid-19-europes-leaders-must-protect-free-flow-of-information/
[131] https://www.opengovpartnership.org/es/news/statement-on-the-covid-19-response-from-civil-society-members-of-ogp-steering-committee/
[132] https://datibenecomune.it/
[133] http://opendatasicilia.it/2020/03/23/lettera-aperta-alla-regione-siciliana-per-la-pubblicazione-in-formato-machine-readable-dei-dati-sulla-covid19/
[134] https://www.avvisopubblico.it/home/home/cosa-facciamo/informare/mafie-e-coronavirus/
[135] https://bandicovid.openpolis.it/

sectors.[136] TI-Spain signed also a joint statement to protect whistleblowers during the COVID-19 crisis - Coalition to Alert Safely During COVID-19 and beyond (April 2020).[137] Other civil society organizations were involved, such as Filtrala and Xnet and some international actors such as FIGBAR.[138]

Conclusion

Chapter 3 has reconstructed the background context in which the anti-corruption initiatives under investigation have originated, have been developed, and in which they will continue to evolve. To point out the main differences and similarities between the Italian and Spanish anti-corruption arenas in the digital age, the chapter has focused on: first, the level of digitization, development and diffusion of digital technologies connected with the issues of transparency for government integrity and accountability. Second, the main "measurements" of corruption, (e.g. the level of control of corruption and its perception), the extent of corruption within the countries, the main areas of opportunity for corruption, as well as the models and manifestations of corruption. Third, the legal framework that affects corruption-related issues (e.g. Transparency Law, Whistleblowing legislation tied to the transposition of EU Directive). Fourth, look at the main actors involved in the anti-corruption arenas (i.e the anti-corruption authorities, civil society organizations and their specific projects and initiatives, plus journalists and news media), their roles, features and relational dynamics, also considering the level of contention.

Starting from the main differences between the two contexts, Spain stands out for a high level of ICT development, instead of a medium level for the Italian case. The two southern European countries diverge also from the experienced grassroots opposition: Spain (Mattoni 2017; Taibo 2011) experienced massive mobilizations in which corruption was a prominent issue. Italy, in-

---

[136] https://transparencia.org.es/transparencia-y-publicidad-activa-covid-19-y-el-estado-de-alarma-en-espana/
[137] https://transparencia.org.es/ti-espana-y-otras-organizaciones-firman-declaracion-para-proteger-los-derechos-de-los-denunciantes-durante-la-crisis-del-covid-19/
[138] https://fibgar.es/quienes-somos/

stead, is characterized by protests against corruption limited in intensity, numbers, and scope (Mattoni 2017). As demonstrated by recent mobilizations - Corrotti (2010-2012) and Senza Corruzione…Riparte il Futuro (2013-2015) - Italian campaigns represent more "awareness-raising campaigns", rather than demonstrations, as in the case of two recent Spanish anti-corruption mobilizations, known as 15M (2011) and 15MpaRato. Although all these campaigns originated in similar contextual conditions in terms of low trust in democratic institutions, as a consequence of the economic crisis and a worsening of austerity measures (Flesher Fominaya 2017) that triggered a wave of anti-austerity protests, more intense in Spain and more fragmented in Italy (Mattoni 2017). An additional difference deal with the level at which grassroots but also institutional) initiatives operate – distinguishing between local, regional and national level – and how this different distribution is tied to leading CSOs and the relational dynamics with the minor ones.

Looking at the grassroots anti-corruption initiatives, we can distinguish two main interrelated realities, that may represent a kind of "duopoly" able to structure the anti-corruption agency in Italy: Libera on the one hand and Transparency International Italy on the other hand. The former operates both at the national but first and foremost is extremely well rooted at the local level. Libera represents an emblematic CSO also because the fight against corruption is strictly tied to the struggle against mafia organized crime. TI-Italy, instead, rests on the national level and leads the issue of the whistleblowing phenomenon in the country, together with Hermes Center and GlobaLeaks, both located in Italy. Considering the institutional actors, the leading role in Italy is played by ANAC, the national anti-corruption authority, active in Italy since 2014. The centralized role of ANAC in the Italian anti-corruption arena represents an additional divergence from the case of Spain. Indeed, it is characterized, by a regional distribution of anti-corruption agencies, with the leading role of the first from Catalunya and the second from Valencia. Moreover, not all regions dispose of their anti-corruption authority). The predominance of Catalunya and Valencia regions seems to also affect the cases of grassroots anti-corruption initiatives, as the case of Xnet, based in Barcelona, which has in the past and

continues to be considered a leading CSO in the fight against corruption, owing also to the use of digital technologies. Going beyond the geographical distribution of AC actors in both countries, Italy and Spain converge in terms of the main areas exposed to corruption, considering, in particular, the sectors of public tenders and corruption behaviors primarily diffused among political elites. These two southern European countries have faced also similar challenges in the recent transposition of the EU Directive on whistleblowing, with a consistent delay concerning the original deadline established by the EU.

To conclude, the main purpose of Chapter 3 was to reconstruct the background of the empirical case studies under investigation. Providing comparable information on the two scenarios is the starting point to discuss in detail the similarities and differences between the nine initiatives under investigation that emerged during the data analysis, to which Chapter 4 is entirely devoted. The initiatives selected and mentioned in this chapter make it possible to compare two specific types of initiatives: those that focus on monitoring public actors through the use of (open) data, on the one hand, and those that aim to facilitate the whistleblowing process through the use of advanced digital technologies, on the other. In this way, the thesis - which adopts an exploratory approach - sheds light not only on different anti-corruption mechanisms (i.e. monitoring and participating albeit at the individual level if we consider the role of whistleblowers), but also on how the relational dynamics between grassroots (but also institutional) actors structure the two different arenas, recognizing that digital technologies - based on open data in the first case and on encryption in the second) - are playing an active role in redefining the grassroots struggle against corruption.

CHAPTER 4

THE EMPIRICAL CASE STUDIES: EXPOSING CORRUPTION BY FACILITATING WHISTLEBLOWING OR MONITORING PUBLIC DATA

Introduction

This chapter introduces the nine anti-corruption initiatives under investigation, devoted to tackling corrupted behaviors (also) through the employment of ACTs. These empirical case studies are clustered into two main types of initiatives. On the one hand, this thesis looks at six initiatives and projects aimed at facilitating the whistleblowing process through the adoption and dissemination of a grassroots ACT based on the GlobaLeaks software. This is the case of *ALAC*, the Advocacy and Legal Advice Centre and the project *WhistleblowingPA*, both implemented by Transparency International Italia in conjunction with the developers of GlobaLeaks. An additional example of a whistleblowing initiative based on the same software is represented by *BuzonX*, which is the first digital whistleblowing platform implemented by Xnet for collecting data on a corruption scandal in Spain. Finally, *Buzón Ético y de Buen Gobierno*, *Buzon de denuncia anonimas*, and *Buzon de denuncias*, represent three additional Spanish digital whistleblowing platforms adopted by public institutions thanks to the leading role played by Xnet in conjunction with the developers of GlobaLeaks. These platforms were adopted respectively by the Municipality of Barcelona and the anti-fraud authorities of Catalonia and Valencia. On the other hand, it focuses on three initiatives that aim to prevent corruption by monitoring public actors through public (open) data: this

is the case of the Italian *Fondazione Openpolis* and the project *Common Comunità Moniroranti*, compared with the Spanish *Civio*.[139]

The following table provides an overview of the nine empirical case studies under investigation, highlighting – when necessary – the overlap between the civil society organization and the anti-corruption initiative under investigation (i.e. the unit of analysis). Indeed, it should be noted that some empirical case studies correspond to the civil society organization in itself, as in the case of two out of three monitoring initiatives, although both Openpolis and Civio are characterized by the development during the time of thematic data-driven platforms devoted to the prevention of specific forms of corruption (e.g. *Bandi Covid* (COVID-19 procurements) platform for monitoring misuses of public funds or anomalies in public procurements during the COVID-19 disease, or *Quien Manda* (Who rules) finalized to spotlight conflict of interests or clientelism related to power dynamics).[140] The case of Common, although it has been analyzed in this research as an anti-corruption project in its own right, remains closely linked to the main Italian anti-corruption organization from which it originated, i.e. Libera, together with another collective actor, i.e. Gruppo Abele. The origins of Common will be discussed in detail in the following sections. As regards whistleblowing initiatives, the empirical case studies do not correspond to the collective actors involved but overlap with the digital whistleblowing platforms (or services) implemented and maintained over time by the pioneering grassroots first, and then by institutional actors.

---

[139] The distinction between whistleblowing and monitoring initiatives is reflected throughout the empirical chapters: respectively, Chapter 5 is devoted to whistleblowing initiatives and Chapter 6 focuses on monitoring initiatives.

[140] See Tables 4.2 and 4.3 for a complete overview of Openpolis and Civio's data-driven platforms.

Table 4.1 – The nine initiatives under investigation devoted to tackle corruption: a brief overview

AC initiative (unit of analysis)	How exposing corruption	Grassroots or Institutional initiative	Country	Active from (year)	Grassroots collective actors as initiators	Public actors as initiators	Core digital technology employed /core activities
ALAC	Facilitating whistleblowing	Grassroots	Italy	2014	TI-Italy GlobaLeaks	N.A.	GlobaLeaks open-source sofware
Whistleblowing PA	Facilitating whistleblowing	Grassroots	Italy	2018	TI-Italy GlobaLeaks	Public Administrations (vs. ANAC)	GlobaLeaks open-source sofware
Buzon X	Facilitating whistleblowing	Grassroots	Spain		Xnet GlobaLeaks	N.A.	GlobaLeaks open-source sofware
Buzón Ético y de Buen Gobierno	Facilitating whistleblowing	Institutional	Spain	2017	Xnet GlobaLeaks	Municipality of Barcelona	GlobaLeaks open-source sofware
Buzon de denuncia anonimas	Facilitating whistleblowing	Institutional	Spain	2017	Xnet GlobaLeaks	Municipality of Barcelona Oficina Antifraude de Cataluña - AOC	GlobaLeaks open-source sofware
Buzon de denuncias	Facilitating whistleblowing	Institutional	Spain	2018	Xnet GlobaLeaks	Municipality of Barcelona Agencia Valenciana Antifraude - AVAF	GlobaLeaks open-source sofware
Common	Monitoring public actors	Grassroots	Italy	2016	Libera Gruppo Abele	N.A.	Participatory monitoring investigations based on data portal and data-related practices
Openpolis	Monitoring public actors	Grassroots	Italy	2006	N.A.	N.A.	Databases and repository (on GitHub), Data-driven platforms
Civio	Monitoring public actors	Grassroots	Spain	2011	N.A.	N.A.	Databases and repository (on GitHub), Data-driven platforms

Looking at a typology proposed by Feenstra and Casero-Ripollés (2014) of political monitoring processes in digital environment, the majority of the initiatives under investigation represent cases of civic monitoring promoted by civil society participants "who have taken advantage of the opportunities offered in the new digital communications environment" (Feenstra and Casero-Ripollés 2014, 2453), except for the institutional whistleblowing channels, implemented and maintained through governmental or state monitoring processes. What defines the differences between the two types of anti-corruption initiatives – beyond the presence of institutional actors – is the type of (civic) monitoring process: whistleblowing initiatives refer to the type "information extraction and filtration", defined as "Extraction and diffusion of secret information to promote transparency". Monitoring initiatives based on public data, instead, refer at the same time to "Watchdog function" and "Expansion of voices", defined respectively as "Supervision of the behavior of power centers, denunciation of abuses, injustices, and bad practices", and "Emergence of alternative channels for news circulation beyond mainstream media, which allows more topics to be included in the public agenda and political speech" (Feenstra and Casero-Ripollés 2014, 2455).

The following two sub-sections introduce the different initiatives, distinguishing between the main aim behind each one: facilitating whistleblowing or monitoring public actors, considering the distinction in types and processes as an additional lens through which to look at each anti-corruption initiative under investigation.

4.1. *Fighting corruption by facilitating whistleblowing: six digital initiatives based on GlobaLeaks software*

This section presents the Italian and Spanish initiatives that aim to expose corrupted behaviors by facilitating the whistleblowing phenomenon. In this dissertation, whistleblowing is conceived as a process finalized to reveal illegal, immoral, or illegitimate institutional behavior. These empirical case studies – represented by the six digital whistleblowing – allow to investigate

the role played by digital technologies in the creation and development of whistleblowing initiatives, considering not just the material components and the main affordances of the platforms, but also the issue of tech ownership and how it shapes the relational dynamics between the different grassroots and institutional actors involved in the adoption and maintenance during the time of these digital platforms in Italy and Spain.

The whistleblowing initiatives under investigation rest on the same grassroots anti-corruption technology developed in the framework of the GlobaLeaks project, founded in 2011 by the Italian NGO Hermes Center for Transparency and Digital Human Rights. The main technology corresponds to the homonymous open-source software GlobaLeaks. The sustainability of GlobaLeaks rests on Whistleblowing Solutions: an innovative social enterprise that arose from the growth path of the GlobaLeaks project. It provides planning reporting channels for anti-corruption and compliance purposes in both the public and private spheres; offers software customization and provides consulting and training services.

As a result of a standardization process over the last decade that affects also the market for whistleblowing platforms, two main players have emerged: on the one hand GlobaLeaks, diffused worldwide except into North America in which the leading role is gained by the alternative software, called SecureDrop, on the other hand.[141] SecureDrop, was developed in the US in 2013. Its main features are built around the needs and characteristics of newsrooms: indeed Secure Drop is currently used by major newspapers for their investigative projects. Currently, GlobaLeaks represents the main open-source whistleblowing software freely available (Jenkins 2020): it is used worldwide by more than 3000 organizations that deal with anti-corruption activism, human rights violations reporting, investigative journalism, and also corporate compliance.

In the context of this research, the generic term "GlobaLeaks" refers to the project as a whole, which is seen as a collective actor in its own right, despite

---

[141] According to the interviews collected with a developer of GlobaLeaks, Secure Drop represents a "fork" of the previous one. A fork is a separate development branch of an open-source project, thus a new repository that shares code and visibility settings with the original "upstream".

the fact that its genesis was associated with the Hermes Centre. In fact, from 2022 onwards, the management of the GlobaLeaks project was taken over by a leading developer, together with other members, who distanced themselves from the Hermes Centre due to internal tensions between the original founders. Regarding the grassroots technology, the corresponding terms referring to "GlobaLeaks software" or "open-source software"

Looking at the role played by GlobaLeaks in both Italian and Spanish scenario, the project maintains a leading role in the diffusion of digital whistleblowing platforms among Italian and Spanish civil society organizations (i.e. ALAC and WhistleblowingPA together with TI-Italy and Buzon X with Xnet) and public actors, such as public administrations or anti-corruption authorities (i.e. the three institutional "buzones" maintained by the Municipality of Barcelona and by the anti-fraud agencies of Catalunya and Valencia). Additionally, it has developed over time specific platforms for other types of actors, such as public authorities such as the case of AGI (i.e. Italia Leaks), or for newsrooms in cooperation with civil society actors and non-mainstream journalists, such as the Italian case of IrpiLeaks, both of them considered more as failure cases that successful. IrpiLeaks is a digital whistleblowing platform adopted by the Investigative Reporting Project Italy (IRPI), the first Italian center of investigative journalism. Looking at the Spanish context, there is the case of Filtrala, an initiative that is no longer active since July 2020. This platform was conceived as a secure and anonymous filtering platform operated by the Associated Whistleblowing Press (AWP) and acted as the intermediary between whistleblowers and different media or civil society organizations that act as the main "recipients" of leaks and reports. [142]

---

[142] Initially, IrpiLeaks and Filtrala were selected as potential additional case studies of journalism whistleblowing initiatives. During the course of the field research in Spain, however, cases of adoption of the GlobaLeaks software by government agencies came to light, of which the case of the Barcelona City Council is the first in the world, making it a emblematic case of the diffusion of a grassroots ACT. Additionally, the interconnections between grassroots and institutional whistleblowing initiatives have been considered more akin to the research questions (see RQ2). In addition, the research on IrpiLeaks and Filtrala, on which two interviews had been collected, was suspended in view of the feasibility and sustainability of data collection and analysis over time.

4.1.1 *From a leading-edge ALAC service to the development of WhistleblowingPA*

The Italian chapter of Transparency International (TI-Italy hereafter) represents the main civil society organization that deals with whistleblowing initiatives in the Italian context. Currently, TI-Italy counts two main projects: *ALAC - Advocacy and Legal Advice Centre* for whistleblowers on the one hand, and on the other hand *Whistleblowing PA*, a digital whistleblowing platform for public administrations developed by TI-Italy together with GlobaLeaks and Whistleblowing Solution. ALAC service was imported from other Transparency chapters that were already offering a service dedicated to potential whistleblowers in other countries. However, TI-Italy was the first chapter of Transparency International to adopt an encrypted platform for information disclosure, running on the GlobaLeaks software, thus making ALAC service a leading-edge. Before, the interactions with informants were mainly managed through phone calls and email exchanges. The service was launched in October 2014 as part of the Speak Up II project, co-funded by the European Commission, thanks to the strict collaboration between TI-Italy and GlobaLeaks. The current "high-tech" version of ALAC is also adopted by several TI chapters across the World, with some exceptions, such as the case of TI-Spain.

The second digital platform under investigation is *WhistleblowingPA*: it is a project originated from the willingness of TI-Italy Italia and Whistleblowing Solutions Impresa Sociale to allow Italian public administrations to adopt free software to dialogue with potential whistleblowers, guaranteeing them a safe and anonymous digital environment. Along with the free version, TI-Italy, and Whistleblowing Solution offer an additional commercial chance to customize the services to the PAs' needs. The number of participating PA actors in August 2023 exceeded 2000, with a fairly homogeneous distribution among the major Italian regions. [143] During the period of data collection (both interviews

---

[143] Abruzzo 40, Basilicata 15, Calabria 23, Campania 95, Emilia Romagna 131, Friuli Venezia Giulia 88, Lazio 84, Liguria 68, Lombardia503, Marche 40, Molise 32, Piemonte 127, Puglia

and documents), Whistleblowing PA was the only platform available: intended for public administrations and free of charge. From 2023, Whistleblowing Solution and TI-Italy offer different configurations of the service depending on the type of entity or actor involved.

The leading role of WhistleblowingPA - officially released in 2018 as a whistleblowing platform for public administrations – deals with the fact that it represents an "alternative" service to the one promoted by the Italian anti-corruption authority (ANAC) and realized by LaserRomae s.r.l., *Openwhistle-blowing* (Fubini and Lo Piccolo forthcoming).[144] The "top-down" version of the whistleblowing platform consists, instead, of two software components that originated from the GlobaLeaks' code: the first is intended for the internal offices of ANAC for the management of investigations following reports of unlawful conduct coming from public employees. The second solution is intended for the management of reports of unlawful conduct coming from employees of this Authority and will be subject to possible reuse for other Public Administrations. Despite the relevance of the institutional platform, it does not represent a case study in itself: it is a top-down platform, in contrast to the Spanish cases, where it is possible to observe that the development and implementation of platforms result precisely from the direct involvement of grassroots actors.

Thus, looking at the Italian scenario, TI-Italy has acquired a clear centrality in dealing with the phenomenon of whistleblowing, including the development and maintenance during the time of ALAC and WBPA. However, this is not the case of the Spanish chapter of Transparency International: currently, the ALAC service, which is available in several chapters of Transparency International, is not active in Spain, as well as other types of projects, such as Whistleblowing PA. Indeed, it seems that the vacant role of TI-Spain has been taken by Xnet at least for the topic of whistleblowing, as it will be explained below.

83, Sardegna 168, Sicilia 73, Toscana 163, Trentino-Alto Adige 55, Umbria 39, Valle D'Aosta 24, Veneto 302.
[144] ANAC had interacted with GlobaLeaks/Hermes Centre during the consultancy phase (see https://www.anticorruzione.it/documents/91439/76d050ce-9e12-c2f6-f369-2e3abadcc159)

4.1.2 *From the pioneering case of Buzon X to its replications including institutional actors*

The pioneering case of the digital whistleblowing platform "Buzon X" was implemented by Xnet, a grassroots collective actor interested in working and proposing advanced solutions in fields related to digital rights and democracy. Xnet represents a kaleidoscopic initiative based in Barcelona, that deals with heterogeneous forms of data and tech-activism such as freedom of expression and net neutrality, but also fights against corruption using digital technologies. The roots of this initiative are related to the Indignados or broader 15-M mobilization from 2011 against austerity measures in the context of the economic crisis. Some scholars define 15-M as a paradigm of "connective" action (Casas et al. 2016) and also a relevant case to examine the role of digital technology within political activism and to explore the media relations with legacy media and activists (Mico and Casero-Ripollés 2014). The collective identity of Xnet remains strictly related to the paradigm of techno-politics: as 15-M, Xnet is inspired by the networks form of the internet, by the hacker ethics and culture, and by the free culture movement (Trerè 2019).

Going beyond its "kaleidoscopic" collective identity, Xnet represents a key collective anti-corruption actor in the Spanish context thanks to its direct involvement in mobilizing and collecting leaks on a huge corruption scandal called " El caso Bankia" (Mattoni 2017). After its involvement in the 15-M mobilization against corruption, Xnet took a central role in the 15MpaRato mobilization (from 2012), an anti-corruption campaign against a Spanish bank, which led to the jail of the former Minister of Economy and President of IMF and 15 more bankers. The scandal is well-known as "El caso Bankia", and has been considered the major leak that has affected the country, thanks to the implementation of a digital and encrypted whistleblowing platform (i.e. *Buzon X*), made by Xnet thanks to collaborative relation with the Italian tech developers of the open source software GlobaLeaks. Although the digital platform is no longer active, Xnet continues to play a central role in the whistleblowing phenomenon. Buzon X represents a pioneering case in the country so much so that

it became a kind of model to be replicated also by Spanish grassroots and institutional actors: indeed Xnet works extensively to promote the diffusion of digital whistleblowing platforms among Spanish public actors, among which the pioneering cases of the municipality of Barcelona and the Anti-corruption authorities of Catalunya and Valencia regions. The first and most pioneering case was the city of Barcelona. Here, thanks to a strong partnership between Xnet and the developers of GlobaLeaks, as well as favorable political conditions and the political will of the mayor of Barcelona, the encrypted platform called *Buzón Ético y de Buen Gobierno* was created. It consists of a digital device managed by the Barcelona City Council, created "inspired by similar mechanisms in civil society (such as the Xnet mailbox) and with the advice of Xnet members from the Consell Ciutadà Assessor de l'Oficina per la Transparència i les Bones Pràctiques del Ajuntament de Barcelona" (Citizens' Council of the Office for Transparency and Good Practices of Barcelona City Council).[145] The second institutional case of the implementation of a digital whistleblowing platform replicating the experiences of the Municipality of Barcelona is the Oficina Antifraude de Cataluña, which has been active since 2009. The Anti-Fraud Office of Catalonia was created by Law 14/2008, on 5 November, and began its activity in the last quarter of 2009. It is the pioneer institution in Spain in complying with the mandates of the United Nations Convention against Corruption. Then was the case of the Agency for the Prevention and Fight against Fraud and Corruption of the Valencian Community was created by Law 11/2016, of 28 November, of the Generalitat Valenciana, amended by Law 27/2018, of 27 December, on fiscal measures, administrative and financial management and organization of the Generalitat.

As was already pointed out in Chapter 3, in Spain there is no anti-corruption authority at the national level, but over time several agencies and public actors have sprung up at the regional level, although not all of them have an encrypted service for whistleblowers. For example, *Oficina Municipal contra el Fraude y la Corrupción del Ayuntamiento de Madrid* (Madrid City

---

[145] https://xnet-x.net/es/buzon-xnet/#12a
https://xnet-x.net/es/buzon-denuncias-anonimas-ciudad-barcelona-bustia-etica/

Council's Municipal Office against Fraud and Corruption) dedicates a section of its website to anonymous reporting, but there is no reference to dedicated digital platforms: it turns out to be a questionnaire to be filled in.

Finally, the crucial role of Xnet in facilitating the diffusion of digital platforms based on GlobaLeaks, effectively fills the void left by the Spanish chapter of Transparency International on these issues. Compared to TI-Italy, the case of TI-Spain is quite different: currently, the ALAC service, which is available in several chapters of Transparency International, is not active in Spain, nor are other types of projects. In short, the vacant role of TI-Spain seems to have been filled, at least for whistleblowing, albeit partly by Xnet.[146]

4.2 *Fighting corruption by monitoring public institutions through data-related practices*

This section presents the Italian and Spanish initiatives that aim to expose corrupted behaviors and reduce institutional opacity by monitoring public actors through (open) data-related practices. Governmental data can be considered properly "open" if they are open by default, timely and comprehensive, accessible and usable, comparable and interoperable, finalized for improved governance and citizen engagement, and for inclusive development and innovation (Open Data Charter 2015).[147] All the monitoring initiatives under investigation deal with data and data-related practices in their fight against corruption. The literature casts light on different types of data-related practices that data activists may put in place in their fight against corruption, distinguishing between data creation, data usage, and data transformation (Mattoni, 2017). Both Italian and Spanish initiatives try to contrast institutional opacity exerting their role of "civic" watchdogs at the national but also local level by intersepting needs of a specific community, as

---

[146] TI-Spain does not represent an empirical case study of this research. However, data was collected (three staff members were interviewed) in order to relate it to both TI-Italy and Xnet. In fact, TI-Spain has not adopted any platform for whistleblowing and is not involved in its diffusion.

[147] https://opendatacharter.net/principles/

in the case of Common. Moreover, data-related practices consist of the production of new data not available before, and finally these (new) data may be then diffused in a format close to data-journalism, as in the case of Openpolis and Civio.

4.2.1 *Common Comunità Monitoranti*

Common is a project of civic activism created in 2016 as a joint initiative of Gruppo Abele and Libera (Rispoli 2022). Common supports local monitoring communities in their fight against corruption and opacity through educational and dissemination events, advocacy campaigns, and projects that also consider the use of open data both at local and national levels. The main peculiarity of this initiative is the so-called "community based-monitoring approach", that is strictly interconnected with the conception of "monitory democracy" (Keane 2009) . In turn, what Keans argued relates to the concept of 'monitorial citizenship' offered by Schudson (1988, 2000). These two theoretical concepts have practical relevance in Common to the point of representing the theoretical roots underlying this approach (Orlando 2020). Thus, this "community based-monitoring approach" - considered first and foremost a monitory form of civic action- "comprises a variety of processes which see citizens organizing themselves in groups based on identity or locality to monitor powerful social actors' actions by using or generating publicly held information; provide feedback on, and advocacy for, specific actions; demand response and responsiveness on these issues by the authorities and/or develop an own strategy of collective action" (Orlando 2020, 14).

One of the most emblematic cases of the implementation of this approach on a national scale is a recent initiative aimed at first mapping the scarce availability of data on PNRR funds (i.e. Pnrr a raggi X), involving more than 100 activists from the garrisons of Libera. This recent initiative, carried out by Common, then developed in a process that went beyond the monitoring of existing data: instead, Common and its monitoring community, composed of re-

gional groups of activists, were able to create a database that was not available before (i.e. Pnrr a raggi X, volume II).

Despite this recent experience, the actions carried out by Common are manifold. Indeed Common promotes projects with other collective actors (e.g. and campaigns (e.g. *Illuminiamo la salute*: fight corruption in the health system), but also organizes the annual event "Scuola Common" that aims to improve civic engagement and civic participation through empowerment and awareness. During the time the same format conceived at the national level was replicated at the local level: thus, the training activities were more akin to the specific needs of a potential community of activists (e.g. Scuola Common Bologna). The national edition of "Scuola Common" represents the starting point to investigate the relational dynamics within the main Italian actors involved in curbing corruption. Indeed the annual training event aims at engaging in the activities of some leading civil society organizations, such as Transparency International Italy, or other minor bottom-up initiatives that deal with transparency issues, organized crime, open data (e.g.Cittadini Reattivi, Avviso Pubblico). "Scuola Common" also involves institutional actors, such as the case of the National Anticorruption Authority, ANAC, and other initiatives closer to the journalistic realm (i.e. Openpolis).[148] As regards the educational mission, Common has developed a theoretical-practical model related to monitoring community practices: defined "Bussola Common" (compass Common), then improved during the project YouMonitor - Empowering YOUth to build MONITORial communities against corruption (Erasmus+ KA2 project 2020-2023), which represents a concrete tentative to replicate the development of monitorial communities in other European countries (i.e. France and Germany), starting from the experience of Common (Orlando 2020). The educational objectives pursued by YouMonitor will be further developed within MoMoEU - MOre MOnitoring action in the EU a new two-year project (2022-2024), which sees

---

[148] Common Schools' have become increasingly central in defining the roles of Common, Libera and Gruppo Abele and the relational dynamics between them and other civil society, institutional and academic actors. For this reason, the context of the Schools was explored in depth through three short-term offline participant observations, in 2020, 2021, and 2022 respectively.

an enlargement of the grassroots actors involved in addition to Common, from Germany, Italy, Spain, North Macedonia, France and Lithuania, to create a digital educational roadmap to empower young generations to build anti-corruption monitoring communities in different local contexts.

Finally, it should be noted that Libera, together with the leading referent of the Common Project, has also developed a service to provide support and assistance to potential victims of corruption. The service, based on a hotline and a mailbox monitored by trained operators, is called Linea Libera. Compared to the whistleblowing initiatives that are included in this thesis, Linea Libera is characterized by a 'low-tech' infrastructure (Fubini and Lo Piccolo forthcoming).

4.2.2 *Openpolis: when data activism meets data journalism*

Openpolis is a non-profit foundation based in Rome since 2006: it develops digital platforms and employs open data to produce journalistic content that fosters monitoring initiatives on various issues that require monitoring actions: from public tenders related to the COVID-19 emergency collected on the platform *Osservatorio Bandi Covid* to the latest platform called *Open PNRR*. Openpolis promotes projects for accessing public information, transparency, democratic participation practices, and data-driven journalism, through the development of web applications based on the open data chain (i.e. Data-driven web applications – DDWAs). This empirical case study represents a hybrid form of data journalism initiative, thanks to the engagement with a wide range of practices devoted to the content creation mainly based on the use of open data: "*We think, design, develop and manage data-based ICT platforms in order to produce information, tell stories, carry out investigations and improve public awareness on specific matters*". The main purpose of this foundation is to promote free access to data and information, to improve the culture of transparency and participation, and therefore empower citizens. This mission means collecting relevant data concerning democracy and society, to build a freely ac-

cessible data repository capable of producing and distributing data-based information. To pursue the main aim, the (open)data-related practices made by the people involved in Openpolis deal with open data-based web applications, data-based journalism; critical data culture; civic activism, and campaigns. Additionally, Openpolis had a leading role in the promotion of heterogeneous projects and campaigns, as in the case of Foia4Italy (2014). Furthermore, Common and Openpolis are both signatories together with more than 60 Italian civil society entities of an open letter directed to the Government, to denounce the serious delay in making available the data that are essential for monitoring the progress of the PNRR. The campaign is called *ItaliaDomaniDatiOggi* and stands in continuity with the main campaign *#DatiBeneComune*, launched in November 2020.

This empirical case study represents a hybrid form of data journalism initiative (Porlezza and Splendore 2019; Splendore 2017), thanks to the engagement with a wide range of practices, mainly based on the use of open data. The main entry point to depict the hybrid role of Openpolis in the news media system is represented by the digital platforms (Gillespie 2010) developed directly by the empirical case study during the time: the thematic data-driven web applications (DDWAs), and the main website, openpolis.it.

The DDWAs constitute the basis for producing data journalism content. All the DDWAs are based on monitoring practices, but they differ both in the time frame in which they were developed and in a different thematic focus with respect to the practices carried out by Italian public and political actors. Among the platforms that have consolidated the most over time there should be mentioned Open Bilanci, which collects the annual accounts of all Italian municipalities, Open Politici, which contains the biographies of around 130,000 Italian elected politicians, and Open Parlamento, which is dedicated to informing and monitoring the work of Parliament. Among the more recent ones, we should mention the Osservatorio Bandi Covid, created in the emergency context of the pandemic, and the Open PNRR, which monitors the development of the National Recovery and Resilience Plan (in Italian PNRR) based on EU Next Generation funds.

Table 4.2 summarizes the features of each platform, highlighting the different issues monitored, the forms of corruption prevented, and their status.

Table 4.2 -   Openpolis' data-driven web applications and the website (based on Fubini 2023a)

DATA-DRIVEN WEB APPLICA-TION (DDWA)	WHAT OP AIMS TO MONI-TOR / THE MAIN GOAL	FORMS OF COR-RUPTION PRE-VENTED	STATUS
VoiSieteQui (YouAreHere)	Consists in an interactive tool designed as an electoral-political questionnaire for citizens/voters that returns as a result the party closest to their own positions	(Not applicable)	Available during each national electoral campaign from 2006 to 2014
Open Bilanci (Open Financial Statements)	Collects the financial statements of all Italian municipalities	- Anomalies in public procurements - Conflict of interest - Misuse of Public Funds	Ongoing since 2006
Open Politici (Open Politicians)	Contains a history of careers of around 130,000 Italian elected politicians	- Conflict of interest	Updated until 2018
Open Parlamento (Open Parliament)	Allows monitoring of the actions carried out by MPs and senators every day in Parliament (such as acts, votes, individual MPs or specific topics)	- Opacity within policy processes - Conflict of interest	Ongoing since 2008
Osservatorio COVID-19 (COVID-19 Observatory)	Collects data on Italian public procurements related to Coronavirus disease	- Anomalies in public procurements - Conflict of interest - Misuse of Public Funds	Ongoing since 2020
Legislative Process Tool	Monitors the meetings of institutional representatives and their financial interests	- Opacity within legislative processes - Conflict of interest	Ongoing since 2020
Open PNRR (Open National Recovery and Resilience Plan)	Monitor the development of the National Recovery and Resilience Plan based on the Next Generation EU funds	- Conflict of interest - Misuse of Public Funds	Ongoing since 2022

| Openpolis.it | - Contains general information about OP (as people involved, budget, statute)
- Host the majority of the contents produced by OP (as articles, reports) | (Not applicable) | Ongoing since 2006 |

4.2.3 *Civio: an independent data journalism initiative against opacity with grassroots origine*

Civio is an independent non-profit organization based in Madrid (Spain) since 2011. Their activities deal with different types of practices: concerning data journalism practices, they investigate power, public procurement, pardons, and conflicts of interest as the main issues. Moreover, Civio is an organization that has been recognized for its journalistic investigations and its innovative use of technology. As regards relational lobbying and collaboration with public administrations, Civio aims firstly to contrast the opacity in public affairs and to achieve free access to key information generated by our institutions, and secondly collaborate with public administrations to provide innovative and effective solutions to the citizens' demand for transparency.

Regarding power dynamics, Civio has created an interactive tool "The Spanish power maps" that represents thousands of verified relationships among Spanish politicians, businessmen, and public entities. On Justice, Civio has developed also the "Pardonometer", which allows exploring all pardons granted in Spain since 1996. On public procurement, Civio's website counts a section on in-depth research on related irregularities, corruption and its performance. On the same issue, Civio has developed an investigative project, "Who's paid for the work?" that shows and analyses for the first time all public works contracts published in the Spanish Official Gazette between 2009 and 2015. On accountability issues, there is a section dedicated to investigations and stories about the performance of public administration, its expenditures (budgets and grants), related public policies, and how these affect citizens.

On transparency, Civio promotes investigations about transparency and accountability – or lack of it – emphasizing how the legal tools (i.e. FOI) may constitute a great ally for overcoming scarce data availability. Civio was also involved in the creation of "Your right to know", the first web in Spain that enabled users to easily request information from any public institution, even when there was no Transparency Act enacted. It was a joint initiative by Civio and Access Info Europe, and it launched in March 2012. The project also served as an advocacy tool and created social awareness about the need for transparency. The same for health and environment issues: on the website are available investigations about the pharmaceutical market, access to medicines, and public policies on health (Medicamentalia) and also on energy, forest fires, and ecology, focusing on how the environment is handled by public administrations, with the development of an interactive map called "Spain in flames".

As in the case of OP, tracing the development of the main projects and related data-driven platforms represents a first step for depicting the main social contentious issues covered during the time by Civio. The following table (Table 4.3) summarizes the main features of each platform, highlighting the different issues monitored and the current status of each one.

Table 4.3 - Civio's data-driven platforms and the website (based on Fubini 2023a)

DATA-DRIVEN PLATFORMS	WHAT CIVIO AIMS TO MONITOR / THE MAIN GOAL	FORMS OF CORRUPTION PREVENTED	STATUS
Tu derecho a saber (Your right to know)	The first website in Spain that makes it possible to request information from any Spanish public institution (before Transparency Law and FOIA)	- Anomalies in public procurements - Conflict of interest - Misuse of Public Funds - Political Financing	Available from 2012 to 2015 as an independent project
dondevanmisim-puestos.es (Where my taxes go)	A tool to explore the General State Budget: how the budget is distributed, where the revenue comes from and what the State spend it on	- Misuse of Public Funds	Data available from 2008 to 2022 (the project was create in 2012) Up-to-date one's per year

espanaenllamas.es (Spain in flames)	A platform mapping the main fires that occurred between 2001 and 2010: a journalistic investigation project open to the collaboration of users to collect more data and trace the causes of arson fires	- Conflict of interest - Anomalies in public procurements	2012 (Up-to-date one's per year since 2017)
El BOE nuestro cada dia (Our daily official gazette)	News and journalistic investigations produced by the Civio's editorial team and based on daily reading of the Official State Gazette	(Not applicable)	Ongoing since 2013
El Indultometro (Pardonometer)	Collects data on 10,158 pardons since 1996 that are available for citizens' scrutiny	- Opacity within judiciary processes - Conflict of interest	Ongoing since 2013 (Up-to-date one's per year)
quienmanda.es (Who rules)	Based on the Onodo tool, this site enables users to visualize: -more than 4,400 profiles of politicians, businessmen, public officials, organisations, administrations and companies. - more than 6,800 relationships between them. All documented with official sources.	- Clientelism - Conflict of interest (revolving doors)	Available from 2013 to 2017 (no more up-to-date)
medicamentalia.org (Health sector)	A data-driven investigation on global access to medicine (61 countries compared)	- Bribes /Corruption within health sector	Realized in 2015
quiencobralaobra.es (Who's paid for the work)	A map of public procurement in Spain	- Conflict of interest - Anomalies in public procurements	Available from 2013 to 2017-18 (no more up-to-date)
Civio.es	- Contains general information about CIVIO (as people involved, budget, statute) - Host the majority of the contents produced by CIVIO (as articles, reports)	(Not applicable)	Ongoing since 2011 Website renewal: during 2017

Conclusion

Chapter 4 has presented the nine initiatives under investigation, located between Italy and Spain, and has tried to trace the roots and specificities of each of them, starting from the description of the technologies used by each of them,

together with the specificities of the different approaches to monitoring, more closely related to the world of journalism or more related to community building. This chapter has also tried to shed light on the collective actors that have led to their development. As it was already mentioned in Chapter 2, the selection of these specific initiatives deals with the fact that the most prominent grassroots collective actors who have tended to integrate different types of digital tools and technologies in their struggle over time in both countries are those who are involved in whistleblowing and monitoring practices.

While Chapter 4 presents the nine empirical case studies in detail, the following chapters go further and attempt to present the main empirical findings concerning whistleblowing initiatives on the one hand (i.e. chapter 5) and monitoring initiatives on the other (i.e. chapter 6). Moreover, the empirical findings are strictly tied to the theoretical one: the emergence of a new form of activism that cuts across these two types of initiatives, the so-called "*infrastructural activism* and the related distinction between whistleblowing (both grassroots and institutional) and monitoring infrastructures.

CHAPTER 5

INFRASTRUCTURAL ACTIVISM FOR ANTI-CORRUPTION PURPOSES: THE PREMISE FOR GRASSROOTS AND INSTITUTIONAL(IZED) WHISTLEBLOWING INFRASTRUCTURES

Introduction

This chapter presents and discusses the main empirical and theoretical findings that arose from the analysis of the six whistleblowing initiatives based on the open-source software GlobaLeaks, the main ACT under investigation. What has emerged from the data is that these initiatives represent cases of whistleblowing infrastructures, distinguishing between "grassroots whistleblowing infrastructures" (i.e. *ALAC*, and *Buzon X*) or "institutional(ized) whistleblowing infrastructures" (i.e. *Whistleblowing PA*, *Buzón Ético y de Buen Gobierno*, *Buzon de denuncia anonimas* and *Buzon de denuncias*). Each type of infrastructure - aimed at the detection and investigation of wrongdoing, facilitating the whistleblowing phenomenon - represents the main outcome of two distinct processes. First, the diffusion of a grassroots ACT (i.e. open-source software GlobaLeaks) among peers (i.e. other CSOs or group of anti-corruption activists) from which derived the grassroots infrastructures. Second, the institutionalization of the same ACT among state and governmental actors (i.e public administrations, municipalities, or anti-corruption authorities), thanks to the leading role played by CSOs, from which emerged the insititutional(ized) infrastructures.

Thus, the analysis suggests that both the Italian and the Spanish CSOs selected for this research are not just potential "recipients" of leaks: they are involved in the development and maintenance of grassroots infrastructures to the point to represent emblematic cases of a specific form of activism, conceptualized in the framework of this dissertation as *infrastructural activism*. This type

of activism is a prerequisite not only for the diffusion but also for the *institutionalization of grassroots ACT*. Therefore, this peculiar form of activism acquire centrality for the struggle against corruption form below due to its capacity to facilitate the whistleblowing phenomenon, as will be explained in detailed in the following sections.

As has been widely shown in the literature, whistleblowing plays an important role in detecting and preventing corruption (Bernstein and Jasper 1996; Bushnell 2020; Schultz and Harutyunyan 2015). Conceived as a process, whistleblowing involves at least three players: "wrongdoer(s) who commit the alleged wrongdoing; whistleblower (s) who observe the wrongdoing, define it as such and report it; and the recipient(s) of the report of wrongdoing" (Near and Miceli 1996, 508). Considering these three human actors, this chapter focuses on the processes of diffusion and institutionalization of a digital platform (based on a specific ACT) employed by potential whistleblowers once it is made available by the "recipients". Indeed, the recipients of the whistleblowing report are crucial in dealing with the corruption disclosures. The recipients can be either internal or external to the whistleblower's organization. The external is usually a collective actor, either an institution, the media, or a CSO. However, to date, few studies have delved into the perspective of both of them (Johnson 2003), and even fewer have focused exclusively on the role of CSOs as whistleblowing addressees (Bernstein and Jasper 1996; De Maria 2008; Loyens and Vandekerckhove 2018).

Moving from what the National Whistleblowing Center stated, "NGOs can play an important role in addressing gaps in whistleblower protection by serving as intermediaries (...) facilitating anonymous reporting, educating whistleblowers about strong existing whistleblower laws and, finally, advocating for stronger whistleblower laws around the world", this research makes a step further focusing on Italian and Spanish CSOs who employed GlobaLeaks software for the development (and then it diffusion and institutionalization) of

digital whistleblowing platforms with high standards of security and anonymity.[149]

Although the research on digital whistleblowing is growing (see Baljija and Min 2023; Coutinho do Nascimento and Rodrigues de Oliveira 2020; Di Salvo 2020, 2021, Hai-Jew 2020) and some authors have started to evaluate the impact of technological advances in this field of studies (Adam and Fazekas 2021), shedding light both on concerns (Berendt and Schiffner 2022) or benefits (Di Salvo 2024) about safety issues, just few studies have investigated how digital technologies and related high-tech skills tied to coalitions among different external recipients (i.e. CSOs, anti-corruption authorities, media outlets) may facilitate information disclosure on wrongdoing. Some authors have investigated the co-presence of different collective actors involved in enabling information disclosure of wrongdoing from a comparative perspective (Loyens and Vandekerckhove 2018), while others look at how some media outlets adopt whistleblowing platforms based on different open-source software (i.e. Secure Drop in the U.S context, GlobaLeaks almost in Europe and in the rest of the World) for investigative purposes, developed by tech-activists (Di Salvo 2020, 2021). However, just a few studies have started to pay attention to how the relational dynamics between civic collective actors and public institutions may impact the whistleblowing process (Lo Piccolo 2023). Even less cast light on how different relational dynamics between grassroots and institutional actors affect both grassroots high-tech and low-tech initiatives devoted to facilitating whistleblowing in specific countries, such as Italy (Fubini and Lo Piccolo forthcoming).

Moving from these pioneering studies, this chapter makes a step forward by focusing on how CSOs facilitate the whistleblowing process by firstly adopting digital whistleblowing platforms able to guarantee whistleblowers' safety and secondly fostering public institutions to adopt and maintain digital whistleblowing platforms based on what Di Salvo called "the technological skeleton for the whistleblowing phenomenon" (Di Salvo 2020, 72). This "skel-

---

[149] https://www.whistleblowers.org/how-non-governmental-organizations-can-help-whistleblowers-around-the-world/

eton" is represented by the GlobaLeaks software that was developed by the Italian technology-oriented actor Hermes Center to increase the safety of whistleblowers, guaranteeing their identity protection.

The chapter is structured as follows: the first section (5.1) presents the first type of whistleblowing infrastructure. The "grassroots whistleblowing infrastructures" arose from a process of diffusion of a grassroots ACT. This process is fostered by social and technological drivers. The social drivers of diffusion correspond to collaborative relations between peers based on mutual recognition. The technological drivers, instead, refer to specific features of the ACT in terms of guaranteeing high standards of security and anonymity for potential whistleblowers. The second section (5.2) instead, introduces the second type of whistleblowing infrastructure, as the result of processes of direct or indirect institutionalization of a grassroots ACT. The difference between the types of institutionalizations deals with different configurations of social and technological drivers. Looking at the social drivers of direct institutionalization, they are almost defined by collaborative relations between grassroots and institutional actors based on recognition. As regards the indirect process, it is almost characterized by conflictual relations between grassroots and institutional actors as initiators, counterbalanced by collaborative relations with public actors as the effective "recipients". Finally, considering the tech drivers of institutionalization, a crucial element is represented by the issue of grassroots tech ownership, together with material features of the ACT.

Then the third section (5.3.) introduces the main conceptual contribution of the entire dissertation from the perspective of whistleblowing, thus presenting one of the two types of *infrastructural activism*. Both types of whistleblowing infrastructures – grassroots or institutional(ized) originate from *infrastructural activism*. This specific form of activism represents the premise for both diffusion and institutionalization of grassroots ACT (either direct or indirect). Furthermore, this section discusses the main implications of this form of activism for the whistleblowing phenomenon also in the long term: indeed "infrastructural activists" may contribute to the maintenance of whistleblowing infrastructures, thanks to stable and durable coalitions with public institutions based on

mutual recognition – or in the case of diffusion with other CSOs. Finally, the chapter concludes casting light on the potential contribution of this research for the literature that deal with the (political) outcomes achieved by social movement and collective action.

5.1 *Diffusing digital whistleblowing platforms among peers: the key role of social and technological drivers*

The empirical findings suggest that whistleblowing infrastructures may originate from two main processes: respectively diffusion and institutionalization of a grassroots ACT (i.e. GlobaLeaks software). The distinction between these two processes (and related outcomes) is discussed in this chapter considering the main focus of this dissertation, thus the digital technologies employed for tackling corruption. As such, diffusion of a grassroots ACT differs from its institutionalization mainly for the types of actors involved in both processes. Indeed diffusion involves (just) peers, intended as other CSOs or tech-hacktivists (as in the case of the developers of the GlobaLeaks software). Institutionalization, instead, involves in this research anti-corruption institutions, municipalities and public administrations. Considering the theoretical contribution made by Weisskircher (2019) in which the author distinguishes among four types of mechanisms that may "link activism and new technologies", seems that diffusion and institutionalization rest both on a previous and common stage, or mechanism which corresponds to the fourth and "most direct" type pointed out by the author. Indeed, social movement organizations or CSOs may use their own resources to develop new technologies.

In the case of the GlobaLeaks project, the grassroots actors have used partially their own funds and partially the economic resources obtained through a non-profit foundation as the main donor. Stick to Weisskircher's mechanisms, in the case of institutionalization of the open-source software GlobaLeaks, its tech developers – togheter with other CSOs such as TI-Italy or Xnet – may cooperate with third parties as state players, in institutionalized ways not for funding the development of new technologies together – as sustained by

Weisskircher in what he defines the third mechanism (see 2019, 63-64), but to facilitate these institutional actors to adopted the grassroots ACT and maintained it using their own resources.

By emphasizing the material component of ACTs, i.e. the 'what' that is disseminated or institutionalized, rather than the 'who' - i.e. the collective actors or their demands - the findings presented and discussed in this chapter seek to extend existing research on the outcomes of social movements, of which 'institutionalization' is a part (cf. Amenta et al. 2010, 2018; Meyer 2021). In doing so, this research also extends Weisskircher's (2019) claim that the development of a new technology is a 'neglected' outcome of social movements. Indeed, in the case of the GlobaLeaks software and related whistleblowing infrastructures, the technological development from 2011 onwards, once the open source software was available, is somewhat taken for granted. In short, what this thesis wants to highlight here is, on the one hand, to go beyond the conception of the development of a new technology as an outcome in itself and to look at its additional consequences (or outcomes), such as its institutionalization. On the other hand, to consider its institutionalization as an outcome that goes beyond the institutionalization of the social movement in itself, of its main demands.

Coming back to empirical evidence, both processes - and related outcomes - are fostered by entangled social and technological drivers that assume different configurations depending on the type of process. This first section sheds light on the main role of social and technological drivers in fostering the diffusion of digital whistleblowing platforms among "peers", i.e. other grassroots collective actors such as civil society organizations involved in exposing corruption facilitating the whistleblowing phenomenon. The following table offers an overview of the main initiatives involved in the process of diffusion of a grassroots ACT, distinguishing between national and transnational diffusion and Italian and Spanish initiatives. Both types of diffusion facilitate the development of a specific type of whistleblowing infrastructure.

Table 5.1 – Whistleblowing infrastructures originated from diffusion

Type of whistleblowing infrastructure	Type of diffusion	Main drivers
Grassroots **whistleblowing infrastructures**	**National** Diffusion of grassroots ACT among peers (i.e. high-tech ALAC for TI-Italy)	**Social drivers of *diffusion*:** Collaborative relations between peers based on mutual recognition
	Transnational Diffusion of grassroots ACT among peers (i.e. Xnet, high-tech ALAC in other TI chapters)	**Technological drivers of *diffusion*:** secure and structuring technologies customized for grassroots actors

The social drivers of diffusion rest on collaborative relational dynamics between the grassroots tech developers from GlobaLeaks and the different CSOs involved in the fight against corruption: respectively the Italian chapter of TI on the one hand and the Spanish Xnet on the other hand. As regards the technological drivers, they correspond to specific features of the open-source software able to guarantee on the one hand high standards of security and anonymity for potential whistleblowers, and on the other hand enough flexibility to be customized according to the specificities of each grassroots actor.

Looking at the process of diffusion from a comparative perspective, for the Italian context, the analysis points out a pioneering case of diffusion of a grassroots ACT for whistleblowing: this is the case of ALAC service, which was already active in different chapters of Transparency International but was almost based on an email box and a hotline. Then it was renovated adopting high-tech anti-corruption technologies (i.e. the open-source software GlobaLeaks and the Tor browser). Furthermore, this "high-tech infrastructure" was then replicated in more than sixty chapters of Transparency International all around the World (but not by TI-Spain), also due to a collaborative relation with Transparency International Secretariat, pointing out a case of not just national but also transnational diffusion or the same ACT. As regards the Spanish context, an em-

blematic case of diffusion of GlobaLeaks and related ACT beyond the Italian context is represented by Buzon X. This platform was implemented and maintained by Xnet for collecting leaks related to a huge corruption scandal, so-called "El caso Bankia". This whistleblowing platform represents the premise for the adoption - defined later as *institutionalization* rather than cooptation - of the same anti-corruption technology also by Spanish institutional actors.

5.1.1 *The social drivers of diffusion: collaborative relations between peers based on mutual recognition*

Different configurations of relational dynamics among grassroots collective actors define the "social drivers" of diffusion. This first type of driver represents a key component in facilitating (or not) the diffusion of grassroots anti-corruption technology among other activists and CSOs. The empirical case studies under investigation show how collaboration between peers based on "mutual recognition" is a driving force behind diffusion.

Starting from the Italian case of ALAC - Advocacy and Legal Advice Centres represents an emblematic case of national diffusion fostered by a collaborative relational dynamic based on mutual recognition between TI-Italy and the technical developers of the Hermes Center. Tech developers were able to develop the first ALAC service based on the GlobaLeaks software, to guarantee a high standard of security and anonymity for potential whistleblowers thanks to encryption. Thus, the low-tech ALAC service based on a hotline and email inbox - available also in other TI chapters – has evolved into a "high-tech infrastructure" maintaining its role as an intermediary between a potential whistleblower and the AC public authorities as official recipients of their reports (Fubini and Lo Piccolo, forthcoming). So it is precise because of this filtering role that TI-Italy requires formal recognition of its work, as emerges from the following quote:

168

"As far as I am concerned, I would like recognition for this pre-signaling activity, or pre-signaling assistance, because I believe that this type of activity cannot be carried out by ANAC today, and because ANAC deals with the management of [whistleblowing reports], which is another thing, it is an institutional subject. We want to play a role in that we are in charge of telling people what their rights are, how to make a report to whom, and whom to go to, and this is a type of activity that we do and that we will continue to do anyway. [Additionally] it is a type of activity that would help ANAC. Today there is an imbalance whereby they are overburdened to say, they, for example, receive one thousand reports per year, and the entities almost all zero, this is a total imbalance, also because most of the reports do not have to go to ANAC" (TI-Italy, INT003, Initiator-Activist)

The pioneering case of ALAC, based on a "high-tech infrastructure", was then replicated in more than sixty Transparency International chapters around the world, thanks to the collaborative dynamics between TI-Italy, GlobaLeaks, and the TI Secretariat, in which the software developers play a leading role. Indeed, the idea of replicating the experience of TI-Italy comes from GlobaLeaks' members, as explained in the following quote:

"[…] since we had managed to support several TI chapters in around the world, we tried to propose ourselves to TI secretariat by saying let's do something together, we want to present what we do, let's see if we can equip all TI chapters with their own platform and likewise train them to do similar projects to the ones TI-Italy did in Italy, where first it supported a few administrations, then a few private companies, and now it has come to offer the platform to the entire public administration" (GlobaLeaks, INT002, Initiator-Tech Developer)

The rapid diffusion of the "high-tech" version of the ALAC service fostered by the creation and maintenance during the time of bottom-up coalitions represents an outcome in itself achieved at the transnational level, as stated by the spokesperson of TI-Italy:

"There are a whole host of other associations [TI chapters] that adopt ALAC. In all the countries [also] outside Europe, it was imple-

mented a lot because it's a citizen service, particularly in South America, and Central America, but also in Africa. There are a lot of chapters, Asians [chapters], they almost all have an ALAC service [based on GlobaLeaks software]" (TI-Italy, INT003, Initiator-Activist)

The existence of collaborative relationships between CSOs represents a precondition for both processes of grassroots diffusion. Considering the cases of BuzonX in Spain and ALAC in Italy they both represent emblematic examples of how is crucial to be able to build bottom-up coalitions" facilitated also by the fact that the activism real is extremely interconnected, and even more the community of tech activists and developers. So, while relational dynamics are particularly important in facilitating whistleblowing processes, the software characteristics underlying the development of digital whistleblowing platforms are undoubtedly more crucial: in fact, in addition to the social drivers, there are the "technological drivers" of diffusion, discussed in more detail below.

5.1.2 *The technological drivers of diffusion: secure and structuring technologies customized for grassroots actors*

As already stated above, the social drivers are closely related to the technological drivers: indeed, they are the so-called "drivers" of the diffusion of innovative technologies as a result of a grassroots innovation process (Parwez, 2022). Collaborative relationships based on recognition, together with technologies and platforms, have the power to structure not only the whistleblowing process itself but also the processes of first diffusing and then institutionalizing an ACT.

Certainly, the technology behind the six platforms is the same, but what emerges most of the interviews is that the different research participants recognize the undeniable contribution that the GlobaLeaks software can make to the

whistleblowing phenomenon.[150] In fact, the interviewees' awareness of the security challenges posed by the technologies is a kind of precondition for deciding to adopt specific AC technologies for whistleblowing. However, even before adopting them, it is the role of tech developers that is crucial, not only because of their capabilities in developing open-source software for whistleblowing but also because they are the first to acknowledge that technology can be leverage to increase the effectiveness of anti-corruption initiatives. Indeed the technological drivers correspond to specific features of the open-source software GlobaLeaks, captured by the imaginaries that both tech developers and activists associate with this specific ACT: the initiators of whistleblowing grassroots initiatives recognize that this specific technology represents a tool to empower citizens (i.e. potential whistleblowers), but it also ensures high-security standards that prioritize the safety of whistleblowers. Finally, the GlobaLeaks software and its implementation within digital platforms has the capacity – together with the human component – to structure the process of whistleblowing in itself. The following quote casts light on the motivations behind the creation of such anti-corruption technology:

> "So the project was created in 2011, and the Hermes Center was born first. Hermes was in fact born instrumentally out of the necessity of this project in the sense that in 2011 we had the idea and the date 2011 is linked to WikiLeaks and the repercussions on WikiLeaks as a result of their work and by computer technicians, not yet anti-corruption activists. We thought about how to reproduce these whistleblowing dynamics digitally for social purposes while trying to avoid repercussions on organizations that created such projects" (GlobaLeaks, INT001, Initiator-Tech Developer)

In practice, advanced technology can make a channel for whistleblowers more reliable and secure. This is evidenced by a significant increase in the

---

[150] Looking at the Codes Maps (Chapter 2) of both countries, a similarity in the arrangement of the technology-related codes becomes evident. The codes in the maps are practically the same, as are their relationships. In both the Italian and Spanish contexts, the codes "'Tech guaranteeing user security" and "Tech enabling whistleblowing" acquire relevance in defining one of the main categories and related sub-categories.

quality of whistleblowing reports, as stated in the internal reports of CSOs but also by the spokesperson of TI-Italy:

> *"We have a fairly high average quality of the report given by the platform, in the sense that it is difficult for [us to receive a high number of] request[s], but we have a positive relevance of 70% of the reports we receive, which is a lot. If you ask ANAC itself, it will tell you that since they put the platform, compared to the more traditional channels, and the protocol, they have gone from 20% good reports to 40-50, which is a lot"* (TI-Italy, INT003, Initiator-Activist)

Beyond the benefits at the organizational level, in the case of Buzon X, the choice of adopting a specific technology has also favoured the achievement of a concrete outcome in the fight against corruption: not only the collection of leaks but their usage for convicting the main persons involved in the already cited Bankia scandal, as also affirmed by a member of Xnet:

> *"With our Buzon X, with our leak, [we were able to] send it to 35 people, judge 35 people from all the political parties, from the two big trade unions, the personal secretary of His Majesty F. VI, the president of the Red Cross of this country, everyone [...] we are an example of a very effective leak"* (Xnet, INT003, Initiator-Activist)

While the two drivers of innovation together may foster the peer-to-peer diffusion of an anti-corruption technology, their partial occurrence may preclude the adoption and thus diffusion of the ACT by some collective actors, as explained below.

5.1.3 *Lack of recognition and resources may hamper the ACT diffusion: no drivers for TI-Spain*

Although the case of TI-Spain does not represent an empirical case study under investigation per se, it points out from a comparative perspective how some elements, both tied to the tech and relational sphere, do not favor the im-

plementation of ALAC, even in its low-tech version. Thus the lack of diffusion in the Spanish context of ALAC service is related just partially to relational dynamics among peers. Instead, it is tied to a lack of institutional recognition in terms of the law (de jure and not just de facto as in the Italian case) of CSOs as key players in facilitating the whistleblowing phenomenon. As explained by the spokesperson of TI-Spain representatives during an interview, the reasons beyond the "lack" of ALAC implementation refer to a lack of "capacity" in terms of human resources, but also in terms of technological skills, plus the issues of "legitimacy" and "legitimation" from the institutions, thus both *de facto* and *de jure* recognition:

"So we help, we guide and we say these are the national channels that you have that are legitimate and legal, these are the words that we don't have of legitimacy and legitimacy. And two, these are the alternative ways that if you want to go there if you don't trust the system it's your decision. But we say that we don't have this capacity nor this legitimacy nor this legitimation which are the 3 parts and the reasons why we don't have ALAC. Be legitimized with capacity and with legality it would be fantastic to be able to help all of them" (TI-Spain, INT001, Initiator-Activist)

TI-Spain has not implemented ALAC either a low or high-tech version, despite its involvement in activities related to the whistleblowing phenomenon, directly connected to its role in the "Foro de Gobierno Abierto": it is a permanent forum for participation and dialogue between public administrations (state, regional and local) and representatives of civil society to promote collaboration, transparency, participation and accountability. Being part of this forum allows TI-Spain to deal with and promote different topics related to the anti-corruption struggle: from the implementation of Transparency Law to proposing some amendments for the transposition of the EU Directive on Whistleblowing. Nevertheless, with or without digital whistleblowing platforms,

Transparency International is perceived as one of the main referents for anti-corruption among CSOs. Indeed TI-Spain may receive some requests for assistance from potential whistleblowers, as described again by the spokesperson of TI-Spain representatives during an interview:

> "*Often de facto [we look like] an ALAC because we give legal orientation, psychological orientation and also content orientation: look at this, this is corruption, this is fraud... in a de facto way [we act as an ALAC]. But if you make it clear in your vision on your website that you don't do this kind of thing if it comes to you, you can't avoid it, but if it comes to you, try to help him [the whistleblower] as much as possible*"
> (TI-Spain, INT001, Initiator-Activist)

So far, this first section presents emblematic cases of peer-to-peer diffusion of digital whistleblowing platforms, while also highlighting cases where this process did not take place. However, as stated at the beginning of this chapter, the emergence of whistleblowing infrastructures is not only the result of grassroots diffusion: in fact, this research sheds light on the existence of another process that involves not only grassroots actors (both local activists and the developers of GlobaLeaks), but also public actors such as municipalities, public administrations and anti-corruption authorities, up to a process of "institutionalization" of ACT, as explained in the following section.

5.2 *More than (just) diffusion: the (direct or indirect) institutionalization of grassroots whistleblowing platforms as an outcome in itself*

This section sheds light on the second type of process tied to the creation of institutional(ized) whistleblowing infrastructures, pointing out the specificities of both social and technological drivers that foster this process.[151] The following table offers a brief overview of the institutional(ized) whistleblowing

---

[151] The main differences between the processes of diffusion and institutionalization are already discussed in 5.1. For an overview of institutionalization both as a process and as a social movement outcome: see 1.2.3.

infrastructures, distinguishing respectively the type of institutionalization be-hind each initiative that may be direct (i.e. the Spanish *Buzón Ético y de Buen Gobierno*, *Buzón de Denuncias*, *Buzón de Denuncias Anonimas*) or indirect (i.e. the Italian *WhistleblowingPA*), and the elements connect to both social and technological drivers in the case of institutionalization. What has emerged from the comparative analysis is that the institutionalization process can also occur in the presence of conflictual relational dynamics and lack of recognition, when is counterbalanced by grassroots tech ownership, as in the case of the open-source GlobaLeaks.

Table 5.2 – Whistleblowing infrastructures originated from institutionalization

Type of whistleblowing infrastructure	Type of institutionalization	Main drivers
Institutional(ized) **whistleblowing infrastructures**	**Direct Institutionalization of a grasstoots ACT** (i.e. 3 Spanish Buzones)	**Social drivers of** *institutionalization*: Collaborative relations *between grassroots and institutional actors* based on mutual recognition
	Indirect Institutionalization of a grasstoots ACT (i.e. Whistleblowing PA)	Conflictual relations *between grassroots and institutional actors* as initiators are counterbalanced by *collaborative relations with public actors as the effective "recipients"*
		Technological drivers of *institutionalization*: grassroots tech ownership, secure and structuring technologies

The first and most pioneering case of institutionalization of a grassroots ACT is represented by the "buzon" implemented by the Municipality of Barce-lona. Here, thanks to a strong partnership between Xnet and the developers of GlobaLeaks, as well as favorable political conditions and the political will of the mayor of Barcelona, the encrypted platform called Buzón Ético y de Buen

Gobierno was created. Then, this model was strongly promoted by Xnet and then replicated by the Anti-Fraud Authorities of Catalunya and Valencia. Thus for the Spanish cases, we can speak about a *direct* process of institutionalization. Indeed the Spanish scenario was characterized by collaborative relational dynamics between CSOs and public authorities as potential initiators. This finding diverges from the Italian ones, due to different configurations almost in terms of social drivers. In fact, the Italian Whistleblowing PA represents a case of indirect institutionalization. Whistleblowing PA is a grassroots initiative realized by GlobaLeaks and TI-Italy for public administrations. The coalition between the two actors fosters not just the adoption but the large-scale institutionalization of the whistleblowing ACT among more than 2000 Italian public administrations (e.g. public service operators, municipalities and their consortia and associations, tourism agencies and bodies). Its origin was in part fostered by a conflictual relational dynamic with the National Anti-corruption Authority (i.e. ANAC): according to a tech developer Whistleblowing PA was created "to checkmate" the Italian anti-corruption authority (see 5.2.1 for further details). Thus for the Italian cases, we can speak about an *indirect* institutionalization, due to different configurations of social drivers, counterbalanced by the grassroots tech ownership.

At the same time, the institutionalization of digital whistleblowing platforms represents a concrete outcome achieved by the anti-corruption CSOs (Amenta et al. 2010, 2018; Meyer 2021), together with the related narratives constructed by the main collective actors involved (Meyer 2006, 2021). Looking at Meyer's studies on this topic, the author stresses the key role of the narratives about political change that activists construct and highlights the power that lies in these stories, starting from the main idea that "the process of claiming credit is analogous to that of establishing a reputation" (Meyer 2006). One of the main "narratives about the outcome" is represented by what some activists state during their interviews, thus playing a key role in fostering institutions to update the law to protect whistleblowers. Should be noted that during the interviews and documents' collection, the transposition of the European whistleblowing directive was being discussed in both countries, which would

open up to potential new actors, such as the media and CSOs (see Chapter 3, subsection 3.3.3 Whistleblowing Legal Framework).[152]

Starting from the so-called "concrete outcomes", the analysis of the coded material casts light on the capacity of some CSOs to foster the diffusion of ACT among public authorities, thanks to collaborative relations based on mutual recognition. Indeed seems that collaborative relations between heterogeneous actors (i.e. tech developers, grassroots and institutional initiators, and official recipients) facilitate whistleblowing as a process. The following quote – collected during an interview with a public servant of the anti-corruption authority of Catalunya region – refers specifically to the idea of a "network" between public actors highlighted during the interview with a public servant of AOC:

> *"We have shared experiences because with Barcelona City Council we [AOC] coincide because we have set up a network of anti-corruption offices and agencies in the state, all of them, regional or local [or national level] because at the central level, they also participate... We set up a network with a more general scope but obviously, the issue of complaints has been one, one of the very central pieces because we are in the process. So there are the regional parliamentary offices like ours, or AVAF, or in Baleares, and in Andalusia [...]"* (OAC, INT001, Public servant)

A more comprehensive analysis of the establishment coalitions between public authorities at different levels (local and national) may suggest that the same process of "direct" institutionalization of an ACT can then be replicated among peers, where in this case the peers are the institutional actors. Thus, if we consider the adoption of an ACT as a cyclical process, we can distinguish phases of grassroots diffusion, followed by phases of institutionalization that may foster in turn additional processes of institutionalization, involving other public actors.

---

[152] The topic was raised and discussed during all the interviews and it was codified as a narrative about a (potential) outcome achieved. Coming back to the Codes Maps, it is interesting to note that in the Spanish context (see Figure 10, Appendix 1) the main outcome "Diffusion of ACT among national public authorities" is unequivocally linked to the code just mentioned.

5.2.1 *The social drivers of institutionalization: collaborative relations or counter-balanced conflictual dynamics*

As was already stated in the first section of this chapter, different configurations of the so-called "social drivers" play a crucial role in facilitating or not the diffusion of grassroots anti-corruption technology among other activists and CSOs. The same occurs in the case of diffusion among public administrations, municipalities, or anti-corruption agencies, which led to speaking about processes of direct or indirect institutionalization (see 1.2.2). In the case of direct institutionalization, the social drivers correspond to collaborative relations between grassroots and institutional actors based on recognition as structuring agents. As regards the indirect case, the social drivers are characterized by an initial stage of conflictual relations between grassroots and institutional actors as potential co-initiators, then counterbalanced by grassroots tech ownership and by an active role played by public actors (i.e. public administrations) as the effective "recipients" of potential leaks.

Although research has revealed the need for mutual recognition between the actors involved as initiators, it is institutional recognition that is a crucial driver in defining the relational dynamics between top-down and bottom-up actors that facilitate - or even enable – institutionalization, as stated by a public servant from the anti-corruption authority of Valencia. This interviewee was previously involved in the case of the Municipality of Barcelona as a leading institutional actor for the whistleblowing issue.

> *"This is an enormous, extraordinary and magnificent contribution by the citizens, materialized in an organization, an NGO, such as Hermes Center and GlobaLeaks. The same can be said of Xnet. Once [Xnet] was aware of the existence of this technology, it implements it in this country and also as soon as it becomes aware that the City Council wants to install a reporting system, it informs us, which is the way in which the first public administration in this country was able to install the GlobaLeaks technology [...] So for us it is very important the contributions that civil society provides"* (AVAF, INT001, Public servant)

Going beyond the mutual recognition, an additional element that defines the so-called social drivers for institutionalization deals with the main motivations and roles played by the grassroots actors with respect to the institutional initiator, in practice – as in the case of TI-Italy and GlobaLeaks with the service Whistleblowing PA– this means to offer assistance to public actors in the whistleblowing process, as well as striving to support anti-corruption institutions in the common struggles, as highlighted by the following quote:

> *"WhistleblowingPA, on the other hand, is a project in which the entity does not install anything on its servers because we have [as an objective] to reach the community of 10 employees who do not have the IT technician [...]So we said we will do the maintenance, we will do the updating, then these platforms remain under our responsibility and we are in contact with the original developers because the platforms are always updated [...] So ANAC has a solution for in-house installation, while we have, we provide the platforms in the cloud [...] the difference is also in the ease of use, precisely. Our platform is even installed by anti-corruption officers who hardly know how to turn on the computer, because it is so simple"* (TI-Italy, INT003, Initiator-Actvist)

Sticking with the case of Whistleblowing PA, while the motivation and role of grassroots actors are finalized to support the public actors that will employ the digital whistleblowing platforms as recipients, the relationship with the potential institutional initiators (i.e. ANAC) appears to be conflictual, again in the case of the PA whistleblowers. As clearly stated by GlobaLeaks' founder – conflictual dynamics led to the creation of the Whistleblowing PA platform in itself:

> *"So Whistleblowing PA was born to checkmate the National Anti-Corruption Authority for a foul play they have done to us"* (GlobaLeaks, INT001, Initiator-Tech Developer)

The reported "misconduct" can be traced back to a specific public tender announced by ANAC for the development of a digital platform for the collection of whistleblower reports. Prior to the tender, GlobaLeaks had provided ANAC with consultancy services on its software. However, their knowledge as

the creators of the software automatically excluded them from the tender as they had an advantage. In the end, the dispute concerned the misuse of the open-source software license by the winner of the bid (i.e. the private actor LaserRoame) together with ANAC, as reconstructed by a former member of ANAC during an interview:

> "*You probably know, that when there is a public tender for the construction of a digital platform, If this entity [GlobaLeaks] helps to build the platform, then it has an advantage if it also participates in the tender, because it knows the system, because it created it. ANAC put it out to tender and this entity [GlobaLeaks] presented itself and was excluded. Why? Because it knew the technical specifications because it had invented them. So our tender would have been challenged if the contract had been awarded to the entity that had created the technical specifications of the software. However, there was a discussion with the delegate [of GlobaLeaks] in which I pointed out to him that his only recourse was to challenge our exclusion decision in court. And that is what they did because it was not so much the exclusion that they objected to, but the fact that ANAC had then violated certain aspects of the license in terms of industrial intellectual property law, in drawing up the technical specifications*" (TI-Italy, INT002, Public servant)

Once the platform was created, TI-Italy together with GlobaLeaks fostered its diffusion among Italian public administrations, thus the recipients. [153] Here both social and technological drivers play a crucial role in enabling a process of institutionalization. Indeed, the CSOs make their expertise available to foster the (indirect) institutionalization of the GlobaLeaks-based platform for the Italian PAs. In practice, both TI-Italy and GlobaLeaks offer assistance to public actors installing their platforms. It is just the conjunction of these elements that enables the institutionalization - albeit indirectly - of the grassroots Whistleblowing PA instead of the one promoted by ANAC (i.e. Openwhistleblowing or OpenBlow), as stated by the TI-Italy spokesperson:

---

[153] The total number of actors adhering to the more generic WhistleblowingIT as of August 2023 stands at 20152, distinguished between public administrations (WB-PA), public control companies (WB-SCP) and private and public entities (WB-CUSTOM). For a detailed list of the 20152 actors involved: see https://www.whistleblowing.it/adesioni/

"The platform provided by ANAC is called Openwhistleblowing I think...but there are very few diffusion of this platform because it is a very complex solution, which has to be implemented. Although it also originates from the GlobaLeaks open-source software and then [LaserRomae] modified the source code was, practically took an alternative path[it] made a platform that originates from GlobaLeaks but differs from GlobaLeaks" (TI-Italy, INT003, Initiator-Activist)

In this case, the tech ownership and related skills of GlobaLeaks developers make the difference in facilitating the dissemination of this ACT by offering technical assistance in the first place. The centrality of the technological component is precisely the basis of the second driver of the institutionalization process, as explained below.

5.2.2 *The technological drivers of institutionalization: the crucial role of grassroots tech ownership tied with security and anonymity features*

As emerged even more clearly with the case of the indirect institutionalization of Whistleblowing PA, the social drivers relate strongly with the technological drivers. The main link between the two "drivers of innovation" is represented especially by the issue of tech ownership and how it affects both direct and indirect forms of institutionalization.

Indeed, the grassroots control over a specific technology as in the case of the open-source software enables to structure not just the anti-corruption activities but to redefine the relational dynamics between the actors involved. Although the code is "open", no one can have similar or better skills than the developers themselves. This advantage in terms of tech literacy allows the developers themselves or those who promote it to have direct control over those who use it, as highlighted by both TI-Italy and GlobaLeaks members in the following quotes:

"We are not a commercial entity anyway, so we try to do some education of the entity. It sounds silly, but if the organization says no, but you give me the platform, I'll put it wherever I want. But it's free anyway, if you want to do what you want you take it from someone else and

I'll deactivate it! We also dictate some of the rules of use of our soft-ware" (TI-Italy, INT003, Initiator-Activist)

Thus, as highlighted by a GlobaLeaks developer, the control over the technology allows directly to give "resilience" to the institutional(ized) initiatives:

"We as software engineers set out that software can have multiple receivers and that all the receivers can see what everyone else is doing. And "stick your nose into [who install our software]" to try to see that this best practice, let's call it like that, that we are writing as security-minded software engineers, we try to write these guidelines also trying to give resilience to the same initiative" (GlobaLeaks, INT001, Initiator-Tech Developer)

Going beyond the issue of tech ownership, also in the case of the institutionalization process, the civil servants' and public actors' awareness of specific features of the software, represents a kind of precondition for the decision to adopt specific AC technologies for whistleblowing. In practice, advanced technology can make a channel for whistleblowers more reliable and secure, increasing the number of reports submitted through the encrypted platform, which represents a concrete outcome in itself. This is evidenced by a significant increase in the quality of whistleblowing reports, as stated in the internal reports of both CSOs and public authorities (i.e. Memorias)

5.3 Infrastructural Activism: the core element of grassroots whistleblowing infrastructures and the precondition for the institutional(ized) ones

This last section introduces the main theoretical contribution of the entire dissertation from the perspective of the whistleblowing phenomenon. Indeed, this thesis aims to contribute to the current literature on anti-corruption from the grassroots by casting light on a specific form of activism, labeled *infrastructural activism*. The analysis of the nine initiatives under investigation points out two main types of *infrastructural activism*: one related to the whistleblowing phenomenon, and the other tied to monitoring initiatives based on public data. In the framework of this chapter, this specific form of activism

represents the precondition for both processes of diffusion and the institutionalization of grassroots ACT (either direct or indirect). Moreover, both social and technological drivers represent at the same time the core element that co-occur in defining *infrastructural activism*. Indeed without the presence of this type of activism, neither diffusion nor institutionalization of a grassroots ACT can take place. In short, *infrastructural activism* for whistleblowing purposes represents a necessary condition for triggering both processes.

Furthermore, infrastructural activists for whistleblowing may contribute not just to the creation first and the diffusion or institutionalization later, but also to the maintenance of whistleblowing infrastructures, thanks to stable and durable coalitions with public institutions based on mutual recognition – or in the case of diffusion just with other CSOs, as in the case of the different chapters of Transparency International.

At the theoretical level, introducing the concept of *infrastructural activism* for whistleblowing represents a tentative to adopt a conceptual lens able to grasp not just the main process – the diffusion and institutionalization of a grassroots technology – and its drivers, but also a provisional (and innovative) conceptual framework able to highlight some additional insights on the key role played by ACTs implemented from below. As already pointed out in the previous sections, the main findings suggest distinguishing between diffused "grassroots whistleblowing infrastructures" based on (national or transnational) *infrastructural activism*, and "institutional(ized) whistleblowing infrastructures" based on (national or transnational) *infrastructural activism*.

Starting from the two main "drivers" of both diffusion and institutionalization – on one hand, the so-called "Collaborative relations based on recognition as structuring agents", and on the other hand "Secure technologies as structuring agents", this study argues that the diffusion and institutionalization of grassroots whistleblowing platforms - and the consequent promotion of anti-corruption practices also from public actors - relies on the existence of an "infrastructure" that is both technological and social. Both social relations and technologies may co-constitute the key elements of whistleblowing "infrastructures" both "relational and ecological […] part of the balance of action, tools,

and the built environment" (Star 1999, 377). These anti-corruption infrastructures enable (directly or indirectly) institutional actors, such as anti-corruption authorities, to curb and prevent corruption by recognizing an active role of organized civil society and embracing technological innovations coming not only from top-down actors but also from below.

Conclusion

This chapter has investigated how whistleblowing platforms based on the GlobaLeaks software were adopted firstly by Italian and Spanish CSOs and secondly by public administrations and anti-corruption authorities in both countries, due to the creation and maintenance of different types of "whistleblowing infrastructures". The analysis suggests to distinguish between grassroots infrastructures that arose from a process of diffusion of an ACT developed by tech hacktivist for increasing the security of digital platforms conceived for leaking purposes. Institutional(ized) infrastructures, instead, emerged as the main outcome of the institutionalization of a grassroots technology, tied to the direct or indirect involvement of public actors, such as public administration, municipalities, and anti-corruption authorities. Both processes were fostered by specific social and technological "drivers", as a result of a grassroots innovation process (Parwez 2022). Beyond the specificities of each process, the technological drivers refer to specific features and affordances of the digital technologies employed for facilitating exposing corruption guaranteeing safety and anonymity to who is blowing the whistle. The latter, instead, refers to the relational dynamics between different grassroots actors (i.e. activists and hacktivists/tech developers) and between grassroots and institutional ones (i.e. municipalities and anti-corruption agencies).

Pointing out the shift from digital technologies to (digital) infrastructures, this chapter reveals the necessity to shed light on a specific form of activism, able to grasp not just the precondition for the development of whistleblowing infrastructures, both grassroots and institutional(ized), but also to understand

how the use of specific ACTs affects the grassroots effort in the anti-corruption arena. This is the case of *infrastructural activism* for whistleblowing, which represents a necessary precondition for both diffusion and the institutionalization of a grassroots technology for whistleblowing, where the coalitions with additional actors (i.e public institutions) speed up and facilitate the process, enabling not just the creation of "infrastructures" but constituting the bases to let them and related ACTs "durable" during the time (Mattoni 2024). As such, this peculiar form of activism acquire centrality for the struggle against corruption due to its capacity to facilitate the whistleblowing phenomenon.

Looking at the empirical findings, the analysis distinguishes a first phase of the diffusion of whistleblowing platforms, in which their implementation was made possible by grassroots coalitions between tech developers of GlobaLeaks and CSOs, as in the case of TI-Italy for ALAC service or Xnet with Buzon X, created to collect leaks related to a specific corruption scandal. Instead, a second phase - defined as "institutionalization" - has involved institutional actors: for Italy, an indirect process of institutionalization stands out for the service offered by TI-Italy to public administrations, called Whistleblowing PA. In Spain, on the other hand, the first emblematic case of cooperation between Xnet, GlobaLeaks, and the Municipality of Barcelona has led to the development of a kind of model, which has been replicated and adopted by both the Catalan and Valencian anti-fraud agencies. Until today, the model continues to be replicated and an increasing number of regional anti-corruption agencies are creating and adopting their own 'buzon'.

In short, findings suggest that the spread of whistleblowing platforms - based on the same grassroots ACT - relies on the existence of an "infrastructure" that is both technological and social. This anti-corruption infrastructure enables institutional actors, such as anti-corruption authorities, to curb and prevent corruption by recognizing de facto – even not (yet) de iure – an active role of organized civil society by embracing technological innovations coming not only from governmental actors but also from the grassroots. Indeed, the recent transposition of the Directive (EU) 2019/1937 of the European Parliament on whistleblowing (in Italy in March 2023 and Spain in February 2023) only

partially recognizes a central role for CSOs in relation to the phenomenon of whistleblowing.[154]

Considering in specific the case of institutionalization, this empirical chapter aims to expand the literature on social movement outcomes, pointing out not the institutionalization of grassroots collective actors, but the institutionalization of a grassroots ACT. Starting from what scholars address as institutional impacts from the grassroots, speaking about policy-making and the institutionalization of movement demands (see Amenta et al 2010, 2018; Meyer 2021), this chapter tries to make a step forward by adopting a slightly different perspective. From institutionalization of movement demands to institutionalization of their own technologies (as in the case of GlobaLeaks). However, this contribution does not consider how grassroots innovation movements engage with more established science, technology, and innovation in which institutions and development agencies pursuit their goals and lead to the development of new models of inclusive innovation, as highlighted by Fressoli et al. (2014). On the contrary, this research turns out to be close to what Parwez (2022) states in his work on the ontology of grassroots innovations to grasp to what extent GIs may enable also institutional processes of innovation.

In sum, considering the main objective and research questions that guide this research, what Chapter 5 has presented represents a first attempt to shed light on how civil society actors in Italy and Spain use digital technologies for facilitating whistleblowing (RQ1), pointing out which types of grassroots actors are involved in whistleblowing practices that include digital technologies (Rq1.a), together with the focus on the type (i.e. high-tech or low tech infrastructure) of digital technologies used by the actors involved in grassroots anti-corruption practices (Rq1.b) and the imaginaries are assigned to anti-corruption practices and digital technologies by the actors involved in the fight against corruption from below (Rq1.c). Moreover, these empirical evidence sheds light

---

[154] For a brief overview of the 2019/1937 EU Directive Transposition in both countries, see Chapter 3. However, despite the centrality of the topic, this dissertation does not analyze this process in detail: the data collection and in particular the interviews were carried out before the transposition of the directive into domestic law, as highlighted in Chapter 2. This last point represents a crucial path for further investigations, as highlighted in the Conclusion.

on the consequences of using digital technologies for facilitating whistleblowing (RQ2). Findings point out how the use of digital technologies shapes the intersections and patterns of interactions within actors involved in the fight against corruption from below, and to what extend the development of digital technologies, followed by their diffusion and their institutionalization – that constitute outcomes in themselves and not just processes (Rq2.a) – (re)shape the relations between bottom-up and top-down efforts against corruption (Rq2.b).

To conclude, the empirical findings presented in this chapter reveals the need to shed light on a specific form of activism that characterizes the grassroots initiatives involved in facilitating the whistleblowing process, i.e. *infrastructural activism*. This type of activism seems to be relevant for understanding current grassroots anti-corruption efforts, even beyond the specificities of the case of digital whistleblowing platforms, as will be argued in Chapter 6 and in the Conclusion of this dissertation.

CHAPTER 6

INFRASTRUCTURAL ACTIVISM FOR ANTI-CORRUPTION PURPOSES: CREATE MONITORING INFRASTRUCTURES TO TACKLE INSTITUTIONAL OPACITY

Introduction

This chapter presents and discusses the main empirical and theoretical findings related to the analysis of three civic monitoring initiatives - Common, Openpolis and Civio - aimed at contrasting institutional (data) opacity, considered a red flag or "precondition" for corrupted behaviors (Jain 2001).

The phenomenon of institutional data opacity moves its path from the limited efficacy of open government (Yu and Robinson 2012), concretely conceived in this context as the scarce and discontinuous availability and accessibility of public data, although some recent research suggests that the functionality and efficiency of open government portals may be more important than transparency (Matheus et al. 2023). Broadly speaking, *institutional opacity* occurs when "the institution is increasingly resistant to assessment and understanding by their agents and, especially, their users" to the point of hampering their "epistemic agency" and transforming it into "epistemic vulnerability" (Carel and Kidd 2021, 481). At the same time, public *data opacity* represents one of the main contradictions of the platform (Van Dijk et al. 2018) and datafied societies (Schäfer and van Es 2017). A recent research casts light on some global "contrasting trends" in the evolution of the so-called "openness", such as the level of governmental transparency on their budgets or data does not increase, even if they joint openness initiatives, and, more crucial, the fact that the space for civil society is "shrinking", although more institutions are adopting online tools to inform and consult citizens (Schnell 2020). Thus, institutional data opacity reduces what research on open data considers to be such an opportunity (and necessity) for government to release granular and detailed

'open data' in order to be more 'open' to citizens (Attard et al. 2015; De Blasio and Selva 2016; Janssen et al. 2012). Therefore institutional data opacity represents a challenge in itself for transparency and accountability (Cahlikova and Mabillard 2020; Mayernik 2017; Stohl et al. 2016), and, even further, for good governance (Cucciniello et al. 2017).

As such this chapter casts light on the employment of open data as anti-corruption tools - and related digital technologies - able to enhance the transparency and accountability of governmental actors and public institutions (Bertot et al. 2010; Cranefield et al. 2014; Rose et al. 2015), but adopting a bottom-up perspective. Practically speaking, this means shedding light also on the role of "data-related practices" (Mattoni 2017) within the grassroots strategies against this specific type of institutional opacity. Following a bottom-up perspective implies first, looking at how civil society organizations adopt the "upward transparency mechanism" (i.e. from civil society to government) to counter-balanced the limits of the opposite mechanism that moves from the government to civil society, the so-called "downward transparency mechanism" (Adam and Fazekas 2021).

Second, it implies challenging the controversial debate on the efficacy of open data in reducing corruption. Indeed, although some scholars consider open data as a valuable tool to hold the government accountable (Gurin 2014; Gray 2016; Lourenço et al. 2017; Kossow 2020), others highlight that open data platforms do not necessarily and directly decrease corruption (Matheus et al. 2012), due to the dysfunctionalities of the already mentioned downward transparency mechanisms (Adam and Fazekas 2021; Davies and Fumega 2014). Thus, the choice to adopt a bottom-up perspective aims to unpack certain narratives within the debate on the limits and potentialities of open data in curbing corruption (see Davies et al. 2019). [155]

Moreover, it should be noted that the period in which the various data were collected in the framework of this research corresponds to a contingent and emblematic context for observing the phenomenon of institutional data opacity,

---

[155] For a reconstruction of the main issues fuelling the debate on the effectiveness of open data in the fight against corruption, see Chapter 1.

such as that of the COVID-19 crisis, in which data availability, accessibility and transparency also affect government action in terms of data reliability, hence its credibility (Miller et al. 2022; Rotulo et al. 2023).[156] Indeed scholars recognized how the COVID-19 pandemic represents a vulnerable scenario that intensifies existing inequities, increasing the financial insecurity of vulnerable people (Gazi and Gazis 2020), and also facilitate corrupted behaviors (see Csonka and Salazar 2021) .[157]

Looking at the main findings well introduced and discussed in the following sections, the analysis of these monitoring initiatives casts light on seven anti-opacity strategies. It distinguishes between those ones that are employed to prevent data opacity, thus corrupted behaviors, from those that are adopted to react to the already existing case of data opacity (see Table 6.1). Even more crucial these different strategies, that rely on more or less advanced technologies, represent a core component of each monitoring infrastructure. Indeed, as will be extensively discussed in the following sections, some of these strategies are made possible because they rest on – and in part, they contribute to – constitute monitoring infrastructures, developed and maintained during the time by the collective actors to be able to exert their watchdog role (or rhetoric).

Thus, before discussing the specific features of each strategy for combating the opacity of public and political institutions, it is necessary to highlight an element that crosses the three monitoring initiatives under investigation. Going beyond the specificities of each initiative, the main driver that fosters Openpolis, Common and Civio's actions is strictly linked to their collective identity based on a *watchdog rhetoric* (Ettema and Glasser 1998; Norris 2014; Tumber and Waisbord, 2004; Waisbord, 2000). Indeed the three initiatives aim to monitor the activities of public officials and governments to ensure that they are obeying the legislation. It is Openpolis itself that uses the term "watchdog" to define part of its activities both on its website and in the annual report (i.e. Im-

---

[156] The peculiarity of the historical moment in which this research was carried out and its implications, particularly in terms of data collection, are discussed in Chapter 2. See Chapter 3 for an in-depth analysis of the Italian and Spanish contexts.
[157] The connection between COVID-19 crisis and the risk of an increase of corruption is well discussed in Chapter 3.

pact Report, 2019). On Openpolis' website, under the heading 'Watchdog campaigns and data activism' Openpolis adds "*We monitor political power, and we carry out campaigns to better understand its functioning*". The report, instead, states "We therefore became a watchdog of Italian political institutions, surveilling on the rules of our democracy" (Openpolis, 2019:5). As regards Civio, it does not directly mention the term watchdog but defines itself on its website as "*Journalism and action to monitor the public*". Moreover, in the document created for the ten years of its activities titled "*A decade of journalism and action to open up the public to society as a whole*", the initiators highlight the objective that guides their actions: "*We are committed to publishing our own rigorous and independent information as a lever to open up institutions and their data*".[158] As far as Common is concerned, both interviewees and activity reports indicate that Common's members see themselves as "*civic watchdogs*" in continuity with their roots, suggesting a major distance from the journalistic path, more aligned with both Openpolis and Civio.

Thus, what triggers the emergence of these initiatives characterized by a (civic) watchdog collective identity – and consequently the adoption of specific monitoring strategies – is strictly tied to the already mentioned "institutional opacity". In practice, this opacity can be translated into different types of institutional "deficiencies ", almost tied to the interest and political will on issues that are crucial for the struggle of Common, Openpolis and Civio, such as the issue of data availability on public procurement or transparency of the power dynamics between politicians in the process of granting a pardon. The empirical evidence sheds light on different types (and conceptions) of deficiencies. The first type relates to the issue of data availability and consists of a lack of public data, both quantitative and qualitative. The second type corresponds to the lack of transparency about the relationship (or power) dynamics between public and political actors, which points to the risk of malpractice due to forms of corruption such as clientelism or less visible forms such as revolving doors. A third type refers to the lack of political will in adopting or updating laws,

---

[158] https://civio.es/aniversario/

amendments, acts, (EU) directives on specific issues related to monitoring practices, such as the cases of transparency laws or FOI. Finally, the additional deficiency regards a different type of actor: this is the case of journalists' scarce data and technological literacy in both Italy and Spain. According to several interviews – almost the initiators and journalists of both Openpolis and Civio – this lack of skills is an element that triggers the adoption of the strategy related to the production of news, typical of informative activism, in which activists adopt journalistic traits to trigger the re-use of data by external actors, but overcoming a low-quality use of their database and platforms by certain news media and journalists.

It is precisely in the scenario outlined above that these three monitoring initiatives decide to adopt – and in some cases develop independently – different strategies to prevent or react to institutional data opacity that may represents a prelude for corrupted behavior. Indeed these initiatives fight corruption in this grey zone between what is already considered corruption – by law and/or by social norms –and what instead represents a "red flag". Furthermore it should be noted that these three initiatives try to contrast data opacity as a precondition of different types of wrongdoings, according to the type of data effectively open. Thus this type of AC struggle investigated in this chapter is strictly "data dependent".

The chapter is structured as follows: the first section (6.1) presents the grassroots strategies for curbing institutional data opacity, distinguishing between preventive and reactive ones. The second section (6.2) presents the main theoretical contribution of this chapter from the perspective of the monitoring initiatives. It introduces the concept of *infrastructural activism* for monitoring purposes, as a form of activism finalized at the creation and maintenance not just of whistleblowing infrastructures as highlighted in Chapter 5, but also of monitoring infrastructures, distinguishing between *Community-based infrastructures* and *Platform-based infrastructures*. Finally, the chapter concludes by highlighting the specificities of *infrastructural activism* for monitoring purposes.

6.1 *Prevent and/or react to institutional data opacity: combining different types of strategies*

This section presents the main empirical results emerged from the analysis conducted on the three monitoring initiatives. It casts light on seven different strategies that civil society actors may adopt to tackle institutional data opacity, characterized by different degrees of employment of digital technologies. The following table highlights the distinction between two types of strategies and shows how different configurations of both preventive and reactive strategies define two types of infrastructures: respectively *community-based* and *platforms-based* monitoring infrastructures.

Table 6.1 - Different declinations of fighting institutional opacity: combine different strategies

	Type of strategy	High-tech / Low-tech	Common	Openpolis	Civio
Facilitate the development of civic monitoring communities	Preventive (ex-ante)	Low-tech	X		
Produce news articles based on *informative activism*	Preventive (ex-ante)	High-tech		X	X
Join advocacy campaigns and lobbying to quest public data	Reactive (ex-post)	Low-tech	X	X	X
Adopting legal tools from Transparency Law	Reactive (ex-post)	Low-tech	X	X	X
Publishing news claiming a lack of public data	Reactive (ex-post)	Low-tech		X	X
Create and implement open databases	Reactive (ex-post)	High-tech	X	X	X
Develop (and maintain)* data-driven platforms	Reactive (ex-post)	High-tech		X*	X
			Community-based monitoring infrastructures	*Platforms-based* monitoring infrastructures	

As shown in Table 6.1, the first two strategies can be considered as "preventive", since they are conceived for reducing institutional opacity before it happens, thus ex-ante. One strategy corresponds to the creation of civic monitoring communities at the local level and the technology is not at the core of it. The other one, instead, consists of producing news articles based on the entanglements between data activism and data journalism practices, in which digital technologies and tools play a more central role. This strategy is strictly connected with a specific form of activism, i.e. *informative activism* (Fubini 2023a, 2024). As regards the reactive ones – implemented ex-post to overcome the data opacity that hampers monitoring practices – the analysis distinguishes some less technological (no tech) strategies, as in the case of joining advocacy campaigns and lobbying to quest public data, adopting legal tools from Transparency Law, and publishing news claiming a lack of public data.

The remaining strategies, instead, rest on the use of digital tools for the creation and implementation of open databases, and for the development and maintenance of data-driven platforms conceived for both internal and external data reuse. Although the core distinction is between preventive and reactive strategies, all of them are characterized by different degrees of "dependence" on each other. The case of the development and maintenance of databases and platforms, for example, represents at the same time a reactive strategy but also a precondition for the internal daily production of data journalism content based on data activism.

Looking at the empirical case studies under investigation from a comparative perspective, this first section and related subsection show how the three collective actors choose to combine these strategies in different ways. Openpolis and Civio adopt almost all the strategies, except for the preventive one related to monitoring communities. Indeed, encouraging the emergence of citizen monitoring communities coincides with Common's main objective. However, Common combines and reinforces this main preventive strategy with reactive ones, such as joining advocacy campaigns, adopting legal tools such as FOI and creating and implementing open databases, but focusing on the local rather than the national level. As in the case of the Italian Openpolis, the Spanish Civ-

io combines different strategies to prevent and react to (data) institutional opacity. Nevertheless, during its ten years of activity, the majority of its data-driven platforms and projects are no longer maintained due to excessive resource needs. Thus, Civio is almost characterized by the implementation of (open) databases reusable by external actors rather than developing and maintaining constantly updated during time data-driven platforms.

Once a general overview of the different strategies and their use by Common, Openpolis and Civio has been provided, each sub-section presented hereafter delves into each strategy in order to outline its specificities and how it is used (or not) by the three monitoring initiatives.

6.1.1 *Facilitate the development of civic monitoring communities*

The first strategy to be analysed in detail is a preventive strategy exclusively associated with Common. Indeed "facilitating the development of civic monitoring communities" represents not just a strategy that defines the main methodology adopted by Common in its monitoring practices. This strategy has as its main objective monitoring from below. However, it differs from the more traditional forms of civic monitoring, looking at community development and monitoring on a (hyper)local scale. The combination of local and community dimensions is typical of the collective identity of the initiative itself, where the civic activism of Libera and its garrisons scattered throughout Italy is combined with the interest and attention to community development and assistance typical of Gruppo Abele, another collective actor that has contributed to the development of Common's project.

The imaginaries that guide the definition of this first strategy rely on what the interviewees said about the employment of "a community-based approach" for fighting corruption. The main aim of this approach is creating monitoring communities of citizens and activists that belong to Libera. In practice, this approach rests on a specific perception of what it means for Common to be an anti-corruption collective actor: again, looking at what has been said by the interviewees, they highlight how they perceive anti-corruption as a "local effort",

195

almost based on existing networks established at the local level. The following quotes capture to what extent both Gruppo Abele and Libera constitute the roots of the Common project:

> "*This dual nature is important in our narrative because there is the issue of anti-mafia and anti-corruption in the key of Libera and therefore territorial activism, but there is also the care of the territory in the sense of listening to the territory, which is the Gruppo Abele's own. So there are these two aspects that distinguish us*" (Common, INT002, Initiator-Activist)

Additional insights are stated in this quote, in which the term "territorial activism" may constitute the most distinctive element of Common's way of doing monitoring activism: local-community-based activism that monitors local entities (e.g. local projects) using data and data-driven platforms created by institutional actors (e.g. the institutional portals of Regis, Open Cup) or by grassroots actors (e.g. the case of Open PNRR, the most recent data-driven platform developed by Openpolis).

> "*So, the territories have a fundamental role in the fight against corruption because it cannot be done by just a few subjects in Italy and the more widespread it is - we call it civic anti-corruption precisely - the better, and in addition the territories know better the territories in which they live and the dynamics in which they live and therefore they are better eyes and ears than Common, who is only in a city and can read the newspapers but how can he understand it? It's the same thing you say in journalism, that real journalism is in local newspapers, because it's away from the spotlight and sometimes things happen precisely because you are away from the spotlight. So territories potentially have a key role to play in this fight. Having said that, I don't see any conflict between territories and technologies, precisely because digital technologies are a tool that is potentially available to everyone and is one of the factors that make it in my opinion a good tool in the fight against corruption, we should make sure that all territories can use these technologies*" (Common, INT002, Initiator-Activist)

The most tangible example of the application of this monitoring approach is represented by a recent initiative carried out by Common. It is a participatory monitoring investigation for mapping data availability on PNRR, which involved 115 volunteers, aged between 20 and 70 for looking at five main data

portals, four institutional and one civic, respectively the governmental Itali-aDomani, Regis and OpenCUP from PAs, ANAC's portal, and the case of the already mentioned Open PNRR. As described in the Report produced by Common: "*What, concretely, we did was to verify the availability (updating and completeness) and usability (comprehensibility to a citizen or a common citizen, not necessarily an expert in the digital front or in the cycle of public projects and investments) of the data of four institutional portals: Italia Domani, ReGiS, OpenCUP, ANAC's public contracts portal. We also investigated the organization of data on OpenPNR, a portal made available by the Openpolis Foundation. We verified the existence and consistency of data on the websites and social pages of the municipalities*" (Report, Il Pnrr a raggi X, 5-6). However, the main problem with this survey was that the lack of data, including the limited accessibility of some portals, effectively precluded any kind of monitoring. This specific case shows that 'preventive' strategies can only be put into practice if the data to be analysed are available. Otherwise, it is necessary to adopt 'reactive' strategies.

While this preventive strategy centers on the relational dynamics at the local level and the community-based approach to monitoring, an alternative strategy deals with journalistic practices, as explained below.

6.1.2 *Produce news articles based on data journalism practices typical of "informative activism"*

The alternative strategy for preventing institutional data opacity deals with the adoption of journalistic hallmarks typical of data journalism by a CSO. It is finalized to monitor public authorities producing reports and news articles close to data journalism. Both Openpolis and Civio are characterized by the adoption during time and incorporation of journalistic hallmarks into activism actions.[159] Both cases tend to hybridize their practices - including news production - and their collective identities. Indeed they perceive themselves as data

---

[159] For a deep and comparative analysis on the two initiatives characterized by the entanglement between data activism and data journalism see Fubini 2023a.

journalists and data activists at the same time. Therefore, both Openpolis and Civio represent emblematic cases of a specific form of activism, labeled "informative activism" (Fubini 2023a, 2024). This type of activism is defined as "a type of collective action that combines (data) activism and (data) journalism hence revolving around data-related practices sustaining both the monitoring of specific social problems and the production of contents on the related contentious issues" (Fubini 2024). This form of activism differs from apparently close concepts such as "information activism" (Halupka 2016), which instead captures a form of political participation in which activists promote the consumption and sharing of news, but do not include the production of news content.

Thus, informative activism is conceived as a form of activism that originated within the liminal spaces between data activism and data journalism. In practice, civil society actors enter the journalistic field when opposing corruption engaging in the production and dissemination of data-driven articles using their own databases. Open databases represent the main technological driver on which they are building their monitoring infrastructures. Thus, this additional preventive strategy rests on this specific form of activism. Indeed crossing the boundaries of the journalistic field and creating resourceful digital informational material are finalized to increase the transparency of governmental institutions. At the same time the production of these journalistic contents represents a strategy in itself for fostering the social impact of the databases implemented during time by both Openpolis and Civio (see the related preventive strategy), thus implementing public awareness and fostering other collective actors in engaging in monitoring practices through the re-use of some of their datasets.

Looking at the reasons that foster the hybridity process between data activism and data journalism, it is possible to distinguish different main "trigger" motivations: firstly, the awareness acquired over time that making open data on issues with public relevance does not imply direct re-use by external actors (such as other activists, journalists o public servants. Secondly, the willingness to reinforce data journalism attitude. Thirdly, the willingness to fill a gap in

terms of journalistic skills both in the Italian and Spanish media contexts, as already pointed out in 6.1.1.

For Openpolis the incorporation of journalistic hallmarks into activist actions is carried out based on a specific remark: OP's members realized that making data more accessible and easily available may not be enough to promote their goals regarding improving accountability and citizen engagement, as one of the initiators affirms:

> "*[...] This was a bit naive, the idea that it would be enough to make data available in order that people start using them. [...] And so we started to do a job initially of analysis and reporting and gradually more and more, instead, a job of storytelling, more journalistic work, which would later be called data-journalism, journalism based on data, but, basically, that's what we started to do, I don't know, around 2006, 2007, 2008*" (Openpolis, INT001, Initiator-Activist)

For Openpolis, the awareness that the mere creation and provision of open databases does not translate into their use triggers the process of hybridization of practices. According to the interviewees, we can frame the data journalism practices as a reinforcement less than an overcome of data activism attitude:

> "*The journalistic aspect became more and more important, simply because the initial ambition was to focus on collecting data, databases of public interest, processing them, making them available in open formats, making them usable through applications [...] So it became increasingly clear that to have any social utility, any impact, we had to add to this work more and more a work of storytelling, of interpretation, of narration, of data. And so we started to do a job initially of analysis and reporting and gradually more and more, instead, a job of storytelling, more journalistic work, which would later be called data-journalism [...]* " (Openpolis, INT001, Initiator-Activist)

Indeed, as mentioned several times in this research, one of the peculiarities of Openpolis is that it has evolved over time to become a CSO capable of producing daily journalistic content. The Activity Report recently published by Openpolis (June 2023) states that during 2022 Openpolis created and published 2.141original content (among them 312 dealt with topics related to OpenPNRR). The data-reòated practices follow what Openpolis itself defines as the 'data chain', and describes in the Impact Report 2019: "*We extract data from different sources, Gathering it into a single infrastructure, We connect the data, and update it, We analyze and monitor social and political phenomena, We produce and distribute articles and investigations, We foster democratic and civic participation*" (Impact Report 2019, 2).

As regards Civio, it becomes closer to a data journalism initiative "to open up institutions" as stated in the main activity report. The tipping point of this evolution is represented by the establishment of a new format, called "*Daily Official Gazette*" and a more general increase in the production of daily news since 2013: *"2013 - More journalism. We are committed to publishing our own rigorous and independent information as a lever to open up institutions and their data"* (Civio, Report 2022). In the same report the Spanish initiatives define its independent nature and it main aim: "*10 years of independent journalism and the fight for transparency*" (Ibid.)

Another element favoring hybridization is the fact that the Openpolis team was not satisfied with the narration done by other journalists who were using their DDWAs: this led to the transformation of OP's website into an 'editorial platform':

> "*We realized that at the end of the day, very few people knew how to present these data, even when we worked with the major newspapers [...] we were never satisfied with the story they wrote [...] we devoted a lot of time to develop our website and therefore we provided the editorial team with a publishing platform*" (Openpolis, INT002, Initiator-Tech Developer)

For Civio as well, incorporating journalistic practices seems first and foremost a necessity to fill a gap not of government institutions, but the journalistic system, and thereafter to implement the impact with lobbying actions:

> "*We started saying well, I am going to make data "open" [...] and I am going to push for a law in case someone wants to consult [public] data, but then we started saying no, I have to investigate because if I don't investigate, nobody investigates because journalists don't know how to use databases, so we are doing journalism and then [...] if I know about the law's lacks, why don't I go to court to do litigation? [...] I am going to try to meet with the parties to change that, if necessary I am going to go to court to do litigation*" (Civio, INT001, Initiator-Tech Developer)

In sum, Openpolis represents – together with Civio – emblematic cases of *informative activism* initiatives, but with some differences (Fubini 2023a). Looking at the Italian Openpolis, it employs its datasets and platforms to produce articles internally, but the main goal of the Italian foundation is to foster data reuse by external actors, including journalists. Indeed for Openpolis is data journalism that fosters data activism and not vice versa, as instead in the case of Civio: "the comparative analysis let emerged two main declinations of informative activism: it may be data journalism that fosters data activism (as in the case of OP), or vice versa, is data activism that triggers data journalism (as for Civio)" (Ibid., 56). Additionally, considering the evolution of its collective identity, Openpolis is still in between data activism and data journalism fields of action.

The case of Civio, instead, diverges from Openpolis: looking at the main mechanisms behind hybridization processes, for Civio is data activism practices that fosters data journalism, and not vice versa as for the Italian case. Moreover, considering its collective identity, Civio seems to be more inclined to make a shift from informative activism initiatives to a data journalism initiative. This shift – together with the growing scarcity of economic and human re-

sources is partially related to a gradual dismantling of platforms in favor of specific data journalism projects: in practice, this means that the strategy of developing and maintaining data-driven platforms is no longer a distinctive element of Civio and thus the infrastructure itself - which is at the base of the concept of *infrastructural activism* - is no longer in place.

While the preventive strategies seem to be the ones that best define the collective leadership (and also the evolutionary path) of the three initiatives examined, the so-called 'reactive' strategies are adopted by CSOs in a more transversal way, as explained in the following subsections.

6.1.3 *Join advocacy campaigns and lobbying to demand public data*

The first strategy, considered as 'reactive', coincides with the choice to join specific advocacy campaigns or to carry out lobbying actions. Looking at the Italian case, it is significant that Openpolis and some of the people involved in the Common and Libera project, together with The Good Lobby, have joined the Foia4Italy campaign, which focuses on promoting the adoption of the Freedom of Information Act, or the more recent one related to data opacity on public funds of the PNRR, i.e. *#ItaliaDomaniDatiOggi*. Civio carried out similar lobbying actions in the Spanish context: in this case, the actions were directed towards the adoption of a transparency law for Spain in line with those of other EU countries. Openpolis' and Common's commitment to FOIA dates back to 2014, when they decided to join the national campaign for the approval of Foia: #Foia4Italy[160]. This campaign was created by the union of several grassroots actors from Italian civil society, including OP, with the aim of raising public awareness on the issue and launching a proposal for a law. On 23 December 2016, the Italian FOIA became effective. OP's action, however, goes beyond the approval of the law, and thus creates a "FOIA Observatory": "*Our desire to understand how and how well [FOIA] is working. is not limited to its*

---

[160] http://www.foia4italy.it/

use. It is precisely for this reason that we are starting a FOIA Observatory, a monthly appointment where we take stock of the topic"[161]

The Openpolis Impact Report states: "*Until the last legislature there was no law on law on general access to documents held by the public administration. Together with many civil society actors, we were among the Foia4Italy, the national campaign that led to the which led to the adoption of a of a law on the subject in December 2016. An important moment An important moment that has indeed laid the foundations for a problem that has existed for too long*" (Impact Report 2019, 30).

As regards a more recent campaign "*#ItaliaDomaniDatiOggi*", on 30 November 2021, more than 60 Italian civil society organizations, representing citizens, associations, groups, movements, universities and research institutes, sent an open letter to the Prime Minister, Giorgia Meloni, and to the Minister for European Affairs, Cohesion Policy and the RRF, Raffaele Fitto, denouncing the serious delay in the provision of data essential for monitoring the progress of the National Recovery and Resilience Plan. The website of one of the international signatories of the campaign, MonithonEU, reports the content of the letter, highlighting a crucial question: "*The data allowing public administrations to check the actual status of the Plan's implementation are not yet available, more than a year after the launch of the Plan. On what basis the Government can evaluate the state of implementation of the Plan and assess the impact of investments*"[162]

Regarding Civio's lobbying actions, the main aim was to exert pressure on Spanish institutions to act on the regulatory and legal level, not just about the Transparency Law, but also to the reform of the Public Sector Contracts Law and to the regulation of interest groups, as highlighted by the following quote: "*We seek to change laws to achieve real and effective transparency. We try to influence those policies and regulations related to our areas of activity. The reform of the Public Sector Contracts Law, the application of the Transparency*

---

[161] https://www.openpolis.it/cosa/foia/
[162] https://www.monithon.eu/blog/2022/11/30/italian-civil-society-asks-the-government-for-data-on-the-project-funded-by-the-recovery-plan/

*Law or the regulation of interest groups are some examples in which we have
already achieved important improvements*"[163]

Moreover, Civio's action goes as far as the involvement of judicial authori-
ties in generating case-law, as stated in it website: "*One of the things that make
us different is that we defend the right of access to information in court if nec-
essary. We do this, even if it involves years of litigation and procedural ex-
pense because each victory sets a legal precedent that makes it more difficult
to deny information in the future*"[164]

As mentioned throughout this chapter, some of the strategies to counter
institutional opacity are intertwined. The most explicit case is represented on
the one hand by the persistence of campaigns pushing for the adoption of
specific laws, acts or amendments, and on the other hand by the use of certain
legal instruments to carry out monitoring actions, as represented by the
emblematic case of citizens' access to public data through FOI requests, as
explained in the following subsection.

6.1.4 *Adopting legal tools from Transparency Law*

The right of generalized civic access (or FOIA, an acronym for the Free-
dom of Information Act, that guarantees public access to government infor-
mation) was introduced in Italy in 2016 (see Legislative Decree No. 33 of
2013, art. 5, paragraph 1) and in Spain. Citizens and representative associations
can request existing data and documents from the public administration - in ad-
dition to those that are already required to be published - without having to
prove the existence of a current and concrete interest or justify the request.

Looking at the case of Civio, it may be relevant to mention the first
platform developed by the Spanish case, appropriately named 'Your Right to
Know' (*Tu Derecho a Saber*). As stated on Civio's website, *Tu derecho a
saber* was the first website in Spain that allowed citizens to make requests of
information from any public institution, even when there was still no

---

[163] https://civio.es/nosotros/impacto/#leyes-mejoradas
[164] https://civio.es/nosotros/impacto/#victorias-judiciales

Transparency Law in Spain. It was a joint initiative of Civio and Access Info Europe, launched in March 2012. The platform was based on the British mySociety website WhatDoTheyKnow.com.

It is 7 February 2023 when Openpolis decides to submit a new FOIA on the Pnrr, explaining to its readers the motivations, as follows: "*Since 2021 we have been denouncing the lack of information about the measures in the plan. This situation has even worsened with the change of executive. That is why we have decided to submit a new request for access to the records [...] last April we sent the then Draghi government and all the organizations involved an initial request for access to data. On that occasion, we were answered that all the information in the executive's possession was already published. "It should be noted that all the data available at the undersigned administration relating to the planning and implementation of the PNRR and PNC are published on the ItaliaDomani portal" - The government's response to our request for access to the records. A response that was in some ways puzzling, since it basically meant admitting that at that time no one in Italy had a complete picture of the state of the art of the PNRR. In the absence of concrete responses from the institutions, a further step can be taken using an instrument such as the Freedom of Information Act, which is the legal premise of this additional strategy*"[165]

The passage above is part of an article published in the Openpolis 'magazine' (as the members of the foundation themselves call it), which represents in fact a concrete example of the forthcoming "reactive" strategy, based on the publishing of news.

6.1.5 *Publishing news claiming a lack of public data*

After reviewing the first two so-called 'reactive' strategies, this subsection points out how the fight against data opacity from below includes a strategy associated with the field of journalism rather than activism, but which only partially fits in with the aforementioned form of activism that closely links data

---

[165] https://www.openpolis.it/perche-chiediamo-al-governo-maggiore-trasparenza-sul-pnrr/

activism with data journalism: i.e. informative activism. This strategy differs from the preventive based on informative activism, precisely because it is the lack of data that "makes the news", as a series of articles published by Open- polis and Civio have shown. One emblematic article published on the 19th of May 2022, titled "*Government open data on the PNRR, a step forward but still not enough. Thanks to our impulse in recent weeks, the government has pub- lished new data on the NRP. This is certainly a step forward, but much remains to be done in terms of transparency*" (https://www.openpolis.it/gli-open-data- del-governo-sul-pnrr-un-passo-avanti-ma-ancora-non-basta/). After one month, Openpolis highlights again lack of data "*Why there is still a lack of reliable da- ta on the PNRR. In a circular issued by the Ragioneria Generale dello Stato, the government has made it known that the system for monitoring the PNRR will only become fully operational at the end of July. As of today, therefore, it is not yet possible to have a detailed picture of the situation*"[166]

Another important example involving both Openpolis and Civio is the journalistic investigation published within the EDJnet network, of which both actors are members. In particular, it focuses on the delays in processing FOIA requests in different european countries: the same delays lead to a lack of transparency on the part of public administrations or other public bodies to which requests for access to public data are sent. This joins pubblication titled: "*Transparency delayed is not transparency*".[167]

The next subsections present the last two types of 'reactive' strategies in which the skills of individuals are central to monitoring initiatives, in particular computer and technology literacy.

6.1.6 *Create and implement open databases*

Creating and maintaining open databases has emerged as a relevant strate- gy to address the data scarcity in different contexts, both in terms of quantity and quality of data. Indeed this strategy aims at tackling the problem at its root:

---

[166] https://www.openpolis.it/lo-scarso-controllo-del-governo-sul-pnrr/
[167] https://civio.es/tu-derecho-a-saber/2023/06/29/access-to-public-information-foia-europe/

searching for data where are is missing, integrating them and then effectively making these data(bases) 'open'. Such a strategy is followed, albeit with different levels of expertise in data collection and analysis, and also in the extent to which it is use (i.e. daily or occasionally), by all three initiatives monitoring initiatives under investigation.

The peculiarity of this strategy is that it relies on the internal expertise of each civil society organization, again in relation to data practices: if data are not available or are incomplete, then efforts are made to collect them, organise them and then make them reusable by third parties. This strategy, which requires significant human, economic and knowledge resources, was adopted, albeit with differences, by all the empirical case studies selected for this research. In order to better understand the shift between prevention and reaction strategies, we can cite two examples, both related to PNRR in the Italian context, and how the scarcity and delay in the publication of data required both Openpolis and Common to make a greater effort, a change of pace to overcome the obstacle of the lack of open data.

In the case of OpenPNRR, the members of Openpolis initially thought that their data monitoring action would be based on the publication of data on the institutional platform ItaliaDomani, but then the data analysts and tech developers (and data scrapers) had to make an effort to collect data from different sources, fill in the gaps and, above all, create a platform that would allow not only their analysis for the production of news, but also their consultation and thus their return to the civil society. The ability to integrate already existing databases and feed their own OpenPNRR platform by themselves is testified several times by articles talking about 'releasing new data on the Pnrr'. A concrete example is the publication by Openpolis of new data on PNRR-related calls for tenders, thanks to the collaboration with ANAC, the National Anti-Corruption Authority. This was announced by Openpolis itself, which published an article on what its members call 'the Openpolis Magazine' on 3 April, titled "*Our new open data on the PNRR public tenders. Thanks to Anac's contribution, new data on all public tenders financed by the plan are available on OpenPNRR.*

These are details that were previously unavailable in aggregate form, in a single, freely downloadable and reusable database"[168]

Coming back to the elements that "trigger" the creation of OpenPNRR – the new data-driven platform was also presented to the Chamber of Deputies by the President of the Foundation on 20 May 2022[169] – the motivations behind the development of OpenPNRR are explained on its website: "*The government's tasks included the creation of a special information platform (the italiadomani.it portal), the release of a set of data in an open format, and the publication of a six-monthly report to be sent to parliament. Unfortunately, we have seen that these three instruments have been implemented but have many shortcomings. The open-format data in fact do not comply with the most common 'good practices' in the field, and furthermore have a number of compilation errors that make them unreliable. The Italia Domani portal, on the other hand, presents a series of very vague indications, which do not allow for timely monitoring of the progress of the various measures and consequently do not allow for a realistic understanding of where we stand. For all these reasons, we wanted to create a tool that would make the national recovery and resilience plan accessible to all*"[170]

However, the specificity of this data-driven platform is that it allows the user to register with OpenPNRR for customized monitoring, as explained also on the main website of the platform. Thus conceived, this strategy becomes the starting point for Common's first strategy:"*At openpnrr.it you can navigate through the various sections of the site to get an overview of all investments, reforms, their deadlines, projects, actors involved and much more. You can also register by creating a personal account and choosing which measures, themes, priorities, territories, and organizations to monitor in order to receive all relevant updates. From the progress of deadlines to the publication of rele-*

---

[168] https://www.openpolis.it/i-nostri-nuovi-open-data-sui-bandi-del-pnrr/
[169] See https://webtv.camera.it/evento/20732
[170] https://openpnrr.it/faq/

vant documents or the allocation of resources to the territories of your inter-est"[171].

As far as Common is concerned, the work on monitoring PNRR funds, which has already been introduced to describe a concrete example of the development of monitoring communities at the local level, was pursued about a year later. After an initial attempt at data monitoring was hampered by the lack of, or difficulty in accessing, public data, the group of Libera activists joined forces together to try to create their own database of the data they needed. In the report 'PNRR a raggi X, second edition', the staff of Common also describes the methodology used to create this database, that counts also the use of FOIA, as stated in the official press release following the publication of the report: "*The report starts from the assumption that, given the absence and lack of data at central level, we, Libera and Gruppo Abele, have monitored and surveyed the projects from the bottom up, directly asking the 109 provincial capitals, as implementing subjects of the PNRR, when they certified and budgeted the resources of the plan. With our methodology it was possible to map 1731 projects for 92 of the 109 provincial capitals", with a total expenditure of around 6 billion euros*".

6.1.7 *Develop (and mantaine) data-driven platforms*

This additional reactive strategy is typical of Openpolis and Civio. Indeed, as it was already pointed out in Chapter 4 (see Tables X and Y) both monitoring initiatives were able during the time to develop a variety of digital platforms (Gillespie, 2010). The centrality gained by "data-driven web applications" (hereafter DDWAs) [172] in the case of OP and the data-driven journalistic projects created by Civio, highlights how platformization and datafication affect the way in which the two actors pursue their main mission. Moreover, looking at an emergent line of inquiry, all the digital platforms and projects de-

---

[171] https://openpnrr.it/faq/
[172] The expression "Data driven web applications" appears in the Internal Report (Openpolis, 2019:4)

veloped during the time by OP and Civio might be framed as "outcomes in themselves" (James 2014, Romanos and Sabada 2016, Weisskircher 2018). Besides – as already pointed out at the beginning of this chapter - the institutional lacks represent also in this case the element that triggers the development of a new platform.

This is the case of the *Osservatorio COVID-19* (COVID-19 Observatory): this platforms was created to browse data on emergency public procurement related to the pandemic. The platform makes information easily accessible and allows any citizen to monitor public tenders in the hope of increasing accountability. Moreover, the tech developer – and at the same time one of the initiators of Openpolis - stresses that OP is also fulfilling a role that should be played by public actors:

> "*This is not a reasoning that Openpolis should make, this is a reasoning that the State should make, right? Am I the one who has to create the platform on COVID-19 public procurements? This is the point.*" (Openpolis, INT002, Initiator-Tech Developer)

In turn, one of the initiators in a previous interview not only points out the vacant role of the state but also how the creation of a platform like the *Osservatorio COVID-19* allows monitoring data and exert pressure on, according to his point of view, these absent institutions:

> "*[Osservatorio COVID-19] is something that, in such a critical period as the one we are living through, you would expect it to be an initiative coming from the public administration [...] 'Let's say that, in part, the pressure that we have exerted since the beginning on these issues has helped to disseminate a series of information on all these aspects that was not available*" (Openpolis, INT001, Initiator-Activist)

Openpolis also curbed the lack of transparency and information on the work of Italian MPs. In 2008, they launched *Open Parlamento* and since then

they invite users, according to the slogan on the initiative's website, to "get information, monitor and take part in the work of the Italian parliament". This platform characterizes the role of Openpolis as a watchdog, as it has been filling a scarcity of open and accessible data in the public sphere, increasing transparency and capacity to monitor public activities, and fostering positive changes also at the institutional level. According to interviewee 4 seems that Open Parlamento produces an indirect effect on the institutions that decide to create the official websites of the Chamber and Senate in 2010:

> "*Open Parlamento originates from the fact that, let's say, at that time there was no unique source for monitoring parliamentary work [...] And then, precisely, we were interested in carrying out analyses, and we were the first ones to publish the absences and presences of parliamentarians. Two years later, the official websites of the Chamber and Senate were also launched*" (Openpolis, INT004, Journalist)

Overall, what Openpolis interviewees consider a lack of State action can be seen as a lack of transparency and accessibility in terms of public data. The same fact emerges clearly for some of the platforms developed by Civio. Looking the case of *Quien manda*, was created to cast light on potential conflicts of interest, and its development was triggered by a lack of transparency. The project, as reported on the site, aims to map the "power" in Spain with three objectives: "*to shed light on public-private connections, to regulate lobbying and to publish the whole agendas of public officials*". Moreover, the website describes in detail the triggering event that led to the creation of the platform: "*When Mariano Rajoy was asked in the Senate about his secret meeting with Mas, the president replied that he did not want to be an exhibitionist, but he did not really think that, in democratic countries, the working meetings attended by a public official should be just that, public . Multiply this by a thousand in the event that the protagonist of that meeting is indeed the president of the gov-*

211

ernment. This is just one example of the opacity of agendas and lobbies in Spain. This is exactly why we deal with Who's In Charge".[173]

Looking at the case of *Quien Cobra la Obra,* was created in response to the dispersion of information by the authorities that have to deal with data on public procurement. No platform was available to aggregate all the data: In fact, Civio as stated on its website considers that "*the most difficult part of the whole process was to create the structure to process and compare*" all the data.[174] In addition, in the section of the main website dedicated to the impact Civio has had over the years on various issues, the centrality of dealing with the analysis of public procurement as a form of anti-corruption is reaffirmed: "*The most serious cases of corruption in recent years are linked to public procurement, and this is no coincidence. The entire contract process has never been transparent, and no one systematically monitored it for irregularities. But, in 2017, our investigations into public contracts leaped from the headlines to Congress. From exposing abuses to changing the law*"[175]

A condition for using platforms over time (whether for advocacy purposes or to publish data-driven journalistic content) is the constant updating of the database, the so-called 'data curation'. Data curation requires the expenditure of various resources (both technological and economic), hence over time some platforms have been dismissed, or rather are still accessible, but with data that are no longer up-to-date.

By comparing the two cases, we can observe that for Openpolis there are only two platforms that are no longer up-to-date, compared to Civio. The choice of keeping the databases up-to-date, besides being linked to the availability of resources, may also be interpreted as a more or less explicit choice of positioning within the fields of journalism and activism or again in both. This tendency of crossing the boundaries of the journalism arena represents the third and the last defining feature of Openpolis and Civio, well discussed in the following sub-section (see 4.1.3).

---

[173] https://civio.es/quien-manda/que-es-quien-manda/#porque
[174] https://civio.es/quien-cobra-la-obra/que-es-quien-cobra-la-obra/
[175] https://civio.es/en/about-us/impact/

For Openpolis, the decision to update its DDWAs means on the one hand being able to continue to use the databases to produce its journalistic content, and on the other hand allowing the same databases to be reused by external actors who can in turn develop monitoring or in-depth journalistic actions. Interviewee 2 highlights the crucial role of up-to-date databases:

> "*What we do is get data on topics and update it every day, because the thing that annoys me the most is having stuff that is one shot. And then we have nothing, because if you don't update the data you can't use them*" (Openpolis, INT002, Initiator-Tech Developer)

Civio makes a different choice: as one interviewee explains, in recent years, Civio's action has increasingly been marked by journalistic investigations on specific topics (which mostly pick up on the topics of previously developed platforms) that require different publication times and no longer require updating the previous database. Although the databases are always made available, most of the data-driven 'projects' are no longer up-to-date, even if they are still searchable. The update is only done for two platforms and once a year. The development of civio.es itself reflects this increasingly pronounced shift towards placing data-driven investigative journalism practices at the center.

6.2 *Infrastructural activism a precondition for community-based and platform-based monitoring infrastructures*

What has emerged from the analysis is that both Italian and Spanish initiatives under investigation represent emblematic cases of grassroots monitoring infrastructures: more precisely we can distinguish between *platform-based infrastructures* (i.e. Openpolis and Civio) or *community-based infrastructures* (i.e. Common) for monitoring purposes. The main difference between the two is strictly tied to a predominance of certain types of strategies aimed at prevent-

ing and/or reacting to institutional opacity that may be more or less data-driven or on the contrary tied to local activism. Moreover they are characterized by different levels of interconnection to each other, such as in the case of both "Create and implement open databases" and "Develop (and maintain) data-driven platforms" which constitute the premise for a specific form of activism close to journalism, i.e. informative activism, as shown in the following table.

Table 6.2 – From empirical to theoretical findings:
Infrastructural activism for curbing institutional data opacity

Categories	(Empirical)Findings	Types of AC infrastructures	Theoretical Finding
Preventive strategies based on *data-driven practices*	- Produce news articles based on data journalism practices typical of "Informative Activism"	***Platform-based monitoring infrastructures*** (i.e. Openpolis and Civio)	***Infrastructural activism***
Reactive strategies based on *data-driven practices*	- Develop (and maintain) data-driven platforms - Publishing news claiming a lack of public data		
Preventive strategies based on *local activism*	- Facilitate the development of civic monitoring communities	***Community-based monitoring infrastructures*** (i.e. Common)	
Shared *Reactive* strategies	- Create and implement open databases - Adopting legal tools from Transparency Law - Join advocacy campaigns and lobbying to demand public data	Both types	

Looking at platform-based infrastructures, their defining features rest almost on three interrelated strategies. The data-driven "reactive strategies" aimed at creating and maintaining open databases and public data-driven plat-

forms. Both databases and platforms have been conceived for their reuse by other actors: indeed the introduction of the core elements of "openness" typical of open data aims at triggering data-reuse and expanding the type of external actors who can employ these databases and platforms for further investigations, such as news media and journalists or members of civil society. Indeed, data are "open" if they are complete, primary, timely, accessible, machine-processable, non-discriminatory, non-proprietary, and license-free (Dawes 2010). Looking at the third type of strategy, partially relies upon the previous: it corresponds to the preventive strategy based on creating and diffusing data-driven journalistic content typical of "Informative Activism" (Fubini 2023a, 2024) to trigger the data reuse or expansion of the variety of actors that may be involved in these infrastructures for monitoring, reporting, or raising awareness on social contentious issues, such as corruption.

Here, the case of Common's use of the Open PNRR platform constitutes an emblematic example of this tentative to promote data reuse: in fact, the activists involved in monitoring practices based on open data include this grassroots platform because they consider Openpolis as a leading actor in the development of data portals "easy to use". Thus, these monitoring communities constitute a potential actor for the reuse of databases or data-driven platforms, to the point of considering the two types of monitoring infrastructures tied to each other. Finally, zooming in on the "community-based infrastructure", it should be noted that it is the main method adopted by Common for developing at local level monitoring communities in which each member belongs to a Libera's garrison scattered throughout the Italian territory both at regional and local level (Rispoli 2022) that shapes this infrastructure. In fact, it is the way in which Libera has built and maintains its "territorial" network that constitutes this type of monitoring infrastructure. As will be discussed further in the conclusion of this chapter, the analysis of the case of Common (and indirectly of Libera) suggests that more emphasis should be placed on a local declination of *infrastructural activism*.

Conclusion

This chapter has shed light on how three civic anti-corruption initiatives based in Italy and in Spain (i.e. Common, Openpolis, and Civio) build-up "monitoring infrastructures" combining a wide range of strategies (and related digital technologies) based on data-related practices (Mattoni 2017) to prevent and react to the (data) opacity of governmental institutions. Thus, adopting a bottom-up perspective, this chapter casts light on CSOs' efforts to tackle institutional data opacity. Data opacity corresponds to one of the "contrasting trends" in the evolution of the so-called "openness", characterized instead by scarce data accessibility and availability , thus limited transparency. Additionally, the fight against institutional opacity from a grassroots perspective, may be also considered a way to struggle against a broaden trend: the "shrinking" space for civil society, although more institutions are adopting online tools to inform and consult citizens (Schnell 2020).

What has emerged from the analysis is that Common, Openpolis and Civio contrast institutional data opacity highlighting "red flags" for corrupted behaviours through the adoption of both preventive and reactive strategies, shedding light on how do monitoring initiatives fight the premise of corrupted behaviour in the digital age (RQ1). This variety of strategies partially rely and partially co-occur in defining different *monitoring infrastructures*, that constitute an outcome in themselves (Rq.2.a). Respectively, Openpolis and Civio deal with the *platform-based infrastructures*, Common, instead, is associated to the "community-based infrastructures". So that these three initiatives are emblematic cases of *infrastructural activism* for monitoring purposes, since they were able during the time to develop and maintain different grassroots infrastructures.

Looking at the results from a comparative perspective, the differences and similarities between these two types of monitoring infrastructures rest primarily on distinct configurations of these "preventive" and "reactive" strategies. The two types of monitoring infrastructure seem to be more clearly distinguishable in the light of strategies aimed at preventing institutional opacity of

data. This is because they capture key elements associated with the collective identity of the CSOs themselves, their imaginaries and perception related to this fight (Rq.1.c). Thus, the preventive strategy aimed at facilitating the origin and development of civic monitoring communities at the local level is strictly tied to Common, a grassroots project that originated from Libera (and Gruppo Abele). Libera corresponds to one of the leading Italian CSOs in which the fight against corruption and mafia start from the local or - following their jargon - territorial level. Looking at the specific case of Common, this initiative aims at involving the local communities that directly live in these territories and want to be part of the anti-corruption struggle, not "simply" form below, but considering their territorial roots as the starting point.

On the contrary, producing news articles following data journalism practices based on public data and/or data-driven platforms is typical of "informative activism" (Fubini 2023a, 2024) that well captures the "blurred" collective identity of both Openpolis and Civio. Looking at informative activism initiatives, as Openpolis and Civio, are characterized by: (1) Overcoming institutional lacks as the main *mission*, (2) Developing open databases and data-driven platforms together with the production of journalistic content, as the main *strategy*, (3) Identities still in transition foster hybrid *performances*" (Fubini 2023a, 56). Thus, this specific form of activism "depicts a type of activism in which journalistic practices, based on the flow of (open) data and aimed at increasing the transparency of governmental institutions and public actors, seem to be closely intertwined with the agency of grassroots actors such as data activists (Milan 2017) and tech activists (Hess 2005)" (Ibid.).

Regarding the five 'reactive' strategies, the analysis shed light on strategies finalised to put pressure on public institutions and in which the use of digital technologies is not so pivotal (Rq2.b). This is the case of the adoption of legal instruments to obtain public data, the participation in advocacy campaigns to obtain public data or lobbying, and the publication of news claiming a lack of public data in terms of availability and/or accessibility. The remaining two strategies, on the other hand, rely mainly on the use of digital technologies: i.e. implementing (open) databases and developing (and maintaining) data-driven

platforms that can be reused by external actors. Both maintenance and re-use represents also outcomes (Rq2.a). The latter strategy corresponds to the more demanding one in terms of data literacy and technical development skills. Moreover, the challenge of keeping each database up to date gives rise to another crucial point: the issue of data curation - a term introduced by the main tech developer of Openpolis - which requires human and economic resources. Indeed, it is extremely time-consuming and can only be partially automatized. Thus, as in the case of Civio, this type of demanding data-related practice was partially abandoned to pursue more targeted journalistic projects that are fulfilled by using a database that then requires less updating. Openpolis, on the other hand, invests its resources in the creation and maintenance of data-driven platforms on which the daily production of news is based. In addition, the constant updating of each database allows Openpolis to provide the public with interactive and easy-to-use platforms, facilitating the re-use of data, which is the main objective for Openpolis, to the point that has guided its shift from data activism to the hybrid form of "informative activism" (Fubini 2023a, 2024).

Going beyond the specificities among the reactive and preventive strategies and focusing instead on their common ground, also this second type of strategy partially rests and partially co-occur in creating or *community-based* or *data-driven-based* monitoring infrastructures. The distinction between the two types of infrastructures aims to capture different approach adopted by grassroots anti-corruption activists to tackle potential corrupted behaviors in our societies. In practice, these grassroots actors and related initiatives integrate in their repertoire of action (and contention) also infrastructures that are both relational and technological. Indeed a leading role is also played by digital technologies as they are embedded in certain AC strategies. So that, considering the existing literature on this topic, seems that these different strategies, combined in different ways by each initiative under investigation, may become part of both their repertoire of contention (Tarrow 1995, Tilly 1978) and communication (Mattoni 2013). This also implies considering how each initiative embeds in its repertoires different digital technologies and with which consequences also at the organizational, symbolic, and relational levels (Selander and Jar-

venpaa 2016) (RQ2). In practice this means shedding light on both (perceived) opportunities and limitations in including digital technologies in the collective action repertoire (Van Laer and Van Aelst 2010), as emerged during the analysis of both interviews and documents, triangulated with offline participants observation.

To conclude, the decision to complement the research on digital whistle-blowing initiatives carry out in Chapter 5 with the analysis of grassroots monitoring initiatives aims to shed light not only on a different declination of "exposing" corrupt behaviors (Mattoni 2024) and on different anti-corruption tools and digital technologies based on (open) data, but also on a specific form of activism - *infrastructural activism* - for both monitoring and whistleblowing purposes. Thus, Chapter 6, together with Chapter 5, set the premises for a critical analysis of this specific type of activism from a broader perspective, which will be discussed in the overall conclusions of this dissertation.

This thesis has focused on the challenges and opportunities that the digital age poses to grassroots anti-corruption struggles, shedding light on the role played by digital technologies in contributing, along with other factors, to re-defining how civil society organizations do anti-corruption on their own and also in conjunction with other grassroots or institutional actors involved in the same fight.

The main contribution of this dissertation is to provide a further perspective from which to look at grassroots struggles in the digital age, adopting the lens of *infrastructural activism*. This is a form of activism aimed at developing infrastructures (e.g. whistleblowing or monitoring infrastructures) based on different types of digital technologies and platforms (e.g. open-source software, open data portals, data-driven applications and platforms) to address specific challenges (e.g. ensuring the safety and anonymity of whistleblowers or addressing the opacity of institutional data to prevent corrupt behavior) related to a given phenomenon (e.g. anti-corruption). These 'infrastructures' - based on a bundle of socio-technical elements conceived as the main drivers of grassroots innovation - become part of the repertoire of action of these collective actors that engage in further forms of contention, to the point of pushing public institutions to replicate these web-based infrastructures through a process of institutionalization of grassroots ACTs.

As mentioned in the introduction, this thesis has focused specifically on anti-corruption activism, as it constitutes a privileged context for capturing the potentialities of certain digital technologies to shape and expand the repertoires of actions and contentions of civil society organizations. Indeed, anti-corruption activists seem to be more inclined to engage with different types of technologies, integrating existing ones with others developed specifically to combat corrupt behavior. This tendency to implement ad hoc ACTs is closely

linked to anti-corruption activists' goal of overcoming (or preventing) the counter-effects of using digital technologies. Indeed, their use can also jeopardize the security of different types of actors (collective or individual, as in the case of the victims of corruption) involved in the fight against corruption, for example increasing the possibility of being surveilled by state actors. Moreover, the field of anti-corruption provides a privileged perspective to understand how the use of certain ACTs can favor not only bottom-up coalitions but also collaborative relations between institutional and grassroots actors involved in the same fight. Indeed, studies on corruption and anti-corruption have shown the importance of combining top-down and bottom-up efforts to achieve better results.

Tracing back the research puzzle

This main theoretical contribution has emerged from the analysis of both whistleblowing and monitoring initiatives located in Italy and Spain. Both southern European countries represent relevant contexts for the study of the grassroots fight against corruption from a comparative perspective (della Porta et al. 2017). The choice to look at these two types of anti-corruption initiatives relies on the fact that within both countries, the prominent grassroots collective actors that tend to integrate different types of digital tools and technologies in their fight over time are those involved in the whistleblowing process and monitoring practices based on public data. More specifically, the nine initiatives under investigation have included in their repertoire of contention different types of digital technologies, for two main purposes. In the case of whistleblowing initiatives, the main aim was facilitating the leaking process by implementing the usage of digital platforms based on open-source software, able to guarantee high standards of security through encryption. For the second type of initiatives, the main goal was preventing institutional data opacity by monitoring governmental actors through the use of public data, then systemized in open databases or data-driven platforms developed on their own.

The selection of these two types of initiatives resonates with some of the

main challenges that emerged from a pioneering attempt to assess the impact of certain digital technologies used for anti-corruption purposes (Adam and Fazekas 2021). Discussing their main findings, the authors point out that the difficulties in measuring the impact of certain technologies on corruption are also linked to specific challenges that anti-corruption actors (grassroots and institutional) should face to overcome obstacles that limit their anti-corruption efforts, such as the necessity to increase the security of certain ACTs (the article refers specifically to whistleblowing platforms and their limited use), or the need to facilitate access to public data, which is very often restricted, with the main consequence of hampering attempts to monitor these data.

Two main objectives have guided the research process. First, casting light on how grassroots actors adopt and embed in their practices different types of "anti-corruption technologies". Second, looking at the consequences of the ACTs' usage, paying attention to the intersections and patterns of interaction between bottom-up and top-down anti-corruption efforts. Considering these two main goals, this dissertation adopts the constructivist grounded theory as the main method (Bryant 2017; Bryant and Charmaz 2019; Charmaz 2014), seeking to elaborate concepts as heuristic tools to explain the opportunities, challenges, and consequences of creating or adopting existing digital technologies in the fight against corruption.

Using the constructivist grounded theory as the main method implies adopting an abductive research strategy for discovering concepts and developing theoretical contributions that are "grounded" in the data. Thus the research process consists of a constant back-and-forth between stages of data gathering, data analysis, and a final stage of theory building. Before discussing in detail the main output of this "theory building" stage, it is necessary to set its empirical premises, looking at the main findings that arose from the analysis of the whistleblowing and monitoring initiatives.

The empirical findings: dealing with processes of creation, maintenance, diffusion and institutionalization of grassroots ACTs

Looking at the findings related to the six whistleblowing initiatives under investigation, the analysis clears up how CSOs facilitate the whistleblowing phenomenon thanks to the entanglements between social and technological "drivers" that foster the diffusion and, then, the institutionalization of digital platforms based on the open-source software GlobaLeaks. Looking at the cases of "diffusion" of a grassroots ACT" among peers, the analysis distinguishes between the *ALAC* service carried out by the Italian chapter of Transparency International and the *Buzon X*, a pioneering Spanish case of a leaking platform implemented by Xnet as the main collective actor. Both initiatives rest on GlobaLeaks software. The Italian tech developers play a crucial role in facilitating its diffusion.

The Italian case sheds light on the processes of diffusion of a grassroots ACT among peers at the national level. Indeed the Italian ALAC service was the first case of renewing a simple hotline and email box to assist potential whistleblowers, adopting an advanced digital platform based on software able to guarantee high standards of security and anonymity. This was possible thanks to a grassroots coalition with the software developers. The pioneering Italian case was then replicated worldwide for the existing ALAC services among different chapters of Transparency International. Looking at the Spanish case, a leading role is played by the CSO Xnet based in Barcelona. Again, thanks to a grassroots coalition among the tech developers of GlobaLeaks, Xnet was able to adopt a digital leaking platform for collecting data on a huge corruption scandal, well-known as "El Caso Bankia", that concludes with penal processes and convictions. In both national and transnational cases of diffusion of a grassroots ACT among peers, the social and technological drivers that facilitate this process correspond respectively to collaborative relations between peers based on mutual recognition, tied to specific features of GlobaLeaks software that can be customized according to the grassroots actors' needs and the peculiarities of each scenario (or "situation").

Moving to the cases of "institutionalization", the analysis elucidates how the process of diffusion of a grassroots ACT may evolve in its institutionalization, which represents an outcome in itself. This is the case of the Italian *WhstleblowingPA*, together with three Spanish initiatives – i.e. *Buzón Ético y de Buen Gobierno*, *Buzón de Denuncias*, *Buzón de Denuncias Anonimas* – adopted respectively by the Municipality of Barcelona, the Anti-Fraud Authority of Catalunya, and then by the Anti-Fraud Agency of Valencia. As for diffusion, the main process of institutionalization was fostered by specific social and technological drivers. The analysis casts light on two paths for institutionalization – direct for Spanish initiatives and indirect for the Italian initiative - which are characterized by the same technological drivers but differ in terms of relational dynamics between grassroots and institutional actors involved in the process, thus social drives.

The technological drivers of both direct and indirect institutionalization refer mainly to the issue of grassroots tech ownership. As regards the features of the ACT in itself (i.e. high standards of security and the capacity of a technology such as GlobaLeaks to structure the leaking process) they are transversal to both diffusion and institutionalization processes. Looking at the social drivers, direct institutionalization rests on collaborative relations between grassroots and institutional actors based on mutual recognition. The indirect case, instead, is characterized by conflictual relations between grassroots and institutional actors (i.e. the Italian anti-corruption authority) as "competing" initiators, then counterbalanced by collaborative relations with public actors as the effective internal "recipients" of whistleblowing reports (i.e. public administrations).

In short, a direct process affects the three Spanish initiatives in which the leading role of CSOs and grassroots tech developers constitutes the starting point to foster public actors to adopt the same ACT, developing together and then maintaining their own high-tech *whistleblowing infrastructures*. On the other hand, the indirect institutionalization affects the Italian case of Whistleblowing PA: it differs from the Spanish case for the conflictual relational dynamics between the main grassroots actors involved – TI-Italy and the project GlobaLeaks which involved at the beginning the members of the Hermes Cen-

ter – and ANAC, the national anti-corruption authority. However due to the grassroots tech ownership – which corresponds to the main technological driver that guarantees both direct and indirect processes of institutionalization – these collective actors were able to involve a huge number of Italian public administrations, competing de facto with ANAC since Whistleblowing PA is in practice an alternative service to the one offered by the Italian Authority.

Thus, pointing out an institutionalization of a grassroots ACT represents a contribution to the current literature on the subfield of social movement outcomes, pointing out that institutionalization – conceived both as a process and as an outcome – may regard not directly the collective actors and their requests, but also their technologies, in this case for AC purposes. Indeed as shown by the initiatives based on GlobaLeaks, they origine by coalitions between grassroots tech activists together with CSOs and then adopted also by public actors, such as public administrations, municipalities, and anti-corruption authorities. Thus, they are not just grassroots ACTs or grassroots platforms, they incorporate some features typical of infrastructures, to the point to be conceived as *whistleblowing infrastructure*, both *grassroots* and *institutionalized*.

Concerning instead the results of the three monitoring initiatives (C*ommon*, *Openpolis* and *Civio*), the analysis sheds light on the different strategies to deal with institutional (data) opacity adopted by Italian and Spanish CSOs. Contrasting institutional data opacity requires a combination of two different types of strategies, characterized by different degrees of employment of digital technologies, that may be low or high technologies: preventive (ex-ante) and reactive (ex-post) strategies. The latter corresponds to a grassroots effort to overcome the lack of data both in terms of availability and accessibility, thus dealing with already existing cases of data opacity. On the contrary, preventive strategies are conceived for reducing institutional opacity before it happens, thus ex-ante. Thus these findings may be tied in further research to the line on inquiry that deals with the grey zone between what is already considered "legal" corruption and what, instead, represents a kind of prelude for wrongdoings (Dincer and Johnston 2020). Indeed institutional opacity is considered a "red flag" for corrupted behaviors (Jain 2001). Thus, different configurations of

these strategies partly converge and partly rely on high or low-tech "monitoring infrastructures".

As regards preventive strategies, they correspond respectively to the creation of civic monitoring communities at the local level in which the technology is not at the core of it (i.e. Common), thus giving more prominence to the *territorial* dimension of anti-corruption activism. The other preventive strategy consists of producing journalistic content based on data-related practices, acting as "informative activism" initiatives, as in the case of Openpolis and Civio (Fubini 2023a, 2024).

Looking at the reactive strategies, the analysis distinguishes between some less technological (no tech) strategies, as in the case of joining advocacy campaigns and lobbying to quest public data, adopting legal tools from Transparency Law, and publishing news claiming a lack of public data. The remaining strategies, instead, rest on the use of digital tools for the creation and implementation of open databases, and for the development and maintenance of data-driven platforms conceived for both internal and external data reuse. Although the core distinction is between preventive and reactive strategies, all of them are characterized by different degrees of "dependence" on each other. The case of the development and maintenance of databases and platforms, for example, corresponds at the same time to a reactive strategy but also a precondition for the internal daily production of data journalism content based on data activism, typical of *informative activism*.

These findings arose from the analysis of both whistleblowing and monitoring initiatives therefore comprehensively answering the main RQs that guided this research. Concerning how grassroots actors use digital technologies (RQ1), this research has shown that it is not just a matter of using them, but also a matter of creating and maintaining these ACTs over time (this is the case of monitoring initiatives) and, on the other hand, diffusing them both among 'peers' and among institutional actors, including in the latter case anti-corruption authorities, public administrations or municipalities, (i.e. institutionalization). The link between RQ1 and RQ2 became clearer here, where the four processes just mentioned are at the same time four different outcomes (Rq2.a),

and where the relationships between grassroots and institutional actors played a key role in their achievement (Rq2.b).

Looking more specifically at the types of actors involved (Rq1.a), they are characterized by different levels of tech skills and can be 'in-house', as in the case of the informative activism initiatives (i.e. Civio and Openpolis), but also externalized, as demonstrated by the presence of the GlobaLeaks software developers, who are key actors in both the diffusion and institutionalization processes. Concerning the type of technology used (Rq1.b), if the whistleblowing cases share the use of the same software, for the monitoring cases it is more about the different types of software employed for data-related practices that allow data extraction, data analysis, storage, and curation. As for the imaginaries associated with the different ACTs (Rq1.c), for the whistleblowing cases they are essentially captured by the so-called 'technological drivers'. In the case of monitoring initiatives, the choice to adopt certain strategies rather than others depends also on a different perception of the role that digital technologies may play in supporting the fight against corruption and to what extend they are perceived as just "instruments" to be employed by local communities, as in the case of Common.

Back to the four processes mentioned above, they are outcomes themselves achieved by the different grassroots actors involved (Rq2.a). While the comparison between Openpolis and Civio has shown the challenges of maintaining data-based platforms in the long term, the Italian and Spanish cases of institutionalization have shown how the same ACTs can be disseminated among institutional actors, both directly (Spanish cases) and indirectly (Whistleblowing PA). The distinction between the two modalities of institutionalization of a grassroots ACT is mainly linked to the different types of relationships (collaborative or conflictual) between the different actors involved in the whistleblowing phenomenon (Rq2.b).

Discussing the main differences and similarities between Italian and Spanish initiatives

After an overview of the main empirical findings on both types of anti-corruption initiatives, it is necessary to discuss the results from a comparative perspective, highlighting the differences and similarities between the Italian and Spanish initiatives. The main differences between the results partly rely on the specific characteristics of the two countries, conceived in the framework of this dissertation as the contexts in which the different initiatives (i.e. the unit of analysis) are developed and still operate.

By comparing whistleblowing cases, the analysis sheds light on two different 'paths' to the institutionalization of the GlobaLeaks software. The 'direct' path for the Spanish cases and the 'indirect' path for the Italian cases. While in the Italian case, the conflictual relations between the developers of GlobaLeaks and ANAC (Autorità Nazionale Anticorruzione) can be traced back to the existence of a 'dispute' between the two actors concerning the license to re-use open software by third parties, which is then linked to 'competitive' dynamics in the development of whistleblowing platforms for the public sector, the peculiarity of the Spanish cases can be traced back to the presence of anti-corruption authorities at a regional and not central level. In Spain, regional anti-fraud agencies have been created over time, and in the case of the Valencian agency, for example, its creation was also partly due to pressure from civil society. Therefore, seems that the different actors of both civil society and public authorities are tied by proximity-relation that may facilitate stable collaborations.

Indeed, if we look at the first case of institutionalization of a grassroots ACT, it coincides with the municipality of Barcelona, where a key role was played by Xnet, a collective actor also based in the same city and well-recognized among civil society organizations and political actors. However, considering recent research on the same collective actors, but far removed from the analysis of the dynamics of the diffusion of digital technologies, encourages a more cautious approach when talking about collaborative relations tout

cure (Lo Piccolo 2023). For this reason, it is worth stressing that the dynamics of relations between Xnet and institutional actors reveal more blurred boundaries, including forms of "conflictual cooperation" (Giugni and Passy 1998). Nevertheless, the unquestioned prominence that characterizes the main collective actor in the Catalan context, but also in the Spanish one, in the processes of diffusion and institutionalization (Colvin 2018; Huss et al. 2023; Levi and Carles 2019) stays in continuity with previous studies that have analyzed in more detail the central role that Xnet acquired during the "15MpaRato" mobilization campaign and the genesis of BuzonX itself (Mattoni 2017, Mungiu-Pippidi and Dadašov 2016; Walle 2020).

Coming back to the specificity of the Italian case, where there has been an institutionalization, albeit indirect, thus without the support of ANAC, of a grassroots ACT, an element that has played a decisive role in considering Whistleblowing PA as a "successful case", seems to be the low level of digitalization of public administrations involved. It is in this context that the developers of GlobalLeaks have been able to guarantee greater and more targeted support to public administrations thanks to the so-called "grassroots tech ownership", thus effectively favoring the dissemination of their software among more than two thousand public administrations in the Italian scenario. The empirical evidence suggests that a decisive role in facilitating the implementation of the GlobaLeaks software has been played here by the technological support offered to the PAs by the members of Whistleblowing Solutions, the SRL managed by the developers of the GlobaLeaks software. As such, the main driver of technological ownership – intended also in terms of having advanced skills at the technological level – has been brought into a context where the level of digitalization is still very low, in contrast to the Spanish context. [176]

Considering the Italian and Spanish monitoring initiatives from a comparative perspective, the results resonate even partially with the first element high-

---

[176] These results that emerged from this analysis represent a further step compared to the main results presented in previous research conducted on whistleblowing initiatives in the Italian context (Fubini and Lo Piccolo, forthcoming). The study compares the cases of ALAC and Whistleblowing PA with a "low" tech infrastructure carried out by Linea Libera, an initiative to assist potential whistleblowers through a hotline and an email box.

lighted for the Spanish whistleblowing initiatives. Indeed, even for monitoring initiatives, the relationship between local and national scales seems to play a crucial role in defining the differences or similarities between anti-corruption initiatives (or approaches), in this case even beyond the technological apparatus.

This is more evident looking at the case of Common, which emphasizes a 'territorial' dimension of activism, facilitating the creation and maintenance of communities of anti-corruption activists at the local level, where the proximity between actors seems to play a crucial role in pursuing the fight against corruption. It should be noted that the main method used by Common for developing local monitoring communities is based on the territorial network of Libera garrisons scattered across Italian territory at both regional and local levels. In fact, it is how Libera has built and maintains its network of activists that gives a centrality to monitoring actions at the local level (Rispoli 2022).

Then the comparative analysis highlights some differences between the two emblematic cases of "informative activism" located in Italy and Spain (Fubini 2023a). The research identifies two main declinations of informative activism: it can be data journalism that fosters data activism as in the case of Openpolis. Vice-versa, for Civio it is data activism that triggers data journalism. Additionally, Openpolis is still in between data activism and data journalism in terms of the evolution of its collective identity. Civio, on the other hand, seems to be closer to a data journalism initiative. This shift – together with the growing scarcity of economic and human resources – is partly linked to a gradual dismantling of platforms in favor of specific data journalism projects. Indeed, going back to the different monitoring strategies, the maintenance of data-driven platforms is no longer a distinctive element of Civio. These differences between the two initiatives close to the journalism field exist even though they belong to the same model of journalism according to the traditional division proposed by Hallin and Mancini (2004): the southern European countries belong to the "polarised pluralistic model", reinforcing the necessity to adopt a more "situated" approach for studying this phenomenon.

Facing the main challenges: similarities among all the initiatives beyond the countries' contexts

Turning to a discussion of the key similarities between the nine initiatives under investigation, this research sheds light on how these anti-corruption initiatives faced intertwined challenges that can be considered crucial for anti-corruption activism in the digital age. The first challenge corresponds to the need to improve competencies in terms of data literacy and technological skills, which can also be used to manage (or prevent) the dysfunctions or 'backlashes' associated with the use of digital technologies. Indeed, technology-based anti-corruption initiatives may be more successful in environments with high levels of technological literacy and extensive ICT infrastructure, as noted by Gigler and Bailur (2014) for the South Korean context.

Tied to the first challenge, the second consists of broadening external coalitions to avoid fighting corruption "in silos", a challenge that is – even partially – recognized by corruption scholars. Indeed, some of them already have highlighted a positive correlation between a high number of civil society actors and better control of corruption practices (Mungiu-Pippidi 2015). Others, instead, have pointed out that anti-corruption efforts seem to be less effective with the high number of actors involved. As such a good balance occurs when just a few professional civil society organizations obtain a leading role (Grimes 2008).

The monitoring and whistleblowing initiatives investigated seem to be suited for addressing these two intertwined challenges, which become even more crucial in platform and datafied societies. Increasing skills for using digital technologies (Gigler and Bailur 2014) can be addressed in different modalities, that may include building grassroots coalitions or involving actors engaged in top-down anti-corruption efforts. The empirical case studies correspond to different modalities of addressing these interrelated challenges. Openpolis and Civio have been able to look for internal training that also corresponds in including, over time, several hallmarks from the journalism realm.

The cases of ALAC and BuzonX, on the other hand, show how to build

grassroots coalitions with other CSOs that are more "technology-oriented", such as the developers of GlobaLeaks. The cases of the institutionalization of a grassroots ACT show how bringing together bottom-up and top-down efforts (and skills) can facilitate the fight against corruption, as in the case of ensuring secure leaking channels for potential whistleblowers. This last modality may also constitute a way to broaden the perspective offered by Fox (2015) with the metaphor of the "sandwich strategy", in which the coalitions between civil society organizations and other governmental actors that fight against corruption seem to achieve better results. As such the institutionalization of a grassroots ACT based on collaborative dynamics and mutual recognition between grassroots goes even beyond the main aim of improving governmental accountability by participating in e-governmental initiatives.

Reaching the same outcome: developing (high or low) anti-corruption infrastructures

Moving toward the main theoretical contribution of this dissertation, what has emerged from the data analysis is an additional and even more crucial commonality across all the grassroots anti-corruption initiatives. They were able during the time to develop, maintain, and diffuse even among institutional actors different types of anti-corruption infrastructures, both for facilitating whistleblowing or for enabling monitoring of governmental actors. More precisely, this research casts light on four types of infrastructures: grassroots whistleblowing infrastructure, institutional(ized) whistleblowing infrastructure, platform-based monitoring infrastructure, and community-based monitoring infrastructure.

As regards the first type, the grassroots whistleblowing infrastructure corresponds to the main outcome of a process of diffusion among peers (activists and hacktivists) of grassroots anti-corruption technologies for whistleblowing, i.e. the open-source software GlobaLeaks. The main drivers that co-occur to foster the process of diffusion correspond to collaborative relational dynamics between different grassroots actors based on mutual recognition (social driv-

ers), combined with specific ACT's features, such as technology means security and anonymity, and technology as a structuring agent, thus technological drivers of diffusion.

The second type, instead, corresponds to the institutional(ized) whistleblowing infrastructure, which constitutes the main outcome of a process of (direct or indirect) institutionalization. Both types of institutionalization share the same technological driver as in the case of diffusion. The ACT on which the infrastruce is based is the same, but the crucial point is that grassroots and institutional actors share the same imaginaries and perceptions related to technologies and their consequences on the struggle against corruption facilitating whistleblowing.

The other two types of anti-corruption infrastructures arose instead from monitoring initiatives: the research distinguishes between *platform-based monitoring infrastructure* and *community-based monitoring infrastructure*. Both infrastructures rest on a combination of different strategies aimed at preventing and reacting to institutional (data) opacity. Thus different "strategic choices" depend on the collective identities, the data-related skills of the grassroots collective actors involved, and consequently, the type of technology employed, distinguishing between low or high-tech monitoring infrastructure.

The platform-based infrastructure rests on two main types of data-related strategies: creating and maintaining open databases and public data-driven platforms. Both databases and platforms have been conceived for their reuse by other actors: indeed the features of technological drivers are strictly entangled with the social drivers, due to the introduction of the core elements of "openness" typical of open data, that trigger data-reuse and expand the type of external actors who can employ these databases and platforms for further investigations, such as news media and journalists or members of civil society. The second type of strategy, instead, partially relies upon the previous and consists of creating and diffusing data-driven journalistic content typical of "informative activism" to trigger the data reuse, thus facilitating other actors to anchor their anti-corruption actions to these infrastructures for monitoring, reporting, or raising awareness on corruption.

Finally, the community-based infrastructure, instead, relies on fostering or supporting the development of monitoring communities at the local level, in which the existing "territorial" ties (i.e. social drivers) are the premise for any employment of ACT (i.e. tech driver) for monitoring purposes. In addition, these monitoring communities are a potential actor for the re-use of databases or data-driven platforms, thus effectively linking the two infrastructures.

Infrastructural activism: towards a conceptual assessment and an interdisciplinary theoretical contribution

With regard to the theoretical contribution of the whole thesis, the analysis has shown that both the Italian and the Spanish initiatives studied are not only anti-corruption infrastructures (high or low tech) but also emblematic cases of a specific form of activism called *infrastructural activism*, where each type of infrastructure corresponds to a different modality of *infrastructural activism*, leading to different types of outcomes. Indeed, the analysis sheds light on the diffusion and institutionalization of grassroots ACT in the case of whistleblowing infrastructures, where *infrastructural activism* is a prerequisite for both outcomes (and processes). In the case of monitoring initiatives, the creation (and maintenance) of data-driven platforms to overcome the opacity of institutional data is in itself an outcome, and in turn a prerequisite for enabling external actors to reuse both databases and platforms. The development of local monitoring communities constitutes a further outcome and at the same time sheds light on how these monitoring communities anchor their data-related efforts and practices (both in the use of data portals and the creation of datasets and data-driven platforms) by adopting a more local - or "territorial" - modality of *infrastructural activism*.

Thus, in the framework of this thesis, *infrastructural activism* is defined as a form of activism aimed at developing and maintaining - but also, and above all, at disseminating and institutionalising - socio-technical anti-corruption infrastructures in order to expand the repertoire of contention for detecting or preventing corrupt behaviour. In short, *infrastructural activism* is a prerequisite

for all the types of anti-corruption infrastructures mentioned above.

Attempting to broaden the definition of *infrastructural activism* beyond the scope of anti-corruption, it can be defined as a specific form of activism aimed at creating specific infrastructures to address certain social contentious issues (including corruption), based on a set of socio-technical elements (or drivers of grassroots innovation) that not only represent (social movement organizations') outcomes but can also be incorporated into the existing repertoire of grassroots actors' actions and contentious performances (Tilly 2008), fostering constant innovation of the various forms of contentious politics (Tilly and Tarrow 2006).

The idea that these grassroots tech infrastructures can be integrated as outcomes into the repertoire of contention of the grassroots actors who implement them, resonates even partially to the hypothesis formulated by Bosi and Zamponi (2015, 2019) in their analysis of 'direct social actions'. The authors argue that these 'direct' social actions constitute an essential part of the repertoire of contention and that, although they tend to be less visible than protest actions, they should not be left in the background and thus "overlooked".

Turning to a more strictly conceptual assessment, it should be made clear that the term *infrastructural activism* has already been used by Maharawal (2021), to define the rise of the 'Google Bus Blocks', a form of protest against gentrification, growing inequality and the housing crisis linked to the economic impact of the tech sector between 2013 and 2018 in the San Francisco Bay Area. The 'Google bus blockade' was a response to the exclusive use of so-called 'Google' buses by employees of technology companies, using public infrastructure (i.e. roads) in an urban context that lacks efficient public transport, thus highlighting even more emblematically the social inequalities and crisis in that area.

In that context, *infrastructural activism* is intended as "a flexible political form that uses the interruption of infrastructure for political ends" (Maharawal 2021, 1456). 'Flexible' in the sense that 'the Google bus blockades both disrupted a transport infrastructure and produced a political analysis of the connections between the privatisation of public transport, the regional housing crisis,

environmental gentrification, the tech industry and the city government in the housing affordability crisis', as the author explains (Ibid.). According to the author, *infrastructural activism* seems to have a multiple valences: it is both a form of activism that uses the blocking of material infrastructures such as roads for political ends, and at the same time criticizes the infrastructures themselves, including in its struggle "material, political and affective critiques of infrastructure" (Ibid.), simultaneously politicized the buses as infrastructures of inequality" (Maharawal 2021, 1459).

In the context of this thesis, however, *infrastructural activism* is an opportunity to move beyond a more traditional and 'stable' conception of infrastructure and to shed light on the more 'malleable' and slightly less stable, but more visible (Furlong 2011), web-based infrastructure, and thus more transitory, as Plantin and Punathambekar (2019) also argue. The two authors also claim that this 'shift' gives an advantage to large technology companies due to the power and reach of their platforms, but that the infrastructure they provide consists of constantly changing interactions (data, connections, etc.) and is, therefore, less stable than old-school infrastructures such as railways and telephone operating systems. The authors then highlight with concrete examples a phenomenon that characterizes these more 'malleable' web-based infrastructures, referring to 'infrastructuralization of digital platform' for the cases of, for example, Amazon, Google and Facebook (Plantin et al. 2018; Plantin and Punathambekar 2019, van Dijck 2020). The reflections brought forward by these scholars are part of a broader 'infrastructural turn' (Plantin and Punathambekar 2019) affecting media studies, in which scholars try to reconstruct from a theoretical perspective how the concept of digital platforms can be linked to an infrastructural approach.

Although in the literature this process of 'infrastructuralization' seems to apply (only) to the so-called 'influential digital platforms' of large corporations such as Meta or Google, this thesis, through the concept of *infrastructural activism*, lays the groundwork for extending this theoretical and empirical reflection to bottom-up platforms, in this case developed for anti-corruption purposes. Indeed, digital whistleblowing platforms based on the GlobaLeaks software

or data-driven platforms developed to monitor government institutions tend to acquire some of the 'socio-technical aspects' or 'properties' (Star, 1999) typical of infrastructures (Bowker and Star 1999; Furlong 2010; Plantin et al. 2018; Star 1999, Star and Ruhleder 1996).

First, these digital AC platforms are 'embedded' in other social structures and arrangements (Star 1999). Indeed, in the case of *infrastructural activism*, these pre-existing structures correspond to grassroots anti-corruption collective actors (e.g. Transparency International Italia or Openpolis). Second, these platforms acquire a certain 'invisibility' in supporting specific tasks and actions (such as supporting whistleblowers or fostering monitoring practices), whose presence is more clearly perceived in case of malfunctioning or 'breakdown' (Plantin et al. 2018). Third, these AC platforms are characterised by a temporal and spatial 'ubiquity' beyond a single event or context (ibid.). This characteristic is understood here as 'replicability'. Fourth, once developed and used, these platforms are somehow 'taken for granted in a community of practices' (Star, 1999), in this case anti-corruption practices. At the same time, however, these infrastructures 'both shape and are shaped by the conventions of a community of practice' (ibid.). Finally, in some cases these AC infrastructures are 'built on an installed base' (ibid.), as in the case of the GlobaLeaks software, which relies on a specific pre-existing browser (i.e. Tor) to function properly.

Hence, by highlighting some of the key characteristics typical of infrastructures, this work is in continuity with what media scholars have recently referred to as the 'infrastructuring' of platform-based services (Plantin et al. 2018; Plantin and Punathambekar 2019). The infrastructural perspective helps to explore not only the power relations between key actors involved in networks but also to 'recognize the contingent and relational nature of distribution networks. After all, infrastructures do not emerge de novo, but are constructed and operate in complex relationships with multiple layers of existing infrastructures' (Plantin and Punathambekar 2019, 166).

In conclusion, by intertwining the concept of *infrastructural activism* with the ongoing debate in media studies about the actual "infrastructural turn" that is taking place across them - indeed, a growing number of studies have refo-

cused attention on the social, material, cultural and political dimensions of infrastructure (Mattern 2016; Parks and Starosielski 2015; Peters 2015; Plantin et al. 2018) - this thesis seeks to make a contribution to social movement studies intertwined with STS and media studies, and to try to spark the debate on a possible infrastructural turn in this specific field of study as well.

Focusing on the subfield of social movement outcomes in conjunction with science and technology studies, both empirical and theoretical contributions make a step forward with respect to perspective that considers the creation of a grassroots technology "as an outcome in itself" (Weisskircher 2019) for civil society organizations and social movements. Indeed, in the context of this research, CSOs have not only been able to develop a technology on their own but have also built and maintaine grassroots infrastructures based on their technologies, then diffused and institutionalized. A the same time, the main findings redefine the definition of a "technology-oriented" or "service-oriented" social movement introduced by Hess in his early studies (2005) that need to facilitate coalitions with other actors even outside the grassroots "silos" to facilitate the diffusion, the institutionalization or simply the re-use of grassroots techsby other types of anti-corruption actors.

Looking, instead, at the potential contribution to corruption studies, this specific form of *infrastructural activism* which is a precondition for the development of different types of anti-corruption infrastructures not only grasps the role of certain CSOs involved in curbing corruption but may also cast light on how the use of different digital technologies, employed for "grassroots innovation processes" (Parwez 2022), may enable "good governance" also from below. In other words, *infrastructural activism* in the framework of anti-corruption from below can be considered an additional lens capable of grasping more concretely what Rose-Akerman (2017) considers one of the main challenges of good governance: finding an equilibrium between top-down expertise and public participation. It is therefore a matter of recognizing that 'top-down' skills can be enriched by the experience and 'know-how' of experts belonging to CSOs, i.e. from a 'bottom-up' perspective. The empirical cases described so far of technological expertise in terms of software development or data literacy

are concrete examples of this reconfiguration of this equilibrium.

Finally, these concluding remarks highlight how this research has been able to fill some gaps that emerged from the review of existing literature. First, it has contributed to enriching research on role of digital technologies in the anti-corruption struggle, looking exclusively at the ACTs developed by civil society anti-corruption actors and even pointing to their institutionalization in some cases. This is an attempt to partially avoid a common tendency in previous research on anti-corruption and digital technologies, which deals with both grassroots and institutional ACT at the same time, then giving more prominence to the latter (see Adam and Fazekas 2021) to discover how grassroots effort impacts the institutional one and not just vice-versa.

Secondly, it introduces the concept of "informative activism", shedding light on the underestimated entanglements between journalism and activism in the fight against corruption in the era of datafication, platformization, and hybridization. This theoretical contribution aims to capture the implications of the blurred boundaries between data activism and data journalism, also from the grassroots anti-corruption field, where the role of data-related practices (Mattoni 2017) is becoming extremely relevant in (re)defining repertoires of contention (Tarrow 1995; Tilly 1978) and communication (Mattoni 2013a). Broadly speaking, it gives the chance to improve the debate around the shifting boundaries between journalism and activism in the digital age, thus stimulating an already existing line of inquiry on this research topic also within corruption studies.

Third, it contributes to the few previous attempts to assess the outcomes of digital technologies on grassroots anti-corruption efforts (Adam and Fazekas 2021) by exploring how the use of digital technologies by grassroots actors is itself reshaping the fight against corruption on its own, also in terms of the relational dynamics between the actors involved, even those involved in top-down anti-corruption efforts. In particular, it points to the institutionalization, not of the CSOs involved, but of the grassroots ACTs that they have been able to develop and deploy. However, this thesis did not evaluate the impact of both whistleblowing and monitoring ACTs in reducing corruption, which is still a

matter of debate (Adams and Fazekas 2021; Davies and Fumega 2014; Kossow 2020), thus the third gap is just partially addressed. Additional limits of this research and possible ways to overcome them in forthcoming research are presented below.

Limits and further lines of research

Having presented and discussed the main empirical findings of this research and highlighted the main theoretical contribution, it is necessary to highlight the overall limitations of this thesis and thus identify some potential avenues that could be explored shortly to further improve this research. Looking at the main limitations at a theoretical level, the conceptualization of *infrastructural activism* needs to be further refined. This also means looking more systematically at the transition from (AC) digital technologies to digital platforms and then infrastructures. One possible starting point could be to unpack the "infrastructuralization of platforms" by adopting a more explicit process-oriented interest in infrastructures, thus trying to answer analytically the main question "How to infrastructure?" in the digital age, looking at the leading research carried out by Star and Bowker (2002). This potential new path for improving the conceptualization of *infrastructural activism* resonates with the so-called "infrastructural inversion", introduced by Bowker (1994) for indicating a shift from the activities supported by an infrastructure (i.e. grassroots anti-corruption practices in this research) to the activities that enable the infrastructure to function. Dealing with this "infrastructural inversion" means looking at "the truly backstage elements of work practices" (Star 1999, 380).

At the same time, an additional way for refining the definition of *infrastructural activism* itself could be to try to unpack the main socio-technical elements that coexist in the definition of the different types of anti-corruption infrastructures, trying to reconduct them to the three dimensions that contribute to defining ACTs as a heuristic tool. Respectively the relational, material and symbolic dimensions (Mattoni 2024), a subdivision that refers back to Practice Theories and more specifically to the elements that simultaneously constitute a

practice (Scott and Orlikowski 2014).

Additionally, it should be discussed more extensively whether it is meaningful to speak about 'digital' *infrastructural activism*. Indeed, although this thesis examines the role of digital technologies in the fight against corruption, it does not conceive of *infrastructural activism* as exclusively 'digital'. *Infrastructural activism* is social and technological, analog and digital, and can be carried out offline or online, locally or transnationally. Framed in these terms, this specific type of activism seems close to conceptions of multi-layered and hybrid media ecologies (Mattoni 2017; Trerè and Mattoni 2016), in which "media and technologies, subjects and socio-political forces coexist in the same environment" (Scolari 2012, 10), and in which "infrastructures" are conceived as "a relational and ecological part [...] of the balance between action, tools and the built environment" (Star 1999, 377).

Looking at the data collected and analyzed in this research, several categories of research participants were involved, especially in the collection of interviews. These included activists, technology developers, journalists, and civil servants. To further enrich the understanding of how grassroots actors use different types of digital technologies in their fight against corruption, and with what consequences, the data collection can be enriched by including an additional category of research participants, the so-called 'users' of these infrastructures. In practice, this may imply including some journalists who re-use the open databases provided by Civio and Openpolis, Italian public administrators and public servants involved in the whistleblowing process thanks to WhistleblowingPA, or the members of the monitoring communities directly involved in the Common project. The data collection already has some documents and fieldwork notes focusing on the users' perspective, which can be further explored by conducting in-depth interviews with this additional category.

Finally, considering the current findings as a starting point, this research may lead to additional directions that can be further explored. Firstly, to broaden the research on the whistleblowing phenomenon, one possible path may be to shed light on how the recent transposition at the national level of the European Parliament's EU Directive 2019/1937 may impact relational dynamics. In

practice this means trying to grasp if this EU directive may be a concrete window of opportunity to ensure institutional recognition of the role played by Italian and Spanish civil society organizations in the whistleblowing phenomenon, also considering their efforts in developing and diffusing whistleblowing infrastructures. The role played by these grassroots "recipients" in the whistleblowing process may facilitate the role of the anti-corruption authorities in managing whistleblowers' requests acting as "filters" for detecting corrupted behaviors. In short, this may be an opportunity to recognize de facto - even if not (yet) de iure - an active role of organized civil society and embrace technological innovations coming not only from government actors but also from the grassroots. In practice, for further research, this implies including legal elements among the so-called "drivers of innovation", together with social and technological ones. This research could even be further extended by including other most-similar or most-different European Union countries, to enrich the comparative analysis beyond the Italian and Spanish anti-corruption scenarios.

As regards monitoring initiatives, another way of expanding the current research could be to examine cases of diffusion of the community-based approach adopted by Common at the transnational level through analysis of two specific European Co-founded projects (i.e. YouMonitor - Empowering YOUth to build MONITORial communities against corruption, followed by the more recent MoMoEU: More Monitoring action in the EU!). Following this research path could be an attempt to understand how these two projects may be cases of success (or failure) in the diffusion of this particular approach to monitoring. This would also shed light on the extent to which the community-based approach - and related infrastructures based on a local and 'territorial' mode of *infrastructural activism* - developed in one situated context (such as the local and regional garrisons of Libera) can be replicated in others, even outside the Italian scenario. In this way, a concrete challenge faced by practitioners can also be addressed and investigated from an academic research perspective.

To conclude, with regard to the concept of *infrastructural activism* itself, future research could seek to extend the possibilities of using the concept beyond the field of anti-corruption by adding further empirical case studies of so-

cial activism. In practice, this also means 'testing' the extent to which the current definition is sufficiently 'flexible' to be adapted to different social contentious issues (e.g. environmental activism) and at different levels of analysis, including local, national and even transnational levels.

References

Aarvik, P. 2019. "Artificial Intelligence – a promising anti-corruption tool in development settings?", *U4 Report*. Bergen: U4 Anti-Corruption Resource Centre, Chr. Michelsen Institute. 1: 1–38. (Accessed March 22, 2023)

Abers, R.,1998 "From Clientelism to Cooperation: Local Government, Participatory Policy, and Civic Organizing in Porto Alegre, Brazil" *Politics & Society*. 26 (4): 511–37.

Adam, I., and Fazekas, M. 2021. "Are emerging technologies helping win the fight against corruption? A review of the state of evidence", *Information Economics and Policy*. 57: 1–14.

Ahva, L. 2017, "*How is Participation Practiced by «In-betweeners» of Journalism?*", *Journalism Practice*. 11, 142-159.

Alaimo, K. 2015. "How the Facebook Arabic Page "We Are All Khaled Said" Helped Promote the Egyptian Revolution", *Social Media + Society*. 1(2): 1-10. https://doi.org/10.1177/2056305115604854

Allern, S. 2002. "Journalistic and commercial news values: News organisations as patrons of an institution and market actors", *Nordicom Review*. 23(1– 2): 137–52.

Almén, O. and Burell, M. 2018. "Social accountability as social movement outcome: Protests in a Chinese city", *Social Movement Studies*. *17*(6): 716–735. https://doi.org/10.1080/14742837.2018.1521716

Alonso-Díaz, L. and Yuste-Tosina, R. 2015. "Constructing a Grounded Theory of E-Learning Assessment", *Journal of Educational Computing Research*, 53(3): 315-344. https://doi.org/10.1177/0735633115597868

Altheide, D. L., and Snow, R. P. 1979. *Media Logic*. Beverly Hills, CA: Sage.

Amenta, E. and Polletta, F. 2019. "The cultural impacts of social movements", *Annual Review of Sociology*. *45*: 279–299. https://doi.org/10.1146/annurevsoc-073018-022342

Amenta, E., Andrews, K. T. and Caren, N. 2018. "The political institutions, processes, and outcomes movements seek to influence". In D. A. Snow, S. A., Soule, H. Kriesi, and H. J. McCammon (Eds.), *The Wiley Blackwell Companion to Social Movements* John Wiley & Sons, 47–465.

Amenta, E., Caren, N., Chiarello, E. and Su, Y. 2010. "The political consequences of social movements", *Annual Review of Sociology*. *36:* 287–307. https://doi.org/10.1146/annurev-soc-070308-120029

Ang, Y.Y. 2014. "Authoritarian Restraints on Online Activism Revisited: Why "I-Paid-A-Bribe" Worked in India but Failed in China", *Comparative Politics*. 47(1): 21-40.

Appelgren, E. and Salaverría, R. 2018, *"The Promise of the Transparency Culture"*, *Journalism Practice*. 12: 986-996, doi: 10.1080/17512786.2018.1511823

Attard J., Orlandi F., Scerri S. and Auer S. 2015. "A systematic review of open government data initiatives", *Government Information Quarterly*. 32 (4): 399–418.

Atton, C. 2009. "Alternative and Citizen Journalism". In Wahl-Jorgensen K., Hanitzsch, T. (Eds.), *The Handbook of Journalism Studies*, New York: Routledge, 265-278.

Baack, S. 2015. "Datafication and empowerment: How the open data movement re-articulates notions of democracy, participation, and journalism", *Big Data & Society*. 2 (2): 1–11.

Baack, S. 2017. "Practically Engaged", *Digital Journalism*. 6(2): 673–692.

Baack, S. 2018. "Civic tech at mySociety: How the imagined affordances of data shape data activism", *Krisis. 1,* 44-56.

Bader, M., Huss, O., Meleshevych, A. and Nesterenko, O. 2019. "Civil Society Against Corruption in Ukraine: Pathways to Impact", *Kyiv-Mohyla Law and Politics Journal*. 5: 1–35.

Bader, M.; Marchevska, D. and Mössinger, K. 2018. "Civil Society and Anti-Corruption: an Overview of the Literature". Working Paper.

Baljija, S., and Min, K. 2023. "Evaluating the effectiveness of whistleblower protection: A new index", *Data & Policy*, 5. doi:10.1017/dap.2023.20

Barassi V. 2015. *Activism on the web: Everyday struggles against digital capitalism*. Hoboken, NJ: Taylor & Francis.

Bauhr, M., and Grimes, M., 2017. "Transparency to curb corruption? Concepts, measures and empirical merit", *Crime Law Soc. Change* . 68: 431–458.

Baumgartner, F. R., and Chaqués-Bonafont, L. 2013. (June 25-27) "All News is Bad News. Newspapers and Political Parties in Spain" [Paper presentation]. Council of European Studies, Amsterdam.

Beraldo, D., and Milan, S. 2019. "From data politics to the contentious politics of data", *Big Data & Society*. 6: 1–11.

Berendt, Bettina, and Stefan Schiffner. 2022. "Whistleblower Protection in the Digital Age - Why 'anonymous' Is Not Enough. : From Technology to a Wider View of Governance", *The International Review of Information Ethics.* 31 (1). Edmonton, Canada. https://doi.org/10.29173/irie479.

Bernstein, M., and Jasper, J. M. 1996. "Interests and credibility: Whistleblowers in technological conflicts", *Social Science Information.* *35*(3): 565–589. https://doi.org/10.1177/053901896035003008

Berti, C., Bratu, R., and Wickberg, S. 2020. "Corruption and the media". In A. Mungiu-Pippidi and P. M. Heywood (Eds.), *A research agenda for studies of corruption.* Edward Elgar Publishing, 107-117.

Bertot, JC, Jaeger, PT and Grimes, JM 2010. "Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies", *Government Information Quarterly.* 27(3): 264–271.

Bhargava, V. 2012. "*Strategies for Empowering Communities to Demand Good Governance and Seek Increased Effectiveness of Public Service*". Partnership for Transparency Fund Working Papers Series No.4/2012.

Blee, K.M. and Taylor, V. 2002. "Semi-Structured Interviewing in Social Movement Research", *Methods Of Social Movement Research.* 92-117.

Blee, K.M. 2019. "How Field Relationships Shape Theorizing", *Sociological Methods & Research* 48 (4): 739–62. https://doi.org/10.1177/0049124117701482

Bosi, L., and Uba, K. 2021. "Collective action outcomes: Ways forward for the subfield", *Partecipazione e Conflitto*, *14*(3): 987–997. https://doi.org/10.1285/i20356609v14i3p

Bosi, L. and Zamponi, L. 2015). "Direct Social Actions and Economic Crises: The relationship between forms of action and socio-economic context in Italy", *Partecipazione e Conflitto.* 8(2): 367- 391. http://dx.doi.org/10.1285/i20356609v8i2p367

Bosi, L. and Zamponi, L. 2019. *Resistere alla crisi. I percorsi dell'azione sociale diretta*. Bologna: Il Mulino.

Bovens, M. 2007. "Analysing and assessing accountability: A conceptual framework", *European Law Journal.* *13*(4): 447–468. https://doi.org/10.1111/j.1468-0386.2007.00378.x

Bowker, G. C. 1994. *Science on the run: Information management and industrial geophysics at Schlumberger, 1920-1940*. Cambridge, MA: MIT Press.

Bowker, G., and Star, S. 1999. *Sorting things out: Classification and its consequences.* Cambridge, MA: MIT Press.

Bratu, R., and Kažoka, I. 2018. "Metaphors of corruption in the news media coverage of seven European countries", *European Journal of Communication*, 33(1): 57-72. https://doi.org/10.1177/0267323117750695

Bryant, A. 2017. *Grounded Theory and Grounded Theorizing: Pragmatism in Research Practice*. Oxford University Press.

Bryant, A., and Charmaz, K. 2019. *The SAGE handbook of current developments in grounded theory*. SAGE Publications Ltd, https://dx.doi.org/10.4135/9781526485656

Bucher, T. and Helmond, A. 2018, "*The affordances of social media platforms*". In Burgess, J., Mawick, A., Poell, T. (Eds), *The SAGE Handbook of Social Media*, London, Sage, 233-253.

Bukenya, B., Hickey, S., and King, S.. 2012. "Understanding the Role of Context in Shaping Social Accountability Interventions: Towards an Evidence-Based Approach*"*.

Bushnell, A. M. 2020. "Reframing the Whistleblower in Research: Truth-tellers as Whistleblowers in Changing Cultural Contexts." *Sociology Compass* 14 (8): 1–13. https://doi.org/10.1111/soc4.12816.

Cahlikova, T., and Mabillard, V. 2020. "Open Data and Transparency: Opportunities and Challenges in the Swiss Context", *Public Performance & Management Review*, 43(3): 662-686, DOI: 10.1080/15309576.2019.1657914

Camaj, L. 2013. "The Media's Role in Fighting Corruption: Media Effects on Governmental Accountability", *The International Journal of Press/Politics*. 18(1): 21–42.

Carel, H., and Kidd, I.J. 2021. "Institutional Opacity, Epistemic Vulnerability, and Institutional Testimonial Justice", *International Journal of Philosophical Studies*, 29(4): 473-496, DOI: 10.1080/09672559.2021.1997393

Carlson, M., and Lewis, S.C. 2015, *Boundaries of Journalism: professionalism, practices and participation*, London - New York, Routledge.

Carr, I., and Outhwaite, O. 2011. "The Role of Non-Governmental Organizations (NGOs) in Combating Corruption: Theory and Practice", *Suffolk University Law Review*, 44: 615-664.

Casas, A.; Davesa, F. and Congosto, M. 2016. "Media Coverage of a 'Connective' Action: The Interaction Between the 15-M Movement and the Mass Media". *Revista Española de Investigaciones Sociológicas*. 155: 73-96.

Casero-Ripollés, A. and Feenstra. 2014. "Democracy in the Digital Communication Environment: A Typology Proposal of Political Monitoring Processes", *International Journal of Communication*. 8. 2448-2468.

Castells, M. 2009. *Communication power*. Oxford: Oxford University Press.

Castells, M. 2012. *Networks of outrage and hope: Social movements in the internet age*. Cambridge: Polity.

Ceccobelli, D. 2019. "«We Need to be Heard by as Many People as Possible!» Southern European Grassroots Organisations and the Practice of Gaining Visibility", *Comunicazione Politica*. 2: 149-172

Chadwick, A. 2013, *The hybrid media system: politics and power. Oxford studies in digital politics*, Oxford - New York, Oxford University Press.

Chadwick, A. 2017, *The hybrid media system: Politics and power*, 2nd edition, New York, Oxford University Press

Chadwick, A., and Collister, S. 2014. "*Boundary-Drawing Power and the Renewal of Professional News Organizations: The Case of The Guardian and the Edward Snowden National Security Agency Leak*", *International Journal of Communication*. 8: 2420-2441.

Chakraborty, A. and Mattoni, A. 2023. "Addressing corruption through visual tools in India: the case of three civil society initiatives and their Facebook pages", *Visual Studies*, 38 (5): 803-816, DOI: 10.1080/1472586X.2023.2239759

Chakraborty, A. 2024. "Potentialities and affordances of grassroots civic tech platforms as effective anti-corruption tools: decoding the story of *I Paid A Bribe*, India". In Mattoni, A. (ed.) *Digital Media and Anti-Corruption from the Grassroots: Contexts, Platforms and Practices of Anti-Corruption Technologies Worldwide*. Edward Elgar Publishing.

Chaqués-Bonafont, L., and Baumgartner, F.R. 2013. "Newspaper Coverage of Politics in a Partisan Media System. The Case of Spain", *Journal of Public Policy*. 33(1): 65-88.

Charmaz, K. 2006, 2014. C*onstructing Grounded Theory: A Practical Guide through Qualitative Analysis* (1st & 2nd eds.). London: Sage.

Chêne, M. 2016. "Literature review: the use of ICTs in the fight against corruption.", *U4 Report*. Bergen: U4 Anti-Corruption Resource Centre, Chr. Michelsen Institute, 6. (Accessed September 2, 2022)

Chêne, M., and Dell.G. 2008. "*UNCAC and the participation of NGOs in the fight against corruption",* Bergen: U4 Anti-Corruption Resource Centre, Chr. Michelsen Institute. (Accessed September 2, 2022)

Cheruiyot, D., Baack, S., and Ferrer-Conill, R. 2019. "*Data JournalismBeyond Legacy Media: The case of African and European Civic Technology Organizations*", *Digital Journalism*. 7: 1215-1229, doi: 10.1080/21670811.2019.1591166.

Chowdhury, A. R. and Abid, A. 2019. "Emergent Protest Publics in India and Bangladesh: A Comparative Study of Anti-corruption and Shahbag Protests Societies and Political Orders in Transition". In: Belyaeva, N., Albert V., amd Zaytsev, D.G, (Eds.), *Protest Publics*, 49-66, Springer.

Clarke, A. 2019. *Situating grounded theory and situational analysis in interpretive qualitative inquiry*. SAGE Publications Ltd, https://dx.doi.org/10.4135/9781526485656

Clarke, A., Friese, C., & Washburn, R.S. 2018. *Situational Analysis: Grounded Theory after the Interpretive Turn*. SAGE.

Clarke, A., Friese, C., and Washburn, R.S. 2015. *Situational Analysis in Practice. Mapping Research with Grounded Theory*. Routledge

Clarke, A. and Star, S. L. 2008. "Social Worlds/Arenas as a Theory-Methods Package". In E. Hackett, O. Amsterdamska, M. Lynch, & J. Wacjman (Eds.), *Handbook of Science and Technology Studies* (3rd ed), Cambridge, MA: MIT Press, 113–137.

Clarke, A.E., Washburn, R., and Friese, C. (Eds.). 2022. *Situational Analysis in Practice: Mapping Relationalities Across Disciplines* (2nd ed.). Routledge. https://doi-org.ezproxy.unibo.it/10.4324/9781003035923

Colvin, N. 2018. "Whistle-blowing as form of digital resistance: state crimes and crimes against the state", *State Crime Journal*, 7(1): 24-45.

Corbin, J., and Strauss, A. 1990. "Grounded theory research: Procedures, canons, and evaluative criteria", *Qualitative Sociology*, 13: 3-21.

CorruptionRisk. (2023, October, 10). Index of Public Integrity Methodology. https://www.corruptionrisk.org/ipi-methodology/

Couldry, N. 2014. "A necessary disenchantment: Myth, agency and injustice in a digital world", *The Sociological Review*. 62(4): 880–897.

Couldry, N., and Powell, A. 2014. "Big Data from the bottom up", *Big Data & Society*, 1(2). https://doi.org/10.1177/2053951714539277

Coutinho do Nascimento, B.L., and Rodrigues de Oliveira, A. 2020. "Enabling anonymous whistleblowing through online reporting mechanisms in Brazil". In Proceedings of the 13th International Conference on Theory and Practice of Electronic Governance (ICEGOV '20). Association for Computing Machinery, New York, NY, USA, 783–786. https://doi.org/10.1145/3428502.3428620

Cranefield, J., Robertson, O. and Oliver, G. 2014. "Value in the mash: Exploring the benefits, barriers and enables of open data apps". Presented at the European Conference on Information Systems, Vol. 16. Israel: Association for Information Systems

Csonka, P., and Salazar, L. 2021. "Corruption and Bribery in the Wake of the COVID-19 Pandemic. Responses at the International and EU Levels", EU-CRIM, Legal effects of COVID-19. 2: 111-114 https://doi.org/10.30709/eucrim-2021-015

Cucciniello, M., Porumbescu, G. A., and Grimmelikhuijsen, S. 2017. "25 years of transparency research: Evidence and future directions", *Public Administration Review*, 77(1): 32–44. doi:10.1111/puar.12685

Davies, T., and Fumega, S. 2014. "Mixed incentives: Adopting ICT innovations for transparency, accountability, and anti-corruption", *U4 Report*. Bergen: U4 Anti-Corruption Resource Centre, Chr. Michelsen Institute . Issue 4 (Accessed April 14, 2024)

Davies, T., Walker, S., Rubinstein, M., and Perini, F. (Eds.). 2019. *The State of Open Data: Histories and Horizons*. Cape Town and Ottawa: African Minds and International Development Research Centre.

Dawes, S. 2010. "Stewardship and Usefulness: Policy Principles for Information-Based Transparency", *Government Information Quarterly*. 27 (4): 377-383.

De Blasio E., and Selva D. 2016. "Why choose open government? Motivations for the adoption of open government policies in four European countries", *Policy & Internet*, 8(3): 225–247

De Maria, W. 2008. "Whistleblowers and organizational protesters: Crossingimaginary borders", *Current Sociology*. 56(6): 865–883. https://doi.org/10.1177/0011392108095343

della Porta, D. 2018. "Anti-Corruption from Below. Social Movements Against Corruption in Late Neoliberalism", *Partecipazione e Conflitto*, 10(3): 661–692.

della Porta, D. and Diani, M. 2020. *Social Movements: An Introduction*. Wiley-Blackwell.

della Porta, D., and Mattoni, A. 2021. "Civil Society against Corruption". In A. Bågenholm, M. Bauhr, M. Grimes, & B. Rothstein (Eds.), *The Oxford Handbook of the Quality of Government*. Oxford University Press, 290-310.

della Porta, D., Mattoni, A., Pirro, A. L., and Caruso, L. 2017. "Anti-corruption Activism in Hungary, Italy, and Spain", *ANTICORRP Final Report*, Work Package: WP11 Building Accountability: Transparency, Civil Society and Administrative Response, 240–276.

della Porta, D., Sberna, S., and Vannucci, A. 2015. "Corruzione centripeta e centrifuga nella post-democrazia italiana". In C. Hanretty e S. Profeti (eds.),

Politica in Italia. I fatti dell'anno e le interpretazioni. Edizione 2015 Bologna: Il Mulino.

della Porta, D., and Vannucci, A. 2012. *The Hidden Order of Corruption: An Institutional Approach*. London: Ashgate.

Denzin, N. K., and Lincoln, Y. S. (Eds.). 2005. *The Sage handbook of qualitative research* (3rd ed.). Sage Publications Ltd.

Deuze, M. and Witschge, T. 2020. *Beyond Journalism*, Cambridge, Polity.

Dey, I. 1999. *Grounding grounded theory*. San Diego: Academic Press.

Dincer, O., and Johnston, M. 2020. "Legal corruption?", *Public Choice* 184: 219–233. https://doi.org/10.1007/s11127-020-00832-3

Di Salvo, P. 2020. *Digital Whistleblowing Platforms in Journalism: Encrypting Leaks*. Palgrave Macmillan

Di Salvo, P. 2021. "Securing whistleblowing in the digital age: SecureDrop and the changing journalistic practices for source protection", *Digital Journalism*, 1-19. doi: 10.1080/21670811.2021.1889384

Di Salvo, P. 2024. "Digital whistleblowing platforms for anti-corruption: The Transparency International Italia case". In, A. (ed.) *Digital Media and Anti-Corruption from the Grassroots: Contexts, Platforms and Practices of Anti-Corruption Technologies Worldwide*. Edward Elgar Publishing.

Earl, J. 2000. "Methods, movements, and outcomes". In P. G. Coy (Ed.), *Research in Social Movements, Conflicts and Change.* Emerald Group Publishing Limited., 3–25. https://doi.org/10.1016/S0163-786X(00)80033-6

Earl, J. 2016. "Protest online: Theorizing the consequences of online engagement" , in L. Bosi, M. Giugni, and K. Uba (Eds.), *The Consequences of Social Movements.* Cambridge University Press, 363–400.

Earl, J., and Kimport, K. 2011. *Digitally Enabled Social Change: Activism in the Internet Age*. Boston, MA: MIT Press.

Eaton, K. 2003. "Restoration or Transformation? Trapos versus NGOs in the Democratization of the Philippines", *The Journal of Asian* Studies. *62* (2): 469–96.

Eldridge, S.A. 2017, *Online Journalism from the Periphery. Interloper Media and the Journalistic Field*, London, Routledge.

Entman, R. M. 2004. *Projections of Power: Framing News, Public Opinion, and US Foreign Policy*.Chicago: University of Chicago Press.

Ettema, J. S., and Glasser, T. L. 1998. *Custodians of Conscience: Investigative Journalism and Public Virtue*. Columbia University Press.

Färdigh, M., Andersson, M. and Oscarsson, H. 2012. "Press freedom and corruption". In S. Holmberg and B. Rothstein (Eds.), *Good Government: The Relevance of Political Science* . Cheltenham: Edward Elgar Publishing, 130–149.

Flesher Fominaya, C. 2015. "Debunking Spontaneity: Spain's 15-M/Indignados as Autonomous Movement", *Social Movement Studies*, 14 (2): 142-163, DOI: 10.1080/14742837.2014.945075

Fox, J. A. 2015. "Social Accountability: What Does the Evidence Really Say?", *World Development*, 72: 346–361.

Fressoli, M., Arond, E., Abrol, D., Smith, A., Ely, A. and Rafael Dias, R. 2014. "When grassroots innovation movements encounter mainstream institutions: implications for models of inclusive innovation", *Innovation and Development*, 4 (2): 277-292, DOI: 10.1080/2157930X.2014.921354

Fubini, A. 2023a. "More than just shifting Boundaries. Informative activism from a comparative perspective", *Problemi dell'informazione*. 1: 37-62. doi: 10.1445/106769

Fubini, A. 2023b (September 4-8). "The "institutionalization" of non-human intermediaries in the whistleblowing process: comparing the emblematic cases of Italy and Spain" [Paper presentation]. ECPR General Conference, Prague, Czech Republic.

Fubini, A. (2024). "Data Practices and Informative Activism in the Grassroots Struggles Against Corruption". In Mattoni, A. (ed.) *Digital Media and Anti-Corruption from the Grassroots: Contexts, Platforms and Practices of Anti-Corruption Technologies Worldwide*. Edward Elgar Publishing.

Fubini, A., and Lo Piccolo, A. (Forthcoming). "Anti-Corruption Initiatives and the Digital Challenge: the Role of Civil Society Organizations and Whistle-blowing Infrastructures in the Italian Context", *American Behavioral Scientist*.

Fubini A., and Mattoni, A. 2020. "What Do We Know About Them? A Systematic Literature Review of Digital Media and Their Uses in Anti-Corruption from the Grassroots". [Paper presentation]. ECPR General Conference, Online.

Furlong, K. 2011. "Small technologies, big change: Rethinking infrastructure through STS and geography", *Progress in Human Geography*, 35 (4): 460-482. https://doi.org/10.1177/0309132510380488

Gamson, W.A. 1990. *The Strategy of Social Protest*, subsequent edn. Belmont, CA: Wadsworth Pub Co.

Gans-Morse, J, Borges, M., Makarin, A., Mannah-Blankson, T., Nickow, A., and Zhang, D. 2018. "Reducing bureaucratic corruption: interdisciplinary perspectives on what works", *World development*. 105: 171–88. https://doi.org/10.1016/j.worlddev.2017.12.015.

Gibson, J. J. 1979. *The ecological approach to visual perception*. Boston, MA: Houghton Mifflin.

Gibson, J. J. 1977. "The Theory of Affordances". In Shaw, R. and Bransford. J. (Eds.), *Perceiving, acting, and knowing : toward an ecological psychology*. Hillsdale, N.J. : Lawrence Erlbaum Associates: New York, 67-82.

Gieryn, T. F. 1983. "Boundary-Work and the demarcation of science from non-science: Strains and interests in professional ideologies of scientists", *American Sociological Review*. 48(6): 781-795.

Gigler, B., and Bailur. S. 2014. "Closing the Feedback Loop: Can Technology Bridge the Accountability Gap?" The World Bank. http://dx.doi.org/10.1596/978-1-4648-0191-4

Gillespie, T. 2010. "The politics of 'platforms'", *New Media & Society*. 12 (3): 347-364.

Giugni, M. 2008. "Political, biographical, and cultural consequences of social movements", *Sociology Compass, 2(5)*: 1582–1600. https://doi.org/10.1111/j.1751-9020.2008.00152.x.

Giugni M., and Passy F. 1998. "Contentious Politics in Complex Societies: New Social Movements between Conflict and Cooperation". In: McAdam D, Giugni M, Tilly C (Eds.) *From Contention to Democracy*. Lanham, MD: Rowman & Littlefield, 81–107.

Giugni, M., McAdam, D. and Tilly, C. 1999. *How Social Movements Matter*. U of Minnesota Press

Glaser, B. and Strauss, A.L. 1967. *The Discovery of Grounded Theory. Strategies for Qualitative Research*. Chicago, IL: Aldine.

Gómez, M. V., and Kuronen, M. 2011. "Comparing local strategies and practices: recollections from two qualitative cross-national research projects", *Qualitative Research*. 11(6): 683-697. https://doi.org/10.1177/1468794111413366

Goodwin, J. and Jasper, J.M. 2004. "Trouble in Paradigms". In J. Goodwin and J. J. Jasper (Eds.), *Rethinking Social Movements. Structure, Meaning and Emotions*. Lanham, MD: Rowman and Littlefield. 75–93

Gray, J., and Bounegru, L. 2019. "What a Difference a Dataset Makes? Data Journalism And/As Data Activism"*, in Evans, J., Ruane, S., Southall, H. (eds).

Data in Society: Challenging Statistics in an Age of Globalisation, Bristol: The Policy Press.

Gray, J. 2014 (September 3-6). "Towards a Genealogy of Open Data" [Paper presentation]. European Consortium for Political Research, Glasgow. http://dx.doi.org/10.2139/ssrn.2605828

Grimes, M. 2008. "The conditions of successful civil society involvement in combating corruption: A survey of case study evidence", *QoG Working Paper Series,* 22: 1-19

Grönlund, Å., and Flygare, AM. 2011. "The Effect of eGovernment on Corruption: Measuring Robustness of Indexes". In: Andersen, K.N., Francesconi, E., Grönlund, Å., van Engers, T.M. (eds). *Electronic Government and the Information Systems Perspective*. EGOVIS 2011. Lecture Notes in Computer Science, vol 6866. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-22961-9_19

Gurin, J. 2014. "Open Governments, Open Data: A New Lever for Transparency, Citizen Engagement, and Economic Growth", *The SAIS Review of International Affairs*, 34(1): 71–82. https://www.jstor.org/stable/27000941

Hai-Jew, S. 2020. *Blowing Whistles on Transnational Social Media: From Micro-to-Mass Scales*, Privately and Publicly.

Hallin, D., and Mancini, P. 2004. *Comparing Media Systems: Three Models of Media and Politics* (Communication, Society and Politics). Cambridge: Cambridge University Press. doi:10.1017/CBO9780511790867

Halupka, M. 2016. "The rise of information activism: How to bridge dualisms and reconceptualize political participation", *Information, Communication & Society*. 19: 1487-1503.

Hamilton, J. 2016. "Hybrid News Practices". In Witschge, T., Anderson, C.W., Domingo, D., Hermida A. (Eds.), *Sage Handbook of Digital Journalism*, London, Sage.

Hantrais, L. 1999. "Contextualization in cross-national comparative research", *International Journal of Social Research Methodology* 2(2): 93–108.

Hantrais, L. 2009. *International Comparative Research: Theory, Methods and Practice*. Houndmills: Palgrave Macmillan.

Haro-Barba, C., and Sampedro, V. 2011. "Activismo politico en red: Del Movimiento por la vivienda digna al 15M" [Political activism in Internet: From the movement for housing up to the 15M]. *Teknokultura. Revista de Cultura Digital y Movimientos Sociales*, 8(2): 167–185.

Helmond, A. 2015. The Platformization of the Web: Making Web Data Platform Ready. *Social Media + Society*, 1(2). https://doi.org/10.1177/2056305115603080

Hess, D.J. 2005. "Technology-and-product-oriented movements: Approximating social movement studies and science and technology studies", in *Science, Technology, & Human Values*, 30: 515–535.

Hess, D.J., and Sovacool, B.K .2020. "Sociotechnical matters: Reviewing and integrating science and technology studies with energy social science", *Energy Research & Social Science* 65, 101462, https://ssrn.com/abstract=3540100

Heywood, P. 2007. "Corruption in Contemporary Spain", *Political Science & Politics*, 40 (4): 695-699. doi:10.1017/S1049096507071119

Heywood, P. 2018. "Combating corruption in the twenty-first century: new approaches", *Daedalus*, 47(3): 83-97 https://doi.org/10.1162/daed_a_00504

Hintz, A., Dencik, L., and Wahl-Jorgensen, K. 2018, *Digital Citizenship in a Datafied Society*, Cambridge, Polity.

Hintz, A., Milan, S., 2009. "At the margins of Internet governance: grassroots tech groups and communication policy", *International Journal of Media & Cultural Politics*, 5: 23–38.

Hodess, R. 2013. "Civil society and nongovernmental organizations as international actors in anti-corruption advocacy". In Rose-Ackerman, S. and Carrington, P. (Eds.), *Anti-Corruption Policy. Can International Actors Play a Constructive Role?* Durham, North Carolina: Carolina Academic Press, 75-90.

Holloway, R. 2008. "NGO Corruption Fighters' Resource Book — How NGOs can use monitoring and advocacy to fight corruption". (Accessed July 19 2023) https://www.ndi.org/files/NGO-Corruption-Fighters-Resource-Book

Howard, P. and Hussain, M. 2011. "The Role of Digital Media", *Journal of Democracy*. 22: 35-48. 10.1353/jod.2011.0041.

Huss, O. 2024. "The social construction of anti-corruption technologies: Analysing the e-participation platform rahvaalgatus.ee in Estonia". In Mattoni A. (ed.) *Digital Media and Anti-Corruption from the Grassroots: Contexts, Platforms and Practices of Anti-Corruption Technologies Worldwide*. Edward Elgar Publishing.

Huss, O., and Keudel, O. 2020. "Open government in education: clarifying concepts and mapping initiatives". Paris: International Institute for Educational Planning, IIEP-UNESCO.

Huss, O., Beke, M., Jan Wynarski, J. and Slot, B. 2023. *Handbook of good practices in the fight against corruption*. European Commission. doi: 10.2837/575157

Hutchby, I. 2001. "Technologies, Texts and Affordances", *Sociology*, 35 (2): 441-456.

Hutchinson, J. 2021. "Micro-platformization for digital activism on social media, Information", *Communication & Society*, 24(1): 35-51, DOI: 10.1080/1369118X.2019.1629612

Inuwa, I., Kah, M.M.O., and Ononiwu, C. 2019. "Understanding How the Traditional and Information Technology Anti-Corruption Strategies Intertwine to Curb Public Sector Corruption: A Systematic Literature Review" [Paper presentation]. PACIS 2019 Proceedings, 15. Twenty-Third Pacific Asia Conference on Information Systems, Xi'an, China.

Jain, A.K. 2001. "Corruption: A Review", *Journal of Economic Surveys*, 15: 71-121. https://doi.org/10.1111/1467-6419.00133

James, R. 2014. "Digital Media and Social Movements: The Role of New Media in the Outcome of Proposition 8" *Young Scholars in Writing*, 11, 17-26. https://youngscholarsinwriting.org/index.php/ysiw/article/view/166

Janssen M., Charalabidis Y., and Zuiderwijk A. 2012. "Benefits, adoption barriers and myths of open data and open government", *Information Systems Management*, 29(4): 258–268.

Jasanoff, S. 2015. "Future Imperfect: Science, Technology and the Imaginations of Modernity". In S. Jasanoff and S.-H. Kim (Eds), *Dreamscapes of modernity: Sociotechnical imaginaries and the fabrication of power*, University of Chicago Press.

Jenkins, H. 2008. *Convergence Culture: Where New and Old Media Collide*, New York: New York University Press.

Jenkins, J.C., and Klandermans, B. 1995. *The Politics of Social Protest*. London: UCL Press.

Jenkins, M.; 2020 Overview of whistleblowing software. Bergen: U4 AntiCorruption Resource Centre, Chr. Michelsen Institute, 4. (Accessed 24 April, 2022)

Johnson, R. A. 2003. *Whistleblowing: When it works and why*. L. Rienner Publishers.

Johnston, M., 1996. "The search for definitions: the vitality of politics and the issue of corruption", *Int. Soc. Sci. J.* 48 (149), 321–335.

Johnston, M. 2005. *Syndromes of Corruption*. Cambridge: Cambridge University Press.

Johnston, M. 2012. "Building a Social Movement Against Corruption", *The Brown Journal of World Affairs*, 18(2): 57-74.

Johnston, M. 2013. "Staying power: Building and sustaining citizen engagement". In *Corruption, Contention, and Reform: The Power of Deep Democratization*. Cambridge: Cambridge University Press, 220-240. doi:10.1017/CBO9781139540957.009

Joshi, A., and P.P. Houtzager. 2012. "Widgets or Watchdogs?" *Public Management Review* 14(2): 145-162.

Kalikh, A. 2015. "The Role of Civil Society in Fighting Corruption in Russia and Poland." Warsaw. Retrieved from https://www.isp.org.pl/uploads/drive/oldfiles/05KalikhFINAL.pdf.

Keane, J. 2009. *Life and death of democracy*. London: Simon & Schuster

Kennedy, H., Poell, T., and van Dijck, J. 2015. "Data and agency", *Big Data & Society*, 2(2). https://doi.org/10.1177/2053951715621569

King, B. G. 2008. "A political mediation model of corporate response to social movement activism", *Administrative Science Quarterly*, 53(3), 395–421. https://doi.org/10.2189/asqu.53.3.395

King, S. and Brown, P. 2007. "Fix my street or else: Using the internet to voice local public service concerns", *ACM International Conference Proceeding Series*. 232: 72-80. 10.1145/1328057.1328076.

Klitgaard, R. 1988. *Controlling Corruption*. Oakland, CA: University of California Press.

Köbis, N., Starke, C., and Rahwan, I. 2022. "The promise and perils of using artificial intelligence to fight corruption", *Nature Machine Intelligence*. 4(5):418–424. doi: 10.1038/s42256-022-00489-1. – DOI

Kohn, M.L. 1989. "Introduction". In M.L. Kohn (ed.), *Cross-National Research in Sociology*. Newbury Park, CA: Sage.

Kossow, N. 2020. "Digital anti-corruption: hopes and challenges". In: A. Mungiu-Pippidi and P. Heywood (Eds.), *A Research Agenda for Studies of Corruption First*. Edward Elgar, 146-157.

Kossow, N. and Dykes, V. 2018. "Embracing Digitalisation: How to use ICT to strengthen Anti-Corruption", Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) (March 2018).

https://www.giz.de/de/downloads/giz2018-eng_ICT-to-strengthen-Anti-Corruption.pdf

Kossow, N., and Kukutschka, R. 2017. "Civil society and online connectivity: controlling corruption on the net?", *Crime, Law and Social Change,* 68(4): 459- 476.

Kriesi, H., Koopmans, R., Duyvendak, J. W., and Giugni, M. 1995. "Outcomes of new social movements". In H. Kriesi, R. Koopmans, J. W. Duyvendak, & M. Giugni (Eds.), *New Social Movements in Western Europe: A Comparative Analysis*. University of Minnesota Press, 5, 207-237

Larsson, F. and Grimes, M. 2022. "Societal Accountability and Grand Corruption: How Institutions Shape Citizens' Efforts to Shape Institutions", *Political Studies*, 71. 003232172110671. 10.1177/00323217211067134.

Latour, B. and Woolgar S. 1979. *Laboratory Life: The Social Construction of Scientific Facts*. Beverley Hills, CA: Sage.

Latour, B. (1987). *Science in Action: How to Follow Scientists and Engineers through Society*. Cambridge, MA: Harvard University Press.

Law, J. and Hassard , J. 1999. *Actor Network Theory and After*. Oxford, UK: Blackwell.

Law, J. 2009. "Actor Network Theory and Material Semiotics". In B.S. Turner (Ed.), *The New Blackwell Companion to Social Theory*. Oxford, UK: Blackwell, 141–158.

Lederman, D., Loayza, N. V. and Soares, R. R. 2005. "Accountability and corruption: Political institutions matter", *Economics & Politics* 17(1): 1-35.

Lehtiniemi, T., and Ruckenstein, M. 2019. "The social imaginaries of data activism", *Big Data & Society*, 6(1), Article 2053951718821146. https://doi.org/10.1177/2053951718821146

Levi, S., and Carles, M. (2019). "Xnet, a case study:the role of civil society in building the framework for whistleblower protection", *European Public Mosaic*. Open Journal on Public Service, 9: 60-75.

Lewis, S.C. 2012. "The tension between professional control and open participation", *Information, Communication & Society*, 15(6): 836-866.

Lima, V. 2021. "The Institutionalisation of Social Movements: Co-Optation and Democratic Policy-Making", *Political Studies Review*, 19(2): 245-261. https://doi.org/10.1177/1478929920913805

Livingstone, S. 2003. "On the Challenges of Cross-National Comparative Media Research", *European Journal of Communication*, 18(4): 477-500. https://doi.org/10.1177/0267323103184003

Lo Piccolo, A. 2023. "To make the dominoes fall: A relational-processual approach to societal accountability in the Italian and Spanish anticorruption arenas". Ph.D. diss. Scuola Normale Superiore.

Loosen, W. 2015. "The notion of the 'blurring boundaries'. Journalism as a (de)differentiated phenomenon", *Digital Journalism*. 3(1): 68–84.

Lourenço, R. 2015. "An analysis of open government portals: A perspective of transparency for accountability", *Government Information Quarterly*. 32. 10.1016/j.giq.2015.05.006.

Loyens, K., and Vandekerckhove, W. 2018. "Whistleblowing from an International Perspective: A Comparative Analysis of Institutional Arrangements", *Administrative Sciences* 8:1-13. https://doi.org/10.3390/admsci8030030

Mabbett, D. and Bolderson, H. 1999. "Theories and methods in comparative social policy". In: Clasen J (ed.) *Comparative Social Policy: Concepts, Theories and Methods*. Oxford: Blackwell, 34–56.

Magallon-Rosa, R., Bolaños, V., Anderica, V. 2017. "Changing civil society in Spain through transparency and civic technologies", *Observatorio (OBS*)*, 11(3): 61-77.

Maharawal, M. M. 2014. "Protest of gentrification and eviction technologies in San Francisco. Prgressive Planning". https://doi.org/10.57912/23854653.v1

Maharawal, M.M. 2021. "Infrastructural activism: Google bus blockades, affective politics, and environmental gentrification in San Francisco", *Antipode*, 1-25.

Malena, C., Reiner, F., and Snigh, J. 2004. "Social Accountability An introduction to the concept and emerging practice", The World Bank Social Development. Paper no. 76

Mancini, P. 2018. "Political scandals as a democratic challenge: 'Assassination campaigns': corruption scandals and news media instrumentalization", *International Journal of Communication*, 12(20): 3067–3086.

Mancini, P., Mazzoni, M., and Zoltán, S. 2016. "Case studies on corruption involving journalists", ANTICORRP. D 6.2. https://anticorrp.eu/publications/casestudies -on-corruption-involving-journalists-conclusion/.

Mancini, P., Mazzoni, M., Cornia, A., and Marchetti, R. 2017. "Representations of corruption in the British, French, and Italian press: Audience segmen-

tation and the lack of unanimously shared indignation", *The International Journal of Press/Politics*, 22 (1): 67– 91.

Marquette, H., and Peiffer, C. 2015. "Corruption and Collective Action", Developmental Leadership Program, U4 Anti-Corruption Resource Centre, Bergen, Norway.

Mason, J. 2006. "Mixing methods in a qualitatively driven way", *Qualitative Research* 6(1): 9–25.

Matheus, R., Faber, R., Ismagilova, E., and Janssen, M. 2023. "Digital transparency and the usefulness for open government", *International Journal of Information Management*,73, https://doi.org/10.1016/j.ijinfomgt.2023.102690.

Mattern, S. 2016. "Scaffolding, hard and soft. Infrastructures as Critical and Generative Structures. In: spheres: *Journal for Digital Cultures*, (3): 1–10. DOI: https://doi.org/10.25969/mediarep/3844

Mattoni, A. 2013a. "Repertoires of communication in social movement processes". In Bart Cammaerts, B., Mattoni, A. and McCurdy, P. (Eds.) *Mediation and Social Movements, Intellect.*

Mattoni, A. 2013b. "Technology and Social Movements". In D.A. Snow, D. Della Porta, B. Klandermans and D. McAdam (Eds.), *The Wiley-Blackwell Encyclopedia of Social and Political Movements.* https://doi.org/10.1002/9780470674871.wbespm212

Mattoni, A., 2017. "From data extraction to data leaking: Data-activism in Italian and Spanish anti-corruption campaigns", *Partecipazione e conflitto*. 10:723 – 746.

Mattoni, A. 2020. "The grounded theory method to study data-enabled activism against corruption: Between global communicative infrastructures and local activists' experiences of big data", *European Journal of Communication*, 35(3), 265–277. https://doi.org/10.1177/0267323120922086

Mattoni, A. 2021. "Digital Media in Grassroots Anti-Corruption Mobilizations". In D. A. Rohlinger & S. Sobieraj (Eds.), *The Oxford Handbook of Sociology and Digital Media*: Oxford University Press.

Mattoni, A. 2024. (ed.) *Digital Media and Anti-Corruption from the Grassroots: Contexts, Platforms and Practices of Anti-Corruption Technologies Worldwide*. Edward Elgar Publishing.

Mattoni, A., and Ceccobelli, D. 2018. "Comparing hybrid media systems in the digital age: A theoretical framework for analysis", *European Journal of Communication*, 33. 026732311878483. 10.1177/0267323118784831.

Mattoni, A., and Ceccobelli, D. 2024. *Activists in the Data Stream. The Practices of Daily Grassroots Politics in Southern Europe.* Bristol: Bristol University Press.

Mattoni, A., and Odilla, F. 2021. "Digital Media, Activism, and Social Movements' Outcomes in the Policy Arena. The Case of Two Anti-Corruption Mobilizations in Brazil", *Partecipazione e Conflitto*, 14(3), 1127–1150. doi:10.1285/i20356609v14i3p1127

Mayer-Schönberger, V., Cukier, K. 2013, *Big data: A revolution that will transform how we live, work, and think*, Kindle ed. [s.l.], Houghton Mifflin Harcourt.

McAdam, D., Tarrow, S., and Tilly, C. 2001. *Dynamics of Contention*. Cambridge University Press

Meyer, D. 2005. "Social Movements and Public Policy: Eggs, Chicken, and Theory". In Meyer, D., Jenness, V. and Ingram, H. (Eds). *Routing the Opposition: Social Movements, Public Policy, and Democracy*. Minneapolis: University of Minnesota Press, 1-26.

Meyer, D. S. 2006. "Claiming credit: Stories of movement influence as outcomes", *Mobilization: An International Quarterly*, 11(3), 281–298. https://doi.org/10.17813/maiq.11.3.952k5670640t253u

Meyer, D. S. 2021. *How social movements (sometimes) matter*. John Wiley & Sons.

Meyer, D. S., and Whittier, N. 1994. "Social movement spillover", *Social Problems*, 41(2): 277–298. https://doi.org/10.2307/3096934

Micó, J. and Casero-Ripollés, A. 2014. "Political activism online: organization and media relations in the case of 15M in Spain, Information", *Communication & Society*, 17(7): 858-871, DOI: 10.1080/1369118X.2013.830634

Milan, S. 2013. *Social movements and their technologies: Wiring social change*. Basingstoke: Palgrave Macmillan.10.1057/9781137313546

Milan, S. 2017. "Data activism as the new frontier of media activism". In G. Yang & V. Pickard (Eds.), *Media Activism in the Digital Age*. Routledge.

Milan, S., and Beraldo, D. (2024). "Data in movement: the social movement society in the age of datafication", *Social Movement Studies*, 23(3): 265–284. https://doi.org/10.1080/14742837.2024.2331550

Milan, S., and Gutiérrez, M. 2015. "Citizens' media meets big data: the emergence of data activism", *Mediaciones*. 11(14): 120-133.

Milan S. and van der Velden L. 2016. "The alternative epistemologies of data activism", *Digital Culture & Society,* 2, 57–74.

Mungiu-Pippidi, A. 2005. *Romanian Coalition for a Clean Parliament: A Quest for Political Integrity.* European Research Centre for Anti-Corruption and State-Building. Working Papers.

Mungiu-Pippidi, A. 2006. "Corruption: Diagnosis and Treatment." *Journal of Democracy*, 17 (3): 86–99.

Mungiu-Pippidi, A. 2010. *Civil Society as an Anti-Corruption Actor in East Central Europe.* European Research Centre for Anti-Corruption and State Building. Working Papers.

Mungiu-Pippidi, A. 2013a. "Controlling Corruption Through Collective Action", *Journal of Democracy*, 24(1): 101-115.

Mungiu-Pippidi, A. (ed.) 2013b. *Controlling Corruption in Europe*. Opladen: Barbara Budrich Publishers.

Mungiu-Pippidi, A. 2015. *The Quest for Good Governance: How Societies Develop Control of Corruption*, Cambridge, UK: Cambridge University Press.

Mungiu-Pippidi, A. 2022. "Transparency and Corruption: Measuring real transparency by a new index", *Regulation and Governance*. DOI: 10.1111/rego.1250.

Mungiu-Pippidi, A., and Dadašov, R. 2016. "Measuring Control of Corruption by a New Index of Public Integrity", *European Journal on Criminal Policy Research* 22: 415–438. https://doi.org/10.1007/s10610-016-9324-z

Nagy, P., and Neff, G. 2015. "Imagined affordance: reconstructing a keyword for communication Theory", *Social Media + Society,* 1(2). https://doi.org/10.1177/2056305115603385

Najam, A. 2000. "The four C's of government third sector-government relations", *Nonprofit Management and Leadership*, **10**(4): 375– 396. https://doi.org/10.1002/nml.10403

Near, J. P., and Miceli, M. P. 1996. "Whistle-blowing: Myth and reality", *Journal of Management*, 22(3): 507–526. https://doi.org/10.1016/S0149-2063(96)90034-3

Nieborg, D. B., and Poell, T. 2018. "The platformization of cultural production: Theorizing the contingent cultural commodity", *New Media & Society*, 20(11): 4275-4292. https://doi.org/10.1177/1461444818769694

Nieborg, D. and Poell, T. 2019. "The Platformization of Making Media". In Deuze, M. and Prenger, M. (Eds), *Making Media Production, Practices, and*

Professions 10.1017/9789048540150.006. Amsterdam: Amsterdam University Press, 85-96.

Norris, P. 2014. "Watchdog Journalism". In Bovens, M., Goodin, R. E., and Schillemans, T. (Eds.), *Oxford Handbook of Public Accountability*. Ed.. Oxford University Press.

Nylen, W.R. 2011. "Participatory Institutions in Latin America: The Next Generation of Scholarship", *Comparative Politics* 43: 479–497.

Odilla, F. 2023. "Bots against corruption: Exploring benefits and limitations of AI-based anti-corruption technology", *Crime, Law and Social Change*: 1–44.

Odilla, F., and Mattoni, A. 2023. "Unveiling the layers of data activism: The organising of civic innovation to fight corruption in Brazil", *Big Data & Society*, 10(2). https://doi.org/10.1177/20539517231190078

Olson, M. 1971. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge, MA: Harvard University Press.

Orlando, E. 2020. "Giving full effect to citizen-centred anti-corruption action. Evaluation of a community-based monitoring European project". Master diss. Pisa University.

Palau A.M., and Palomo, J. 2021. "The Role of the News Media in Fighting Corruption Practices: A Case Study of Spain", *Journalism Studies*, 22(7): 839-859, DOI: 10.1080/1461670X.2021.1895871

Palau, A.M. and Davesa, F. 2013. "The Impact of Media Coverage of Corruption on Spanish Public Opinion". *Revista Española de Investigaciones Sociológicas*, 144: 97-124. http://dx.doi.org/10.5477/cis/reis.144.97

Parks, L., and Starosielski, N. 2015. *Signal Traffic: Critical Studies of Media Infrastructures*. Champaign, IL: University of Illinois Press.

Parwez, S. 2022. "Institutionalisation and Processes of Grassroots Innovations: Evidence from the Literature", *Journal of Entrepreneurship and Innovation in Emerging Economies*, 8(2): 258–269.

Patton, M. Q. 2002. "Two Decades of Developments in Qualitative Inquiry: A Personal, Experiential Perspective", *Qualitative Social Work*, 1(3): 261-283. https://doi.org/10.1177/1473325002001003636

Persson, A, Rothstein, B. and Teorell, J. 2013. "Why Anticorruption Reforms Fail— Systemic Corruption as a Collective Action Problem", *Governance*, 26 (39: 449–471.

Peruzzotti, E. 2012. "Broadening the Notion of Democratic Accountability: Participatory Innovation in Latin America", *Polity*, 44; 625-642.

Peters, B. G. 2007. "Performance-Based Accountability". In Anwar Shah (ed.) *Performance Accountability and Combating Corruption*. Washington, D.C.: The World Bank.

Pink, S. and Morgan, J. 2013. "Short-Term Ethnography: Intense Routes to Knowing", *Symbolic Interaction*, 36 (3): 351-361.

Plantin, J.C., Lagoze, C., Edwards, P.N., and Sandvig, C. 2018. "Infrastructure studies meet platform studies in the age of Google and Facebook", *New Media & Society*, 20(1): 293–310.

Plantin, J.C., and Punathambekar, A. 2019." Digital media infrastructures: pipes, platforms, and politics", *Media, Culture & Society*, 41(2), 163–174. https://doi.org/10.1177/0163443718818376

Porlezza, C., Splendore, S. 2019, "From Open Journalism to Closed Data: Data Journalism in Italy", *Digital Journalism*, 7 (9): 1230-1252.

Postill, J., and Pink, S. (2012). "Social Media Ethnography: The Digital Researcher in a Messy Web", *Media International Australia*, 145(1): 123-134. https://doi.org/10.1177/1329878X1214500114

Powers, M. 2018. *NGOs as Newsmakers. The Changing Landscape of International News*, New York, Columbia University Press.

Powers, M., and Russell, A. 2020. *Rethinking Media Research for Changing Societies*. Cambridge University Press.

Prior, L. 2003. *Using documents in social research*. SAGE Publications Ltd, https://doi.org/10.4135/9780857020222

Pybus, J., Coté, M., and Blanke, T. 2015. *Hacking the social life of Big Data*. Big Data & Society, 2(2). https://doi.org/10.1177/2053951715616649

Quilgars, D., Elsinga, M., Jones, A., Toussaint, J., Ruonavaara, H., and Naumanen, P. 2009 "Inside qualitative, cross-national research: making methods transparent in a EU housing study", *International Journal of Social Research Methodology* 12(1): 19–31.

Rädiker, S. 2023. *Doing grounded theory with MAXQDA. Guidance und tips for your practice*. Berlin: MAXQDA Press. https://doi.org/10.36192/978-3-948768164

Ragin, C. C. 1987. *The comparative method: Moving beyond qualitative and quantitative strategies*. Berkeley and Los Angeles, CA: University of California Press.

Reynolds, P. and Irwin, A. 2017. "Tracking digital footprints: anonymity within the bitcoin system", *Journal of Money Laundering Contro.* 20: 172- 189. 10.1108/JMLC-07-2016-0027.

Rispoli, F.R. 2022. "Piazze contro la corruzione. Trent'anni di mobilitazioni nel paese di mani pulite: 1992-2021". Ph.D. diss. Pisa University.

Romanos, E., Sádaba, I. 2016, "From the Street to Institutions through the App: Digitally Enabled Political Outcomes of the Spanish Indignados Movement", *Revista Internacional de Sociología*, 74 (4).

Rose, J., Persson, J.S., Heeager, L.T. and Irani, Z. 2015. "Managing e-government: Value positions and relationships", *Information Systems Journal*, 25(5): 531–571.

Rose-Ackerman, S. 1978. *Corruption: A Study in Political Economy*. New York: Academic Press.Routledge.

Rose-Ackerman, S. 2017. "What Does "Governance" Mean? Governance: An International Journal of Policy", *Administration and Institutions*, 30(1): 23-27, https://doi.org/10.1111/gove.12212

Rose-Ackerman, S. and Palifka, B. J. 2016. *Corruption and Government: Causes, Consequences, and Reform*. Cambridge: Cambridge University Press.

Rotberg, R. I. 2017. *The Corruption Cure: How Citizens and Leaders Can Combat Graft*. Princeton: Princeton University Press.

Rotulo, A., Kondilis, E., The, T., Gautam, S., Torcu, Ö., Vera-Montoya, M. et al. 2023. "Mind the gap: Data availability, accessibility, transparency, and credibility during the COVID-19 pandemic, an international comparative appraisal", *PLOS Glob Public Health*, 3(4): e0001148. https://doi.org/10.1371/journal.pgph.0001148

Russell, A. 2016, *Journalism as Activism: Recoding Media Power*, Cambridge, MA, Polity Press.

Russell, A. 2020. "Coming to terms with dysfunctional hybridity: A conversation with Andrew Chadwick on the challenges to liberal democracy in the second-wave networked era", *Studies in Communication Sciences*, 20(2): 211–225. https://doi.org/10.24434/j.scoms.2020.02.005

Ryvkin, D., Serra, D., and Tremewan, J. 2017. "I paid a bribe: Information sharing and extortionary corruption", *European Economic Review*, 94: 1-22.

Sampedro, V., and Sánchez-Duarte, J. M. 2011. "A modo de epilogo. 15M: la red era la plaza[The network was the square]". In V. Sampedro (Ed.), *Cibercampaña. cauces y diques para la participación. las elecciones generales de 2008 y su proyección tecnopolítica*. Madrid: UCM, 237–242.

Sberna, S., and Vannucci, A. 2013, "It's the politics, stupid!' : the politicization of anti-corruption in Italy", *Crime law and social change*, 60(5): 565-593. https://hdl.handle.net/1814/33730

Sberna, S., Vannucci, A. 2019. "Mafia and political corruption in Italy". In *Italian Mafias Today: Territory, Business and Politics*. Cheltenham, UK ; Northampton, MA: Edward Elgar Publishing.

Schäfer, M. T., and van Es, K., 2017. *The Datafied Society: Studying Culture through Data*. Amsterdam University Press. http://www.jstor.org/stable/j.ctt1v2xsqn.

Schatz, F. 2013. "Fighting Corruption with Social Accountability: A Comparative Analysis of Social Accountability Mechanisms' Potential to Reduce Corruption in Public Administration", *Public Administration and Development* , 33(3): 161-174.

Schnell, S. 2020. "Vision, Voice, and Technology: Is There a Global "Open Government" Trend?", *Administration & Society*, 52(10): 1593–1620. https://doi.org/10.1177/0095399720918316

Schrock, A. R. 2016. "Civic hacking as data activism and advocacy: A history from publicity to open government data", *New Media & Society*, 18(4): 581–599.

Schudson, M. 1998. *The Good Citizen: A History of American Public Life*. New York: Free Press.

Schudson, M. 2000. "Good citizens and bad history: Today's political ideals in historical perspective", *The Communication Review*. 4 (1): 1-19.

Schultz, D. and Harutyunyan, K. 2015. "Combating Corruption: The Development of Whistleblowing Laws in the United States, Europe, and Armenia." *International Comparative Jurisprudence* 1 (2): 87–97. https://doi.org/10.1016/j.icj.2015.12.005.

Schatzki, T.R. 2002. *Site of the Social: A Philosophical Account of the Constitution of Social Life and Change*. Pennsylvania: Pennsylvania State University Press.

Scolari, C. A., 2012. "Media ecology: Exploring the metaphor to expand the theory", *Communication Theory*, 22 (2): 204–225. doi: 10.1111/j.1468-2885.2012.01404.x

Scott, S. V., and Orlikowski, W. J. 2014. "Entanglements in practice: Performing anonymity through social media", *MIS Quarterly*, 38(3): 873–893.

Seawright, J., and Gerring, J. 2008. "Case Selection Techniques in Case Study Research: A Menu of Qualitative and Quantitative Options", *Political Research Quarterly*, 61(2): 294-308. https://doi.org/10.1177/1065912907313077

Selander, L. and Jarvenpaa, S. 2016. "Digital Action Repertoires and Transforming a Social Movement Organization", *MIS Quarterly*. 40. 331-352. 10.25300/MISQ/2016/40.2.03.

Selznick, P. 1949. *TVA and the Grass Roots: A Study of Politics and Organization*. Berkeley, CA: University of California Press.

Skolkay, A. 2016. "Media's controversial roles/impact on/in examples of (un)covering fraud with EU funds". In P. Smuk (Ed.), *Costs of Democracy*, Gondolat: Budapest, 152–176.

Smith, D.E. 1988. *The Everyday World as Problematic: A Feminist Sociology*. Milton Keynes: Open University Press.

Smulovitz, C., and Peruzzotti, E. 2000. "Societal Accountability in Latin America", *Journal of Democracy*, 11 (4):147-58.

Splendore, S. 2017. *Giornalismo ibrido. Come cambia la cultura giornalistica italiana* [Hybrid Journalism. How Italian Journalism Is Changing]. Roma: Carocci.

Staggenborg, S. 1986. "Coalition work in the pro-choice movement: Organizational and environmental opportunities and obstacles", *Social Problems*, 33(5): 374–390. https://doi.org/10.2307/800657

Star, S. L. 1999. "The Ethnography of Infrastructure", *American Behavioral Scientist*, 43(3), 377–391. https://doi.org/10.1177/00027649921955326

Star, S. L., and Bowker, G.C. 2002. "How to infrastructure?". In L. A. Lievrouw; and S. Livingstone (eds): *The Handbook of New Media: Social Shaping and Consequences of ICTs*. London: Sage, 151- 162.

Star, S., and Griesemer, J. 1989. "Institutional Ecology, 'Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39". *Social Studies of Science,* 19 (3): 387–420. doi: 10.1177/030631289019003001

Star, S.L., and Ruhleder, K. 1996." Steps toward an ecology of infrastructure: design and access for large information spaces", *Information Systems Research* 7: 111–134.

Stohl, C., Stohl, M., and Leonardi, P.M. 2016. "Managing opacity: Information visibility and the paradox of transparency in the digital age", *International Journal of Communication* 10(2016): 123–137.

Taibo, C. 2011. *El 15M en sesenta preguntas*, Madrid: La Catarata.

Tarrow, S. 2012. *Strangers at the Gates: Movements and States in Contentious Politics*, 1st edn. Cambridge and New York: Cambridge University Press.

Tarrow, S. 1995. "Cycles of Collective Action: Between Moments of Madness and the Repertoire of Contention". In M. Traugott (ed.), *Repertoires and Cycles of Collective Action* Durham, NC: Duke University Press, 89-115.

Taylor, L., Cowls, J., Schroeder, R., Meyer, E.T. 2014. "Big Data and Positive Change in the Developing World." *Policy and Internet* 6 (4): 418–444.

Tilly, C. 1978. *From Mobilization to Revolution*, Reading, MA: AddisonWesley.

Tilly, C. 2008. *Contentious Performances*. Cambridge: Cambridge University Press.

Tilly, C. and Tarrow, S. 2006. *Contentious Politics*. Paradigm Publishers.

Timonen, V., Foley, G., and Conlon, C. 2018. "Challenges When Using Grounded Theory: A Pragmatic Introduction to Doing GT Research", *International Journal of Qualitative Methods*. 17. 160940691875808. 10.1177/1609406918758086.

Torsello, D. 2016. *Corruption in Public Administration: An Ethnographic Approach*. Cheltenham, UK: Edward Elgar Publishing.

Treré, E. 2019. *Hybrid Media Activism: Ecologies, Imaginaries, Algorithms*. Routledge Studies in Radical History and Politics. London ; New York: Routledge, Taylor & Francis Group.

Treré, E. 2012. "Social movements as information ecologies: Exploring the co-evolution of multiple internet technologies for activism", *International Journal of Communication* 6: 2359–2377.

Treré, E. and Mattoni, A. 2016." Media ecologies and protest movements: main perspectives and key lessons", *Information, Communication & Society*, 19(3): 290–306, doi: 10.1080/1369118X.2015.1109699

Tumber, H., and Waisbord S. R. (2004). "Introduction: Political scandals and media across democracies", *American Behavioral Scientist* 47(8): 1031–39.

Urquhart, C. 2017. *Grounded Theory for Qualitative Research: A Practical Guide*.

Vaidya, S., 2005. "Corruption in the media's gaze", *European Journal of Political Economy*, 21(3): 667-687.

van Dijck, J., Poell, T., and De waal, M. 2018, *The Platform Society*. New York: Oxford University Press.

Van Laer, J., and Van Aelst, P. 2010. "Internet and Social Movement Action Repertoires: Opportunities and Limitations," *Information, Communication & Society* 13(8): 1146-1171.

van Nes, F., Abma, T., Jonsson, H., and Deeg, D. 2010. "Language differences in qualitative research: is meaning lost in translation?", *European Journal of Ageing*.7(4):313-316. doi: 10.1007/s10433-010-0168-y. Epub 2010 Nov 19. PMID: 21212820; PMCID: PMC2995873.

Vannucci, A. 2017. "Come cambia la corruzione in Italia: pulviscolare, sistemica, organizzata". In E. Ciconte, F. Forgione, I. Sales (Eds.), *Atlante delle mafie*, Soveria Mannelli, Rubbetino, vol.5: 43-65.

Vannucci, A. 2020. "Systemic corruption and disorganized anticorruption in Italy: Governance, politicization, and electoral accountability", *Civitas - Revista de Ciências Sociais*. 20: 408-424. 10.15448/1984- 7289.2020.3.37877.

Vukovic, D. 2014. "Civil Society, Accountable Government and the Rule of Law", *SSRN Electronic Journal*.

Waisbord, S. 2000. *Watchdog Journalism in South America: News, Accountability, and Democracy*. Columbia University Press.

Wall, M. 2017. "Citizen journalism: connections, contradictions, and conflicts". In: Franklin B and Eldridge S II (eds) *The Routledge Companion to Digital Journalism Studies*. London: Routledge.

Walle, Y. M. 2020. "The impact of digital government on whistleblowing and whistle-blower protection: Explanatory study", *Journal of Information Technology Management*, 12(1): 1-26.

Walton, G., and Jones, A. 2017. "The Geographies of Collective Action, PrincipalAgent Theory and Potential Corruption in Papua New Guinea." Development Policy Centre Discussion Paper 58. Australian National University, Canberra.

Wampler, B. 2008. "When Does Participatory Democracy Deepen the Quality of Democracy? Lessons from Brazil." *Comparative Politics* 41(1): 61–81.

Weder, B., and Brunetti, A. 2003. "A free press is bad news for corruption", *Journal of Public Economics*, 87(7–8): 1801–24.

Weisskircher, M. 2019. "New Technologies as a Neglected Social Movement Outcome: The Case of Activism against Animal Experimentation", *Sociological Perspectives*, 62(1): 59-76.

Witschge, T., Anderson, C., Domingo, D., and Hermida, A. 2019. "Dealing with the mess (we made): Unraveling hybridity, normativity, and complexity in journalism studies", *Journalism*, 20(5): 651-659.

Yu H., and Robinson D. G. 2012. *The new ambiguity of "open government"* (Working Paper No, 12-01). Princeton Center for Information Technology Policy.

Zinnbauer, D. 2015. "Crowdsourced Corruption Reporting: What Petrified Forests, Street Music, Bath Towels, and the Taxman Can Tell Us about the Prospects for Its Future" *Policy & Internet* 7(1):1–24.

Table 1 – Drawing a situational map: the main elements that define a situation (based on Clarke et al. 2018)

TYPES OF ELEMENTS	CONCRETE EXAMPLES
HUMAN AS INDIVIDUALS	**IMPLICATED INDIVIDUAL ACTORS** (physically present/not physically present): Individual, activists (collective actions), experts, concerned citizens (people concerned about political, economic and social issues), academics, consultants, journalists, developers, students, lawyers, media owners, politicians, celebs/digital influencers, content curator/ social media manager, bloggers, users.
HUMAN AS COLLECTIVE ACTORS	**IMPLICATED COLLECTIVE ACTORS** (physically present/not physically present): communities, religious organizations, private actors, economic actors, international actors, political parties, labour organizations, political, collectives/social movement organizations or social movement networks/social movement coalitions, public actors, NGOs and associations, universities, news media actors, legal/judicial actors.
NON-HUMAN ACTORS	**IMPLIED ACTANTS** (physically present/not physically present): technological devices, IT and web-based services, physical/digital infrastructure, artificial intelligence, cultural objects, material elements, legal elements.
SPATIAL ELEMENTS	Public spaces, commercial spaces, domestic spaces, labour spaces, institutional spaces, religious spaces, sport spaces, cultural spaces, activists' spaces
DISCURSIVE AND SYMBOLIC ELEMENTS	Ideas, ideology, rhetoric, collective identity/-ies, master frames, collective and personal action frames, framing devices
TEMPORAL ELEMENTS	Scandals, court cases and related decisions, elections, military coups, revolutions/mass protests, terrorist attacks, crisis
STRUCTURAL ELEMENT	
POLITICAL ELEMENTS	Political systems, party system, centralization/decentralization of state's power (federalism), prevailing strategies of govt forms and levels of e-governance
ECONOMIC ELEMENTS	Fundings, type of market, ease of doing business, digitalization of money, offshore investments
SOCIO-CULTURAL ELEMENTS	Divides (digital, gender, minorities, etc.), festivities and traditions, social inequalities, polarization/cleavages, media diet
LEGAL ELEMENTS	Transparency capacity, anti-corruption legal framework, framework for citizen participation
CORRUPTION ELEMENTS	Forms of corruption, sectors prone to corruption, perception of corruption, type of corruption system, corruption and anti-corruption discourses
RELATIONS BTW ELEMENTS	
	Cooptation, partnership, repression, sponsor/funder, co-creation, co-operation, collaboration, competition, contentious, exposure, inclusion, exclusion, utilization, reproduction, replication, diffusion, producer, consumer

Figure 1 - The relational map drawn upon the messy situational map: the case of Common

Figure 2 - The social world map: the case of Common

CASE 1 — ITALY

COMMON

SOCIAL WORLD — ARENAS Map   Meso level

aim: locate intersections of collective actors

MODEL MAP.
[Fosket]

LIBERA

GRUPPO ABELE

OnDATA

DEPONATI

CONFISCATIBENE 2.0

MASTER APC

AVVISO PUBBLICO

COMMON

ANAC

UNIV. STRADA
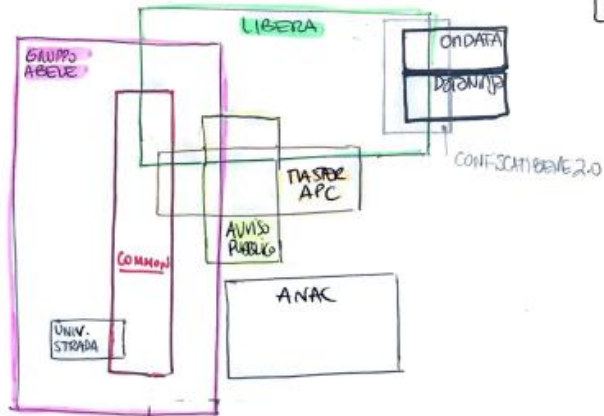
OPEN DATA SICILIA

Figure 3 - The relational map drawn upon the messy situational map: the case of Openpolis
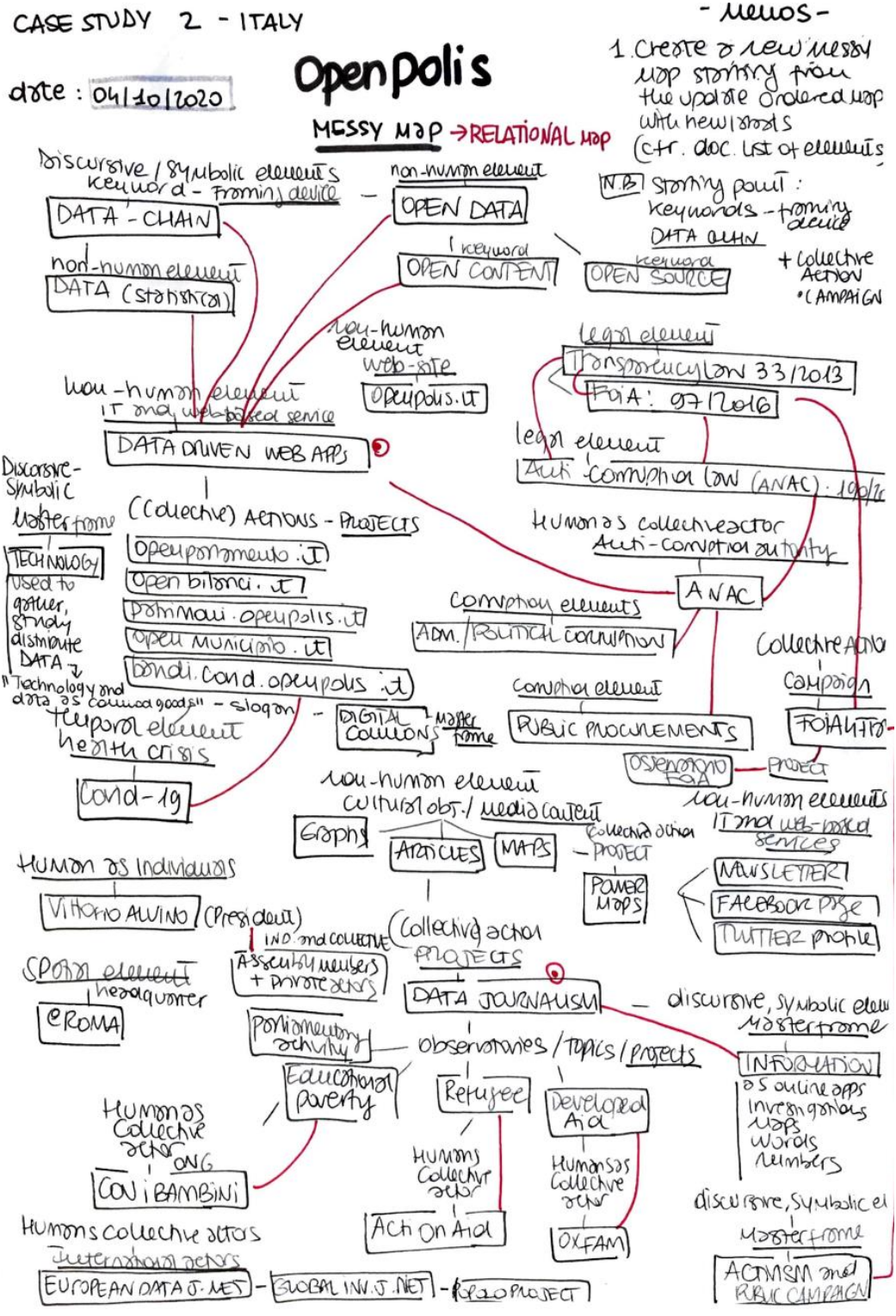
Figure 4 – The social world map: the case of Openpolis
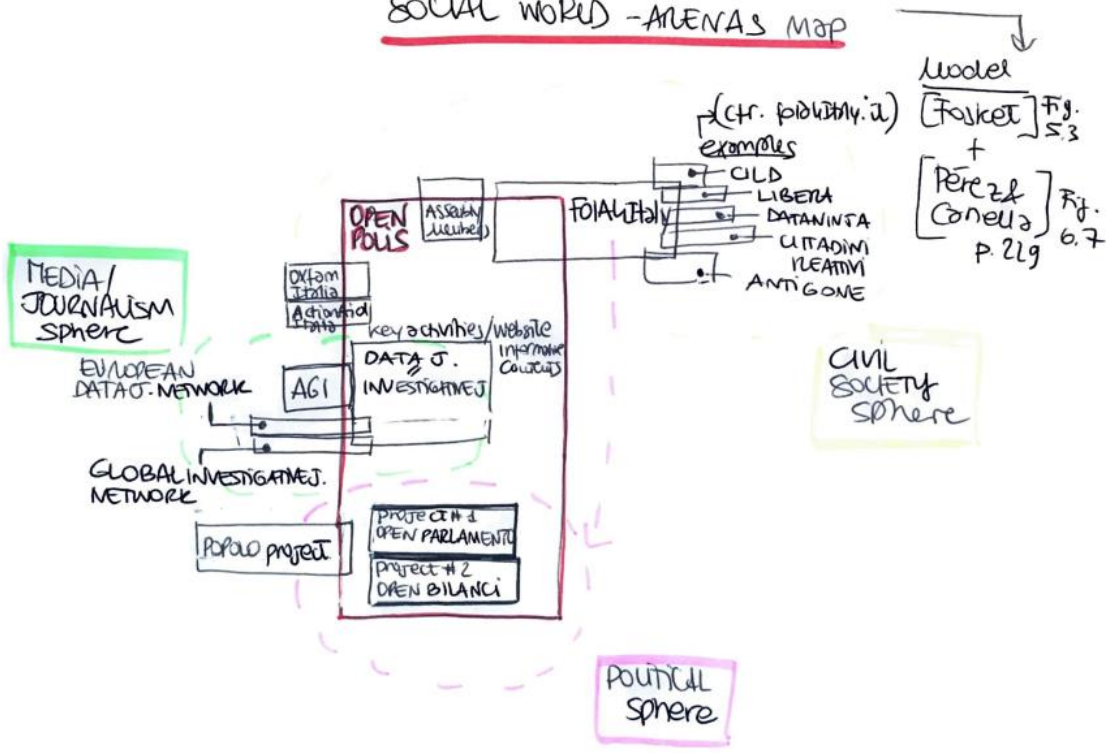
Figure 5 - The relational map drawn upon the messy situational map: the case of Civ-io
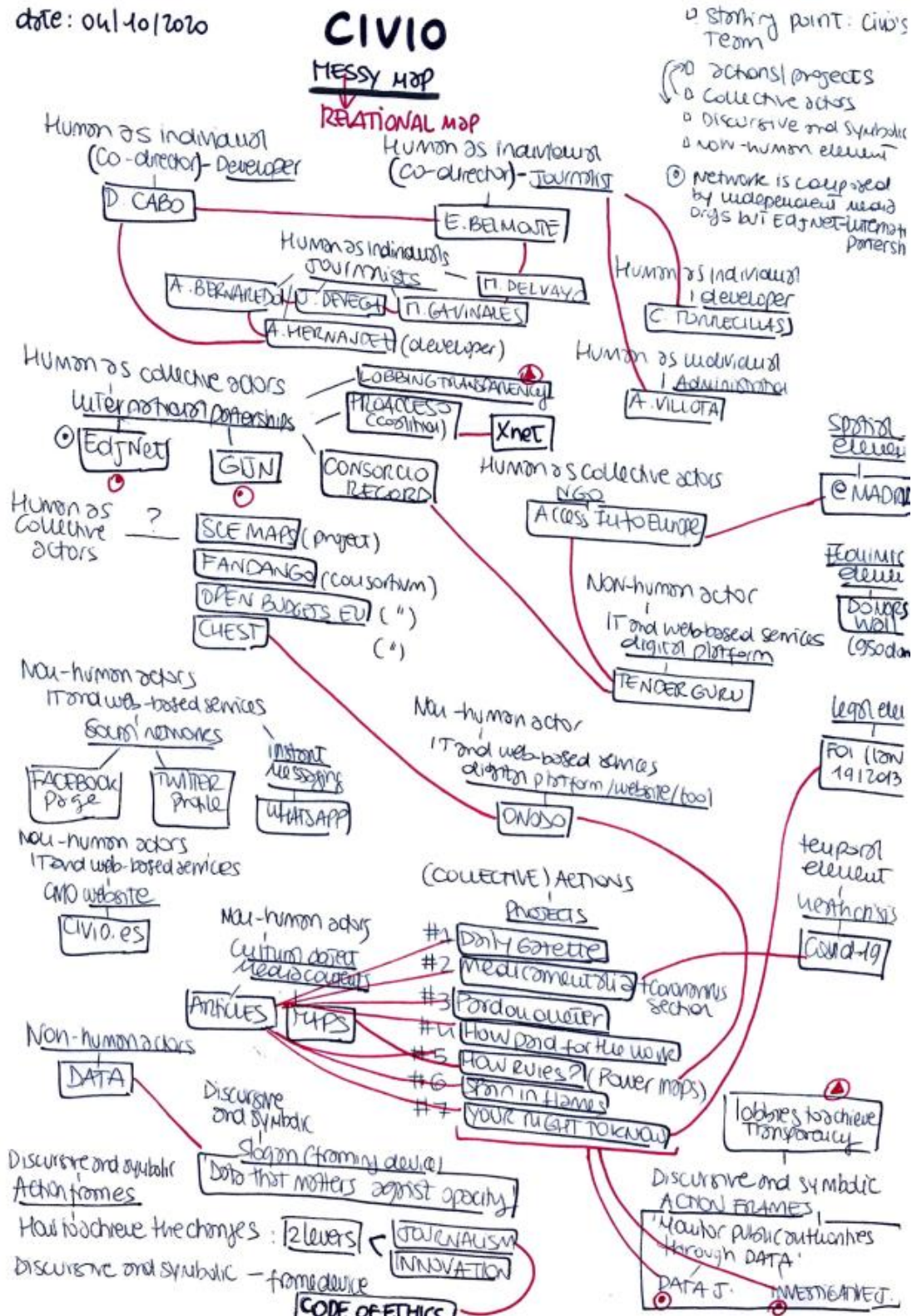
Figure 6 - The social world map: the case of Civio
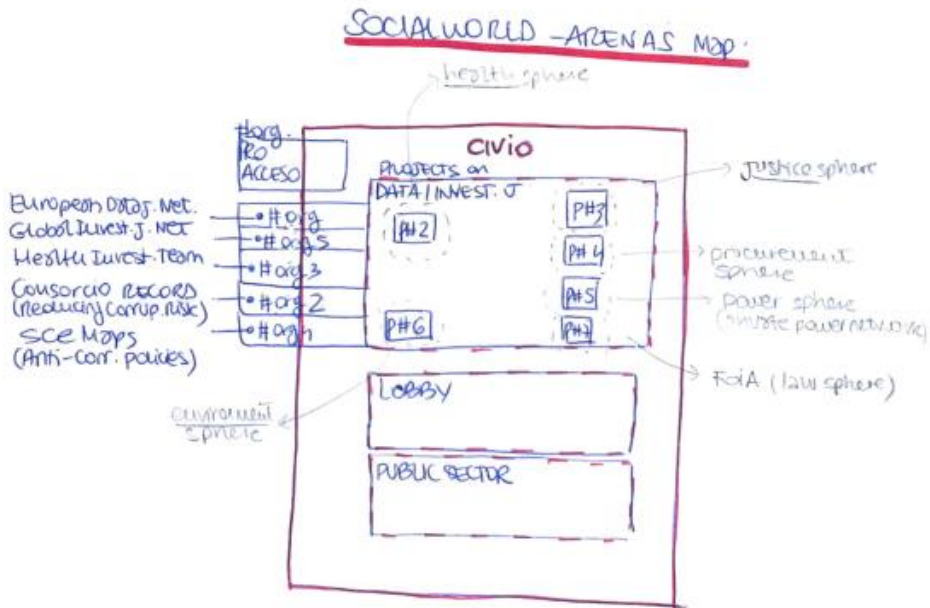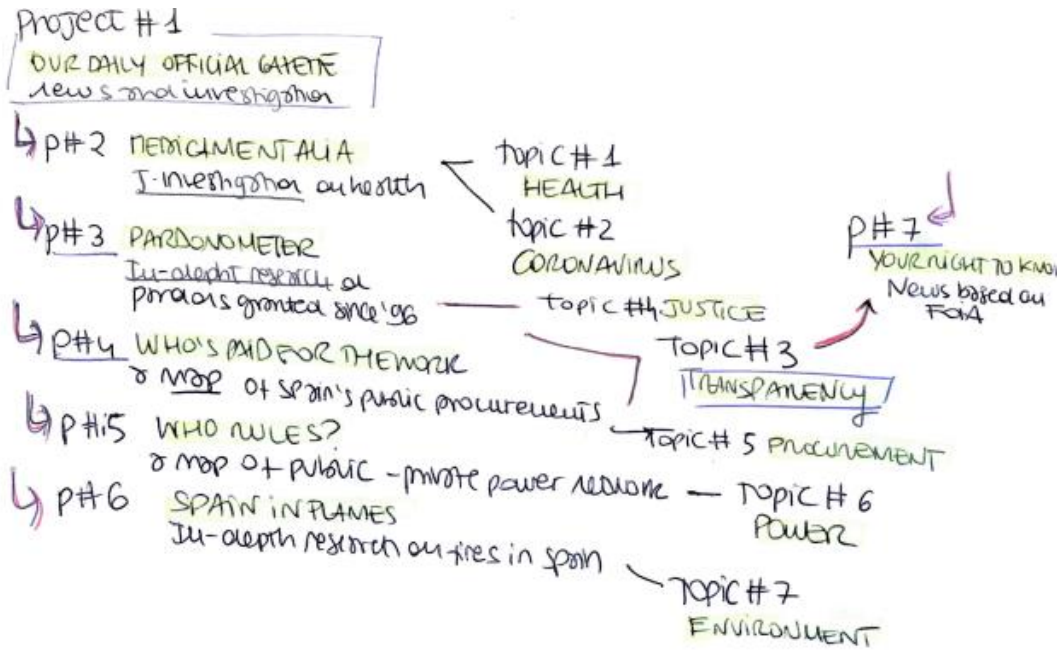
Figure 7 - The relational map drawn upon the messy situational map: the case of Xnet

278
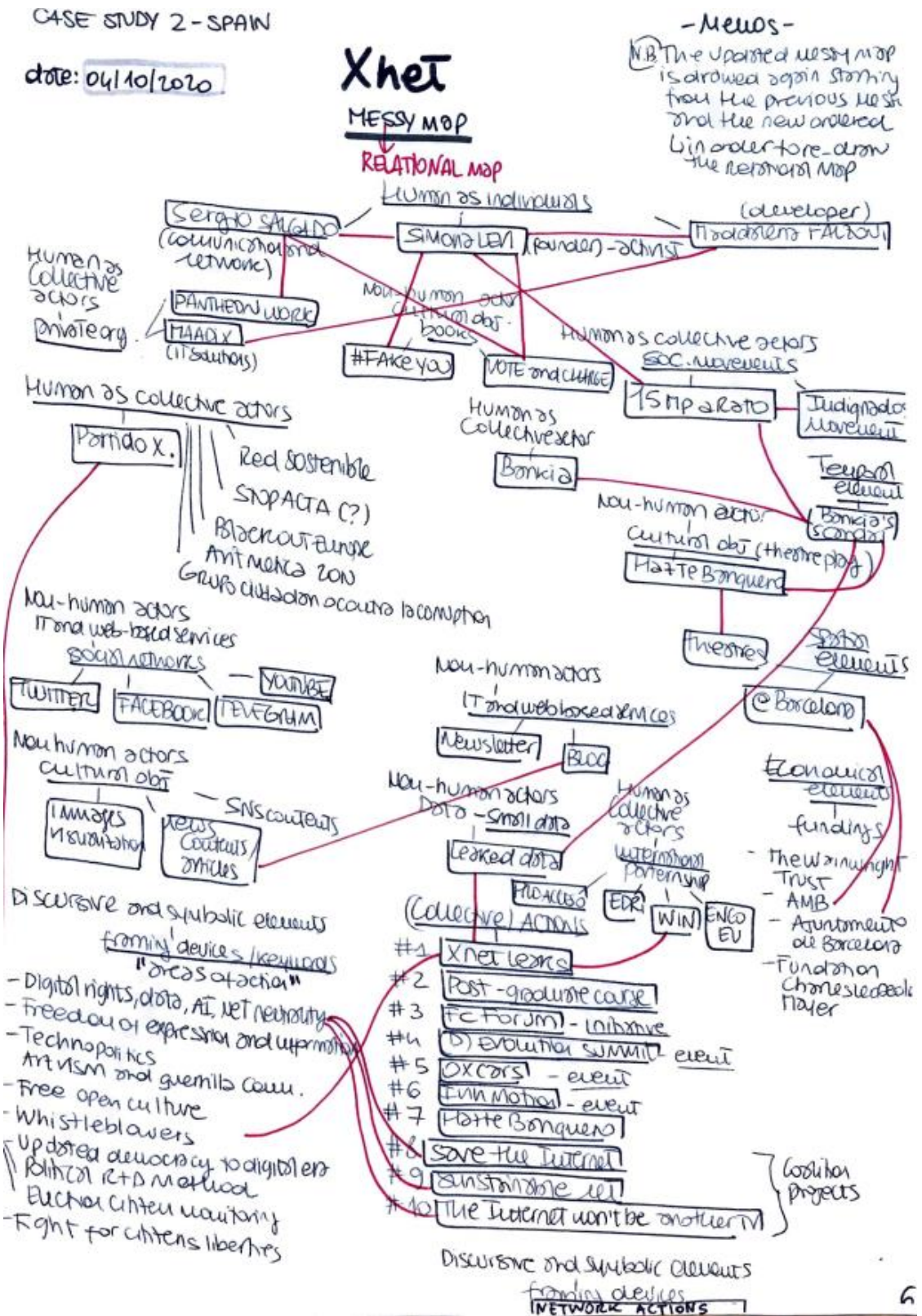
Figure 8– The social world map: the case of Xnet
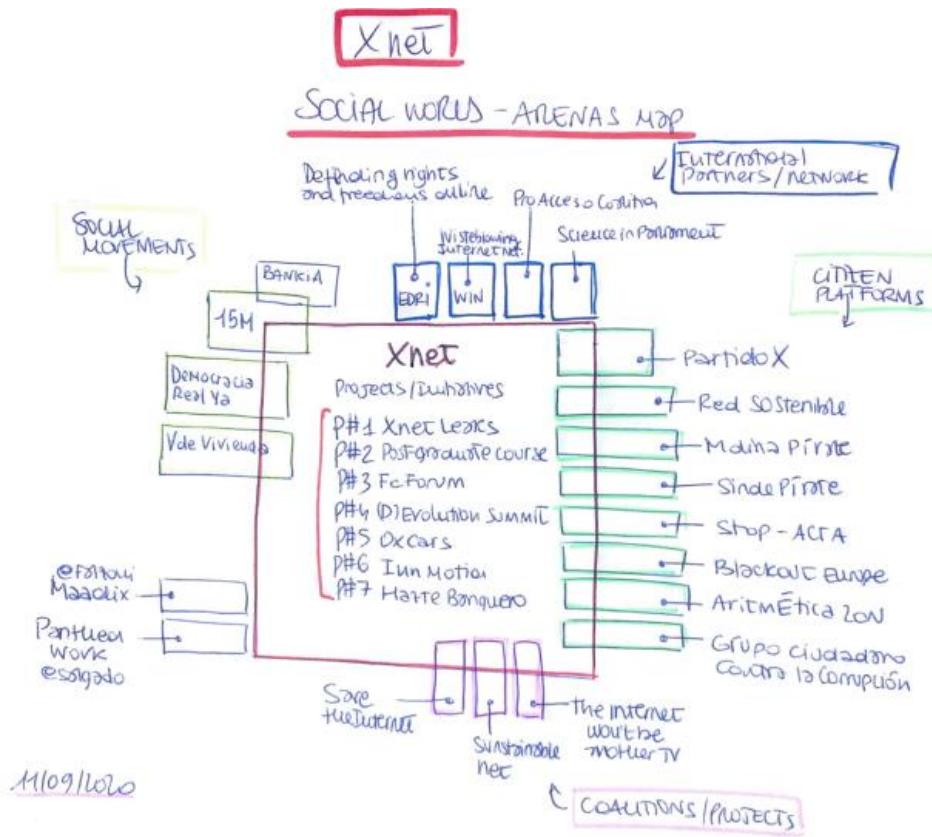
Table 2 - List of (N=34) semi-structured interviews

	Country	Case study	Corresponding code	Type of Research Participant	Used for Phase 3	Year (data collection)
1	IT	Common	Monitoring_CS01_INT001	Initiator-Activist	X	2021
2	IT	Common	Monitoring_CS01_INT002	Activist	X	2023
3	IT	Common	Monitoring_CS01_INT003	Activist	X	2023
4	IT	Openpolis	Monitoring_CS02_INT001	Initiator	X	2020
5	IT	Openpolis	Monitoring_CS02_INT002	Initiator-Tech Developer	X	2020
6	IT	Openpolis	Monitoring_CS02_INT003	Initiator-Journalist	X	2020
7	IT	Openpolis	Monitoring_CS02_INT004	Initiator-Tech Developer	X	2021
8	IT	Openpolis	Monitoring_CS02_INT005	Journalist/Analyst	X	2023
9	IT	Openpolis	Monitoring_CS02_INT006	Journalist/Analyst	X	2023
10	IT	Openpolis	Monitoring_CS02_INT007	Journalist/Analyst		2023
11	IT	Openpolis	Monitoring_CS02_INT008	Journalist/Analyst		2023
12	IT	Openpolis	Monitoring_CS02_INT009	Journalist/Analyst		2023
13	IT	Openpolis	Monitoring_CS02_INT010	Web designer		2023
14	IT	Openpolis	Monitoring_CS02_INT011	Communication referent		2023
15	IT	Openpolis	Monitoring_CS02_INT012	Initiator		2023
16	SP	Civio	Monitoring_CS03_INT001	Initiator-Tech Developer	X	2022
17	SP	Civio	Monitoring_CS03_INT002	Journalist/Analyst	X	2022
18	SP	Civio	Monitoring_CS03_INT003	Journalist/Analyst	X	2022
19	IT	ALAC/ Whistle-blowing PA	Whistleblowing_CS02_CS03_INT001	Initiator-Tech Developer (GlobaLeaks)	X	2021
20	IT	ALAC/ Whistle-blowing PA	Whistleblowing_CS02_CS03_INT002	Initiator-Activist (TI-Italy)	X	2021
21	IT	ALAC/ Whistle-blowing PA	Whistleblowing_CS02_CS03_INT003	Public Servant (ANAC)	X	2021
22	SP	Buzon X	Whistleblowing_CS01_INT001	Initiator-Activist (Xnet)	X	2021
23	SP	Buzon X	Whistleblowing_CS01_INT002	Initiator-Activist (Xnet)	X	2021
24	SP	Buzon X	Whistleblowing_CS01_INT003	Initiator-Activist (Xnet)	X	2022

25	SP	Buzon X	Whistleblowing_CS01_INT004	Initiator-Tech Developer (GlobaLeaks)	X	2022
26	SP	Buzon X	Whistleblowing_CS01_INT005	Activist (TI-Spain)	X	2022
27	SP	Buzon X	Whistleblowing_CS01_INT006	Activist (TI-Spain)	X	2022
28	SP	Buzon X	Whistleblowing_CS01_INT007	Activist (TI-Spain)	X	2022
29	SP	Buzon X	Whistleblowing_CS01_INT008	Activist (Observatori Ciutadà Contra la Corrupció)	X	2022
30	SP	Buzon de denuncias (Agencia Valenciana Antifraude) / Buzón Ético y de Buen Gobierno (Municipality of Barcelona)	Whistleblowing_CS04-CS06_INT001[177]	Public Servant	X	2022
31	SP	Buzon de denuncias (Agencia Valenciana Antifraude)	Whistleblowing_CS04_INT002	Public Servant	X	2022
32	SP	Buzon de denuncias (Agencia Valenciana Antifraude)	Whistleblowing_CS04_INT003	Public Servant		2022
33	SP	Buzon de denuncias (Agencia Valenciana Antifraude)	Whistleblowing_CS04_INT004	Public Servant		2022
34	SP	Buzon de denuncia anonimas (Oficina Antifraude de Cataluña)	Whistleblowing_CS05_INT001	Public Servant	X	2022

[177] The interviewee was previously involved in Buzón Ético y de Buen Gobierno, Municipality of Barcelona

Table 3 - List of (N=5) short-term offline participant observations

	Country	Case study	Corresponding code	Type of Part.Obs.	Used for Phase 3	Year (data collection)
1	IT	Common	Monitoring_CS01_OFF_PART.OBS_001	Offline (Scuola Common 2020, Turin)[178]	X	2020
2	IT	Common	Monitoring_CS01_OFF_PART.OBS_002	Offline (Scuola Common 2021, Turin)[179]	X	2021
3	IT	Common	Monitoring_CS01_OFF_PART.OBS_003	Offline (Scuola Common 2022, Turin)[180]	X	2022
4	IT	Common	Monitoring_CS01_OFF_PART.OBS_004	Offline (Public Event organized by Libera 21/03/2023, Milan)[181]		2023
5	IT	Openpolis	Monitoring_CS02_OFF_PART.OBS_001	Offline (Openpolis's headquarters: 5-12 May 2023, Rome)		2023

[178] Scuola Common 2020: 30 September – 3 October 2020, Turin.

[179] Scuola Common 2021: 28 – 31 October 2021 Turin.

[180] Scuola Common 2022: 13 – 16 October 2022, Turin.

[181] XXVIII Giornata della Memoria e dell'impegno in ricordo delle vittime innocenti delle mafie - Seminar: È possibile monitorare il PNRR? Una riflessione tra esperienze civiche: 21 March 2023, Milan

Table 4 - List of (N=6) short-term online participant observations

	Country	Case study	Corresponding code	Type of Part.Obs.	Used for Phase 3	Year (data collection)
1	IT	Common	Monitoring_CS01_ON_PART.OBS_001	Online event (kick-off YouMonitor 9/12/2020)[182]		2020
2	IT	Common	Monitoring_CS01_ON_PART.OBS_002	Online seminar on corruption 16/12/2021[183]		2021
3	IT	Open-polis	Monitoring_CS02_ON_PART.OBS_001	Webinar (ACT week 26/02/2021)[184]		2021
4	IT	TI-Italy	Whistlebling_CS02_CS03ON_PART.OBS_001	ACT Week: webinars 22-26 Febr. 2021[185]		2021
5	IT	TI-Italy	Whistleblowing_CS02_CS03ON_PART.OBS_002	ACT- Anti-corruption City Toolkit, online event 23/03/2021[186]		2021
6	IT	TI-Italy	Whistleblowing_CS02_CS03ON_PART.OBS_003	TI-Italy hybrid event on CPI 2022, 31/01/2023[187]		2023

[182] Events that involve Common's actors: The launch of the YouMonitor project 09/12/2020.
[183] GIN (https://globalinitiative.net/): The role of transnational organized crime in corruption 16/12/2021
[184] ACT- Anti-corruption City Toolkit: webinar, Febr. 2021
[185] See footnote 8.
[186] International conference: 23/03/2021 on ACT- Anti-corruption City Toolkit, online event, 23 March 2021
[187] PRESENTAZIONE Indice di Percezione della Corruzione - CPI 2022

Table 5 - List of (N=20) documents

	Country	Case study	Corresponding code	Type of document	Used for Phase 3	Year (data collection)
1	IT	Common	Monitoring_CS01_DOC_001	Activity Report (Indagine partecipata di monitoraggio del Pnrr: "Il PNRR ai raggi X")	X	2022
2	IT	Common	Monitoring_CS01_DOC_002	Activity Report (Indagine partecipata di monitoraggio del Pnrr: "Il PNRR ai raggi X, 2nd Edizione")	X	2023
3	IT	Common	Monitoring_CS01_DOC_003	Activity Report (RimanDATI, Libera, Gruppo Abele, DCPS UNITO)		2023
4	IT	Openpolis	Monitoring_CS02_DOC_001	Impact Report 2019[188]	X	2020
5	IT	Openpolis	Monitoring_CS02_DOC_002	Activity Report 2021[189]	X	2022
6	IT	Openpolis	Monitoring_CS02_DOC_003	Activity Report 2022[190]	X	2023
7	SP	Civio	Monitoring_CS03_DOC_001	Activity Report (¡10° aniversario de Civio!)[191]	X	2022
8	SP	Civio	Monitoring_CS03_DOC_002	Other doc (News Article)[192]	X	2023
9	SP	Civio	Monitoring_CS03_DOC_003	website section (We Lobby)	X	2022
10	SP	Civio	Monitoring_CS03_DOC_004	website section (Impact)[193]	X	2022
11	SP	Civio	Monitoring_CS03_DOC_005	website section (Code of Ethics)[194]	X	2022

[188] https://www.openpolis.it/wp-content/uploads/2019/07/Impact_report_openpolis_foundation_en.pdf
[189] https://www.openpolis.it/wp-content/uploads/2023/01/activity_report_2021_ita.pdf
[190] https://fondazione.openpolis.it/web/content/3487?unique=0a8e49d600d095b21ba963170fa7a6abfc578a39
[191] https://civio.es/aniversario/
[192] https://civio.es/tu-derecho-a-saber/2023/06/29/access-to-public-information-foia-europe/
[193] https://civio.es/nosotros/impacto/
[194] https://civio.es/nosotros/codigo-etico/

12	SP	Civio	Monitoring_CS03_DOC_006	YT Video transcription[195]		2021
13	IT	ALAC/Whistleblow-ingPA	Whistleblowing_CS02-CS03_DOC_001	Activity Report (A voce alta. Un anno di segnalazioni 2015)	X	2023
14	IT	ALAC/Whistleblow-ingPA	Whistleblowing_CS02-CS03_DOC_002	Activity Report (A voce alta. Un anno di segnalazioni 2018)	X	2023
15	IT	ALAC/Whistleblow-ingPA	Whistleblowing_CS02-CS03_DOC_003	Activity Reports (Whistleblowing 2020)	X	2023
16	IT	ALAC/Whistleblow-ingPA	Whistleblowing_CS02-CS03_DOC_004	Other doc (Risposta appello Hermes Center – ANAC)[196]	X	2021
17	SP	BuzonX	Whistleblow-ing_CS01_DOC_001	Video transcription: the theatre performance Hazte Banquero[197]		2022
18	SP	Buzon de denuncias (Agencia Valenciana Antifraude)	Whistleblow-ing_CS04_DOC_001	Activity Report (Memoria 2021)[198]		2022
19	SP	Buzon de denuncia anonimas (Oficina Antifraude de Cataluña)	Whistleblow-ing_CS05_DOC_001	Activity Report (Memoria 2018)[199]		2022
20	SP	Buzón Ético y de Buen Gobierno (Municipality of Barcelona)	Whistleblow-ing_CS06_DOC_001	Activity Report (2018-2019 memorias de actividad)[200]		2022

[195] Entrevista a David Cabo y Eva Belmonte de Fundación Ciudadana Civio:
https://www.youtube.com/watch?v=sDwCnb5Eqzw&ab_channel=ehdmagazine
[196] https://www.anticorruzione.it/documents/91439/6eb586ad-e55e-18d1-9cfb-ce5e7959c4cb
[197] https://xnet-x.net/hazte-banquero/
[198] https://www.antifraucv.es/wp-content/uploads/2022/03/MEMORIA-DE-ACTIVIDAD-2021-CAS.pdf
[199] https://www.antifrau.cat/sites/default/files/Documents/Quefem/Antifrau-Memoria-2018.pdf
[200] https://ajuntament.barcelona.cat/bustiaetica/es/direccion-de-servicios-de-analisis/acciones-de-la-direccion/memorias

Table 6 - A comprehensive list of data collected and employed as" background information"

	N=17 **Semi-structured interviews**	N=1 **Short-term offline part.obs.**
Observatorio Ciudadano contra la Corrupción (AVAF) (Spain)	(2) Initiators	
Fundacion Justicia (AVAF) (Spain)	(1) Main referent	
Accion Civica (AVAF) (Spain)	(1) Main referent	
Goteo (Civio, Xnet) (Spain)	(1) Staff Member	
Decidim (Spain)	(1) Staff Member	
Filtrala (Xnet, GlobaLeaks) (Spain)	(1) Initiator-Tech Developer	
Irpileaks (IRPI, GlobaLeaks) (Italy)	(1) Journalist	(1) DIG Festival, Oct.2021, Modena
Linea Libera (Italy)	(3) - Main referent of Linea Libera (1) - Staff members in charge of receiving calls /emails (2)	
Expert Interviews	(6) - Media Scholars (4) - Corruption Scholars(2)	

Table 7 – Insights from the coding process: the key sets of codes for whistleblowing initiatives

KEY SETS OF CODES	KEY FOCUSED CODES (and sub-codes)
(1) Concrete Outcomes	• **Diffusion of ACT among national public authorities** • Fostering the creation of AC authority at the regional level • **Diffusing ACT among public sector** • **Triggering other projects** • **Diffusion of ACT among other CSOs** • **Diffusing the initiative among media** • **Diffusing AC projects internationally** • **Transnational diffusion of technology**
(2) Narratives about the outcomes	• **Be perceived as referent for whistleblowing phenomenon** • **Fostering institutions to adopt a law to protect whistleblowers** • **Forming understanding of corruption-related issues** • Contribute to normalization/acceptance of whistleblowing
(3) Relationships	• **Collaborating with other CSOs** • Building bottom-up partnerships • Activism realm is extremely interconnected • **Collaborating with public authorities** • Collaborative relations affect whistleblowing • Assisting public actors in whistleblowing process • Collaborative relations based on mutual recognition • Being recognised by authorities • Recognizing the crucial role of CSOs in AC • **Looking for recognition in AC arena** • **Not being recognized by authorities/law/government** • **Conflictual relationships with public authorities** • Acting as an institutional channel without inst. Recognition • Acting as an alternative to the institutional actor
(4) Definition of anti-corruption	• **Anti-Corruption as a state effort** • Anti-Corruption as dependent on the State • **Anti-corruption as a shared duty/common effort** • **Anti-corruption is almost a civil society effort**
(5) Motivations to engage in AC initiatives	• **Striving to generate a cultural impact on AC** • **Increase the accountability of public actors** • Striving to support anti-corruption institutions • **Motivated to serve society with own expertise** • **CSOs filling in the role of institutions** • **Motivated about ACT for its potential** • Being inspired by popularity of the ACT
(6) Repertoire of Contention	• **Employ advocacy** • **Pressuring gov. for reaction**
(7) Imaginaries and Perception of technologies	• **Seeing technology as a tool to empower citizens** • **Recognising tech poses security challenges**

(8)Consequences and Effects of Using tech	- **Technology as leverage to upscale anti-corruption initiatives**
	- Tech guaranteeing user security
	- Tech enabling user anonymity
	- Tech generating evidence against corruption
	- **Tech enabling whistleblowing**
	- **Technology structuring whistleblowing process**
	- **Tech structuring collaborative efforts**
	- **Control over platform structuring activities**
	- Seeing AC CSOs as intermediaries btw AC authority & whis
	- **Using secure ACT increase trust in public institutions**

Figure 9 - Code Map of the Italian whistleblowing initiatives (own elaboration)

(1) Relational dynamics in the anti-corruption arena

(2) Institutional Recognition in the anti-corruption arena

(3) Features of whistleblowing technologies

(2.2) Looking for recognitions

Acting as an institutional channel without inst. Recognition

PNFC - Looking for recognition in AC arena

PNFC - Collaborative relations based on mutual recognition

PNFC - Seeing AC CSOs as intermediaries btw AC authority & whis

Acting as an alternative to the institutional actor

PNFC - Be perceived as referent for whistleblowing phenomenon

PNFC - Anti-corruption as a shared duty/common effort

Being recognised by authorities

(3.1) Technologies means security and anonimity

Technology as leverage to upscale anti-corruption initiatives

Fostering institutions to adopt a law to protect whistleblowers

Technology structuring whistleblowing process

Control over platform structuring activities

Tech guaranteeing user security

Tech enabling whistleblowing

Tech enabling user anonymity

(3.2) Technology as structuring agent

PNFC - Striving to generate a cultural impact on AC

Conflictual relationships with public authorities

(1.3) Conflictual relational dynamics between CSOs and public authorities

CSOs filling in the role of institutions

PNFC - Contribute to normalization/ acceptance of whistleblowing

PNFC - Assisting public actors in whistleblowing process

(1.2) Collaborative relational dynamics between CSOs and public authorities

PNFC - Increase the accountability of public actors

Anti-Corruption as a state effort

Motivated to serve society with own expertise

Diffusion of ACT among national public authorities

Building bottom-up partnerships

(1.1) Collaborative relational dynamics between different CSOs

Collaborating with other CSOs

Striving to support anti-corruption institutions

289

Figure 10 - Code Map of the Spanish whistleblowing initiatives (own elaboration)

(1) Relational dynamics in the anti-corruption arena

(2) Institutional Recognition in the anti-corruption arena

(3) Features of whistleblowing technologies

(3.1) Technologies means security and anonimity

Tech enabling user anonymity

Technology as leverage to upscale anti-corruption initiatives

Tech generating evidence against corruption

PNFC - Diffusing ACT among public sector

PNFC - Diffusion of ACT nationally

(3.2) Technology as structuring agent

Tech enabling whistleblowing

Tech guaranteeing user security

Seeing technology as a tool to empower citizens

Recognising tech poses security challenges

Technology structuring whistleblowing process

Control over platform structuring activities

(1.1) Collaborative relational dynamics between CSOs and public authorities

PNFC - Collaborative relations based on mutual recognition

PNFC - Collaborative relations affect whistleblowing

Being recognised by authorities

(2.1) Be recognized by public institutions/ AC authorities

PNFC - Collaborating with public authorities (+)

PNFC - Recognizing the crucial role of CSOs in AC

Diffusion of ACT among national public authorities

Fostering institutions to adopt a law to protect whistleblowers

Figure 11 – MAXMap: Shared and diverged codes between the Italian interviewees (own elaboration)

Cat.1 - Relational dynamics

Cat.2 Institutional recognition

Cat.3 - Features of whistleblowing tech

Outcomes /their narration

Building bottom-up partnerships

PNFC - Activism realm is extremely interconnected

Collaborating with other CSOs

PNFC - Not being recognised by authorities/law/government

Control over platform structuring activities

Transnational diffusion of technology

PNFC - Diffusion of ACT nationally

Seeing technology as a tool to empower citizens

CSOs filling in the role of institutions

Tech structuring collaborative efforts

Acting as an alternative to the institutional actor

Tech generating evidence against corruption

Motivated about ACT for its potential

PNFC - Diffusing the initiative among media

PNFC - Diffusion of ACT among other CSOs

PNFC - Anti-corruption is almost a civil society effort

Spain_Activists and TechDev

Recognising tech poses security challenges

PNFC - Collaborating with public authorities (+)

Tech guaranteeing user security

Technology as leverage to upscale anti-corruption initiatives

Diffusion of ACT among national public authorities

Tech enabling user anonymity

Fostering institutions to adopt a law to protect whistleblowers

Forming understanding of corruption related issues

PNFC - Diffusing ACT among public sector

PNFC - Collaborative relations affect whistleblowing

PNFC - Striving to generate a cultural impact in AC

Being recognised by authorities

PNFC - Assisting public actors in whistleblowing process

PNFC - Looking for recognition in AC arena

Tech enabling whistleblowing

PNFC - Collaborative relations based on mutual recognition

PNFC - Diffusing AC projects internationally

Technology structuring whistleblowing process

PNFC - Recognizing the crucial role of CSOs in AC

Spain_Public Servants

PNFC - Increase the accountability of public actors

Anti-Corruption as a state effort

PNFC - Fostering the creatio of AC authority at regional level

PNFC - Using secure ACT increase trust in public institutions

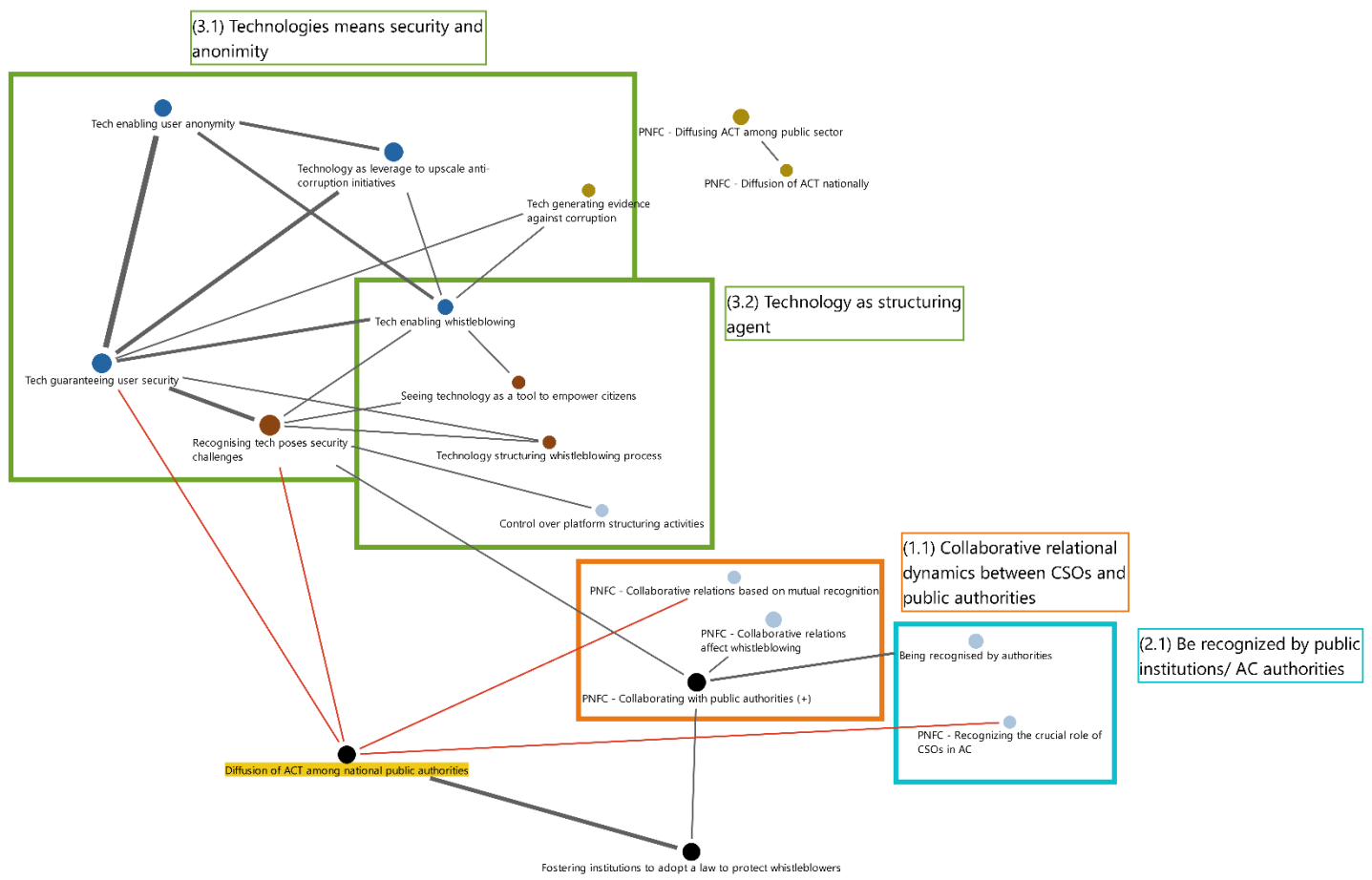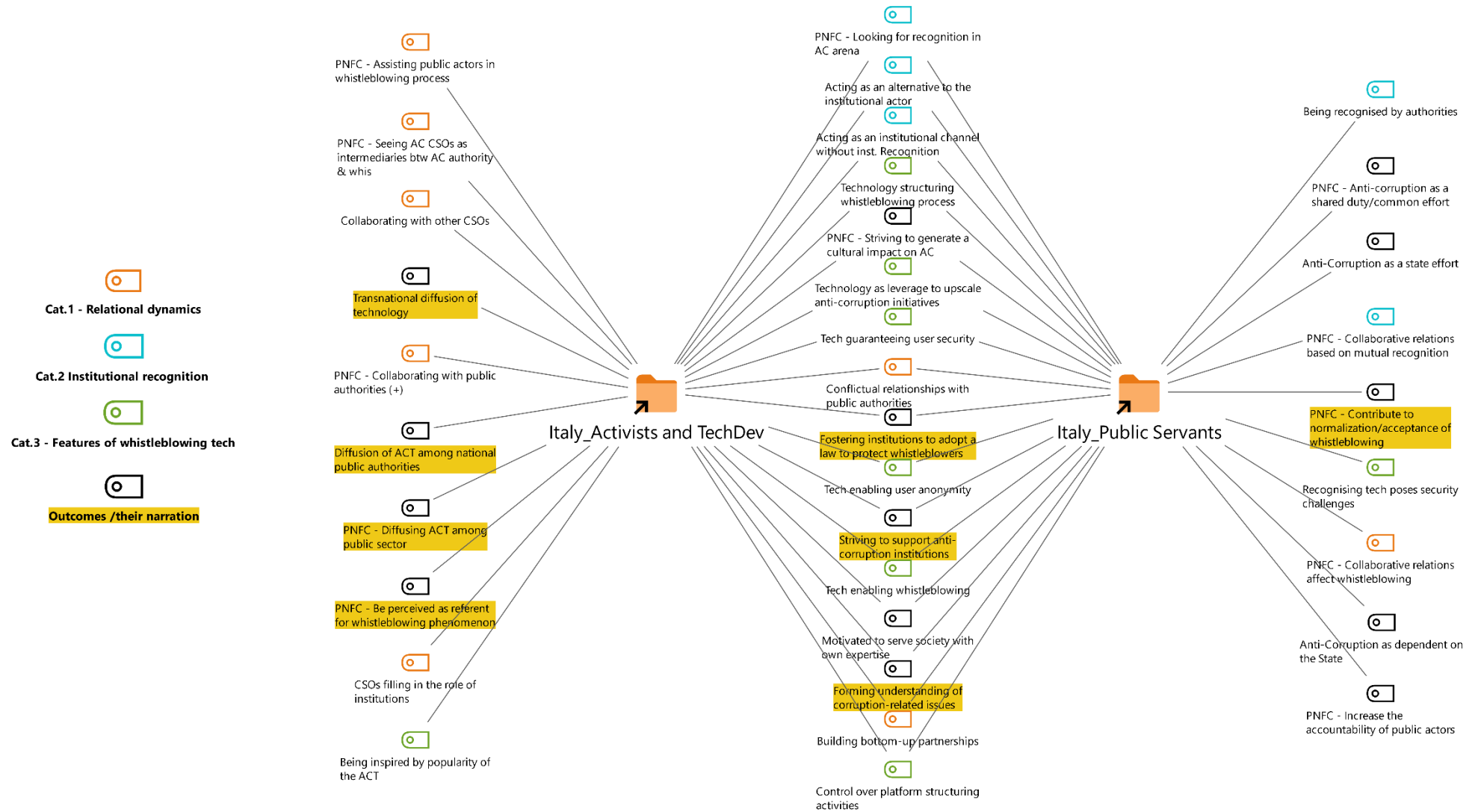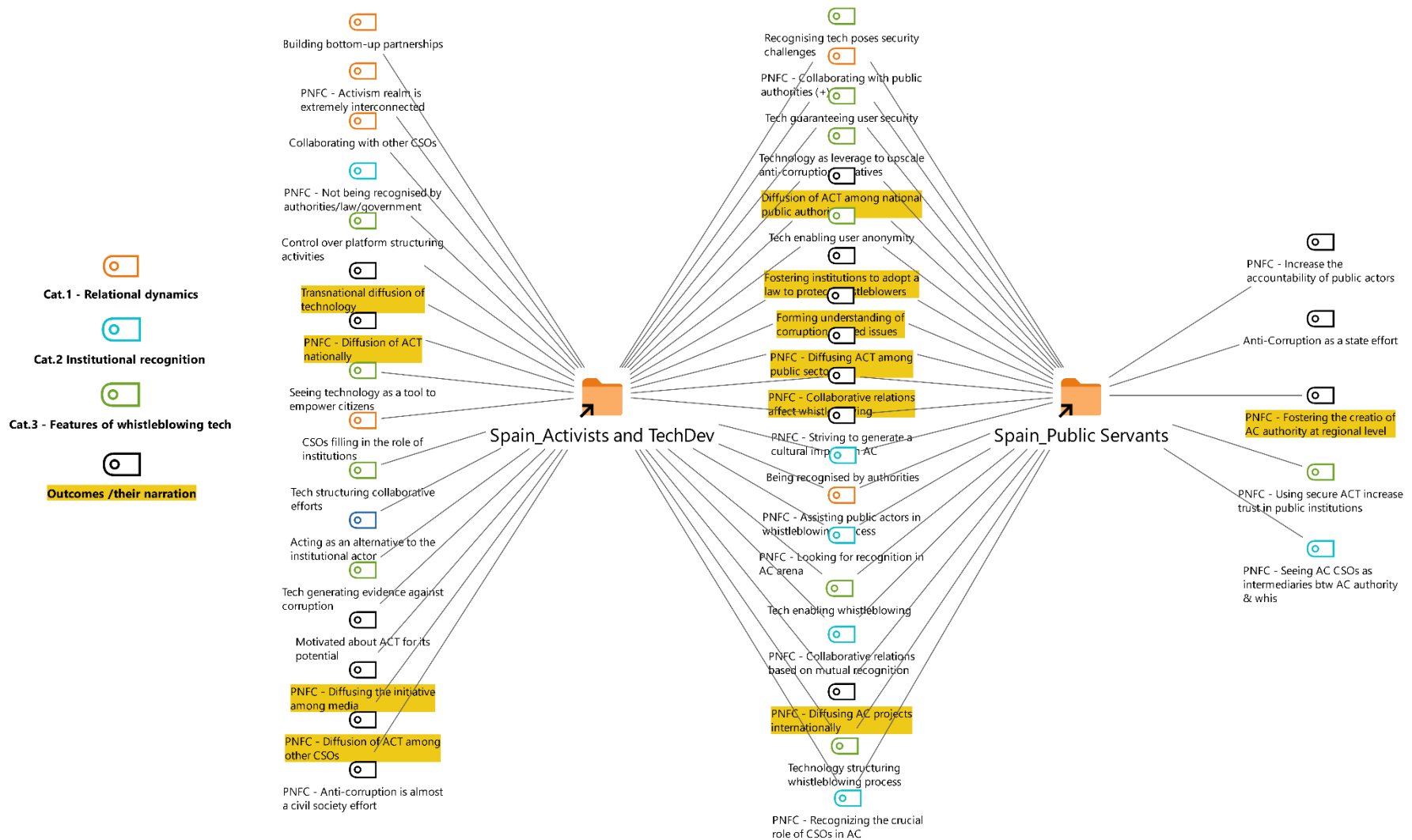PNFC - Seeing AC CSOs as intermediaries btw AC authority & whis

Figure 12 – MAXMap: Shared and diverged codes between the Spanish interviewees (own elaboration)

Figure 13 – MAXMap: Shared and diverged codes between monitoring initiatives: comparing Common and Openpolis (own elaboration)
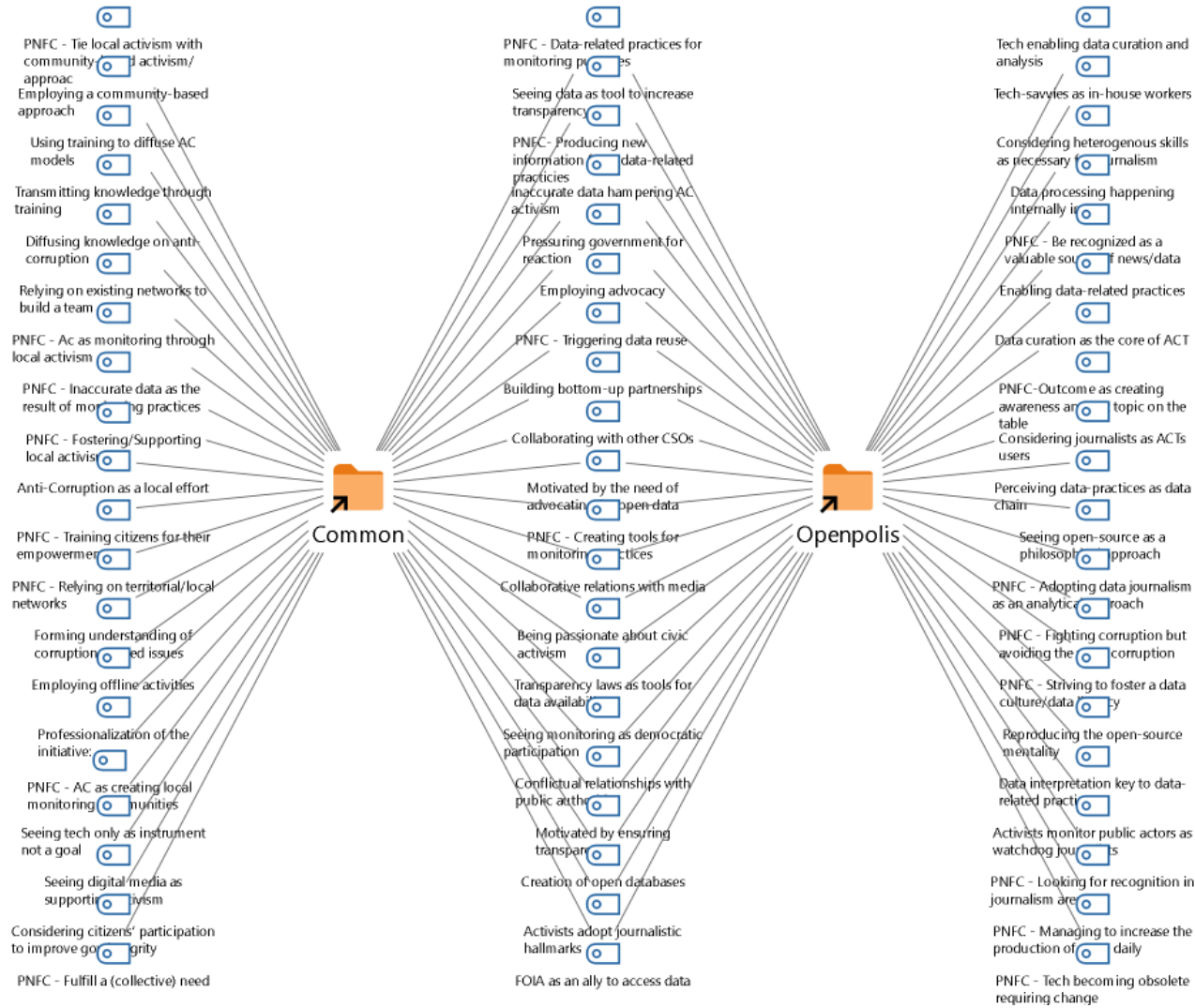
Figure 14 – MAXMap: Shared and diverged codes between monitoring initiatives: Comparing Openpolis and Civio (own elaboration)
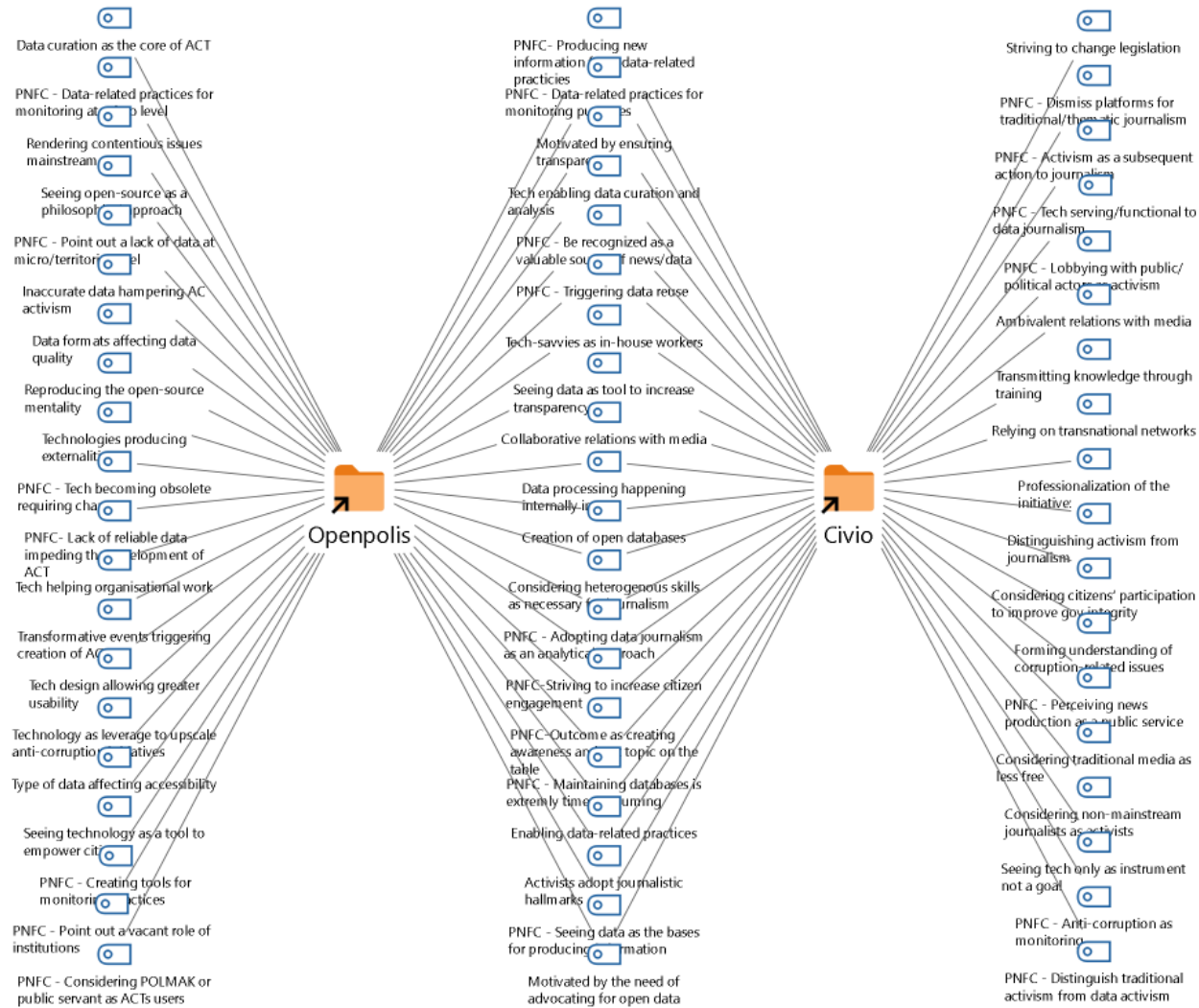
Figure 15 – MAXMap: Shared and diverged codes between monitoring initiatives: the cases of Common and Civio (own elaboration)
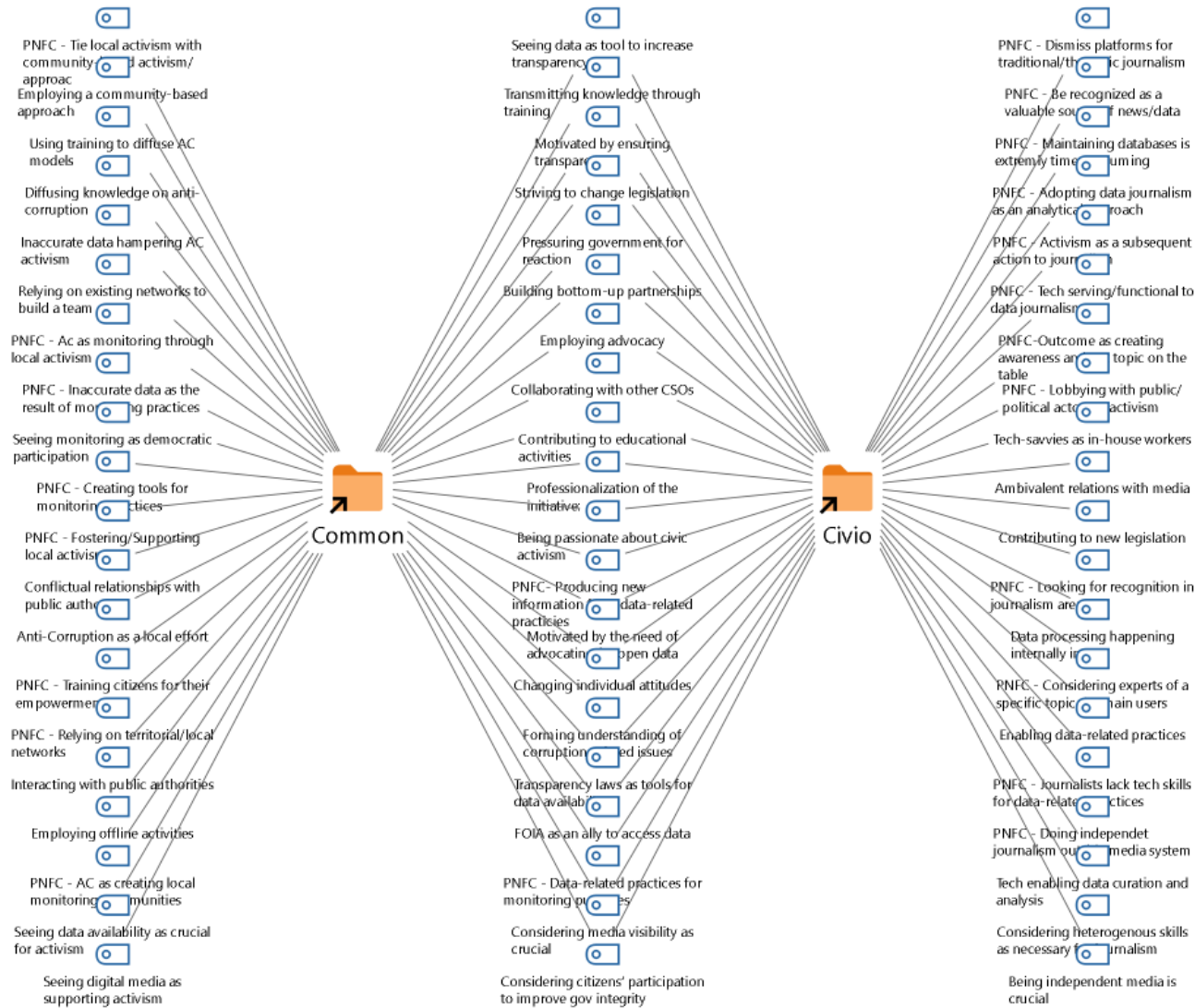
Table 8 - Comparing monitoring approaches across all the initiatives: shared and divergent topics (codes)

	Common	Openpolis	Civio
Common	• Tie local activism with community-based approach • Employing a community-based approach • Using training to diffuse AC models • Relying to existing networks to build a team • Relying on territorial/local networks • AC as monitoring through local activism • AC as a local effort • Fostering/supporting local activism • Training citizens for their empowerment • Employ offline activities • AC as creating local monitoring communities • Seeing tech only as an instrument not a goal	• Pressuring government for reactions • Employ advocacy • Collaborating with other CSOs • Building bottom-up parterships • Being passionate about civic activism • FOIA as an ally to access data • Trigger data reuse • Transparency law as tools for data availability • Creation of open databases	• Pressuring government for reaction • Employing advocacy • Collaborating with other CSOs • Building bottom-up partnerships • Be passionate about civic activism • FOIA as an ally to access data • Striving to change legislation
Openpolis		• Data curation as the core of ACT • Tech becoming obsolete requiring changes • Seeing technology as a tool to empower citizens • Point out a vacant role of institutions • Perceinving dat apractcies as data chain • Fightig corruption but avoiding the word corruption • Activists monitor public actors as watchdog journalists	• Producing new information from data-related practices • Adopting data journalism as an analytical approach • Activists adopt journalistic hallmarks • Seeing data as the bases for producing information • Creation of open databases • Maintaining databases is extremely time consuming

296

		• Looking for the recognition in journalism arena • Managing to increase the production of news daily	• Striving to increase citizen engagement • Be recognized as a valuable source of news/data • Data processing happening internally
Civio (Spain)			• Activism as a subsequent action to journalism • Dismiss platforms for thematic data journalism • Tech serving/functional to data journalism • Lobbying with public/political actors as activism
Transversal topics (codes)	• **Seeing data as tool to increase transparency** • **Motivated by ensuring transparency** • **Motivated by the need of advocating for open data** • **Data-related practices for monitoring purposes** • Pressuring government for reactions • Employ advocacy • Collaborating with other CSOs • Building bottom-up parterships • Being passionate about civic activism • FOIA as an ally to access data		

OPENING

1. What role(s) do you play within [initiative]?

IMAGINARIES: perceptions, expectations, goals, motivations, origin of ideas

2. How and why (purpose/mission) was [Name of the initiative] conceived?
3. What was your role in the ideation/realization phase? [only for initiators]
4. How did you come into contact with this reality? / What motivated/motivated you to be part of this reality?
5. What are the main activities related to fighting corruption / increasing transparency of [Name of the initiative]?
6. Would you give me your definition of corruption?
7. How would you define the relationship between technology and anti-corruption / technology and transparency?
    a. How has digital technology impacted on anti-corruption (in general)?
    b. How has digital impacted and does it impact your way of doing activism - 'strategic use of digital tools'?

MATERIALITY: role of ICT and other non-human elements and content production

Implementation process (Which conditions made [Name of the initiative] possible? e.g. infrastructure, technology, funding, new skills etc.)
8. How did you make [Name of the initiative] happen? What was necessary for [Name of the initiative] to get started / to work?
9. Could you briefly take me through the implementation process/ functioning of [Name of the initiative] and related ACTs, starting from initial program design up to now?
10. Which technologies do you use in your anti-corruption practices?

Content production[Just for monitoring initiatives/initiatives close to journalism].
11. What kind of content do you produce [Name of the initiative]?
12. Would you give me an example of a content construction process?
    a. Which actors are involved (from data analysts, data j., developers, civil servants, activists)
    b. Which technologies do you use?

RELATIONAL DYNAMICS WITH OTHER ACTORS (GRASSROOTS AND INSTITUTIONAL) (Deepening the multi-positionality of individuals (worlds and social arenas) and the different types of relationships that characterize the initiative and influence its functioning and results).

13. Are there other initiatives related to this one in which you are involved? Do you think it is important to create synergies with other grassroots initiatives?
14. How does [Name of the initiative] relate to other civil society organizations working on anti-corruption issues both in [country] and internationally? (possible partners)
15. How does [Name of the initiative] relate with institutional actors? How is [Name of initiative] perceived by institutional actors?

TEAM STRUCTURE AND INTERNAL COMMUNICATION

16. Who else is involved in [Name of initiative]
17. What are their roles/responsibilities?
18. What role does technology play in the internal communication and management/organization activities of [Name of initiative]?

USER PERSPECTIVE/RELATIONSHIP

19. Who are you addressing? Who is your target group(s)?
    a. Who uses your platforms? / Who consumes your content?
20. What strategies do you use to promote the [Name of initiative]? (Elaborate on the role of technology in external communication)

OUTCOMES: EVALUATION OF USE, RESULTS, FUTURE PERSPECTIVES

21. How has [Name of initiative] evolved over time? Can you identify significant milestones/moments?
22. Do you remember a difficult moment for [name of initiative]? Do you have an example of when your organization wanted to give up? (Dealing with challenges)
23. What are the main achievements of [Name of initiative] in recent years with respect to monitoring / whistleblowing issues?
24. Do you have any strategies in mind to improve the initiative?
25. Are there plans to replicate the initiative elsewhere? ('Exporting' the idea to other countries

CLOSING

26. What is your age (cohort), education, profession?
27. Can you suggest further contacts to talk to?