

1. Digital media and technologies in grassroots struggles against corruption

Alice Mattoni

INTRODUCTION

Corruption is a global social problem that manifests itself in a variety of ways across the world and there are several attempts to counter it, also from the grassroots. Activists, civil society organisations, and concerned citizens engage with anti-corruption in different manners. There have been many examples in which digital media, and especially social media platforms like Facebook and Twitter, played a relevant role in the emergence and spreading of protests in the past decade, including the massive anti-corruption movement that developed in 2011 in India (Chowdhury & Abid, 2019), the wave of massive protests that hit Brazil in 2013 tackling, amongst other issues, also the corruption of the political elites (Saad-Filho, 2013), the youth-led anti-corruption protests that occurred in Guatemala in 2015 (Flores, 2019), or the anti-corruption protests that developed in Romania between 2016 and 2017 (Olteanu & Beyerle, 2018). The widespread employment of social media platforms in Indonesia contributed to creating spaces where citizens discuss information about corruption (Prabowo et al., 2018). Furthermore, the use of social media platforms might support the creation of online communities that coalesce around a shared sense of injustice and then, eventually gather in offline mobilisations. This happened in the mobilisations that occurred in Egypt in 2011, in which the Facebook page ‘We are all Khaled Said’ proved crucial in gathering the discontent of thousands of users against police brutality and, also, the then Egyptian president Hosni Mubarak’s corruption; a sense of disenchantment that went on to flow into the street demonstrations that swept across the country (Alaimo, 2015). While all these cases address the relevant role of social media platforms in anti-corruption efforts, this volume and the chapters in it move their gaze beyond this type of digital media to understand what else is going on in the world of anti-corruption from the grassroots, telling other, often untold, stories.

The chapters in this volume indeed focus on why and how anti-corruption activists decide to design, develop, and employ different types of digital media and technologies to sustain their efforts and with what consequences not so much for corruption at large, but for the activists themselves and their organisations.¹ In so doing, they also highlight the challenges that activists and civil society organisations meet when including digital media and technologies in their anti-corruption activities as well as how they deal (or might deal) with them. Doing so is relevant because many theoretical assumptions and practical expectations still need to be further explored and connected with a broader understanding of how social change might work when supported through digital media and technologies to decrease corruption (cfr. Ear-Dupuy & Serrat, 2017). Scouting such assumptions and expectations allows us to understand how anti-corruption works today, since digital media and technologies are deeply ingrained in the anti-corruption sector: they are here to stay, even in more advanced and complex forms in the future, and increasingly employed by civil society and social movement organisations all over the world. It is, hence, essential to understand which digital media and technologies activists use to counter corruption, how they can create them and then involve others in their employment, why they decide to include digital media and technologies in their anti-corruption initiatives in the first place, and with what consequences for the overall grassroots anti-corruption movement. This volume is the first organic attempt to answer these relevant questions starting from the empirical investigations that the authors have gathered and analysed on different case studies worldwide. Beyond providing some valuable insights on how digital media and technologies has been integrated into actual anti-corruption efforts from the grassroots, creating novel opportunities but also challenges for activists and their movement organisations, this volume provides a more general discussion on what digital media and technologies implies for the struggle against corruption from the grassroots, the political actors involved in it, and their anti-corruption practices.

Before venturing into the appreciation of the specific anti-corruption initiatives addressed in the remainder of this volume, this chapter will provide a general framework for the many case studies that will be discussed below, and it does so in the following way. The next section starts with a brief literature review of corruption studies and how they have covered so far the topic of digital media and technologies for anti-corruption from the grassroots. It also explains why it is the case to shift the centre of attention from a purely instrumental view of digital media and technologies, which emphasises why anti-corruption activists and their civil society organisations employ them. To make this shift possible, the section proposes the concept of Anti-Corruption Technologies (from now on, ACTs) as a heuristic that casts light on aspects other than the scopes for which anti-corruption activists employ digital media

and technologies to counter corruption. The section that comes next discusses each of these aspects in-depth to provide a broad fresco of the variations we find in concrete examples of ACTs. It indeed argues that, while anti-corruption and even many digital media and technologies unquestionably have a global dimension, ACTs come in specific shapes due to the contexts and situations in which they are embedded, where the availability of material elements, the presence of certain symbolic aspects, and the involvement of specific social actors combine into unique configurations. Then, the subsequent section advances a typology of ACTs that takes into consideration the overall scopes for which digital media and technologies are used in grassroots struggles against corruption and discuss them considering their material, symbolic, and social dimension. The final section presents the main contributions of this edited volume: a series of empirically grounded chapters that investigates digital media and technologies in grassroots struggles against corruption from different viewpoints and concerning different countries across the globe.

THE CASE FOR THE CONCEPT OF ANTI-CORRUPTION TECHNOLOGIES

Over the past decades, scholars have produced an extensive body of literature aimed at comprehending the origins of corruption, identifying strategies to reduce it, and facing its adverse effects (for example, Rothstein, 2021; Rose-Ackerman & Palifka, 2016; Torsello, 2016; Mungiu-Pippidi, 2015; della Porta & Vannucci, 2012). Numerous studies have focused on institutional approaches to combating corruption, but scholars have also recognised the crucial role that civil society actors and social movement organisations play in supporting anti-corruption efforts (for example, Larsson & Grimes, 2022; Rose-Ackerman & Palifka, 2016; Mungiu-Pippidi, 2015; Hough, 2013; Johnston, 2014; Johnston, 2005). Going more in-depth in this direction, some scholars have examined and explained the discourses, forms of protest, and grassroots initiatives against corruption at the national level (for example, Walton, 2017; Beyerle, 2014; Torsello, 2012). There is empirical evidence that actual change concerning the presence of corruption manifests not so much after the introduction of one specific anti-corruption tool but, instead, when there is a sustained interaction between civil society organisations and the tool in question. An example is the presence of Freedom of Information Acts which have an impact on corruption to the extent that civil society organisations use them to participate in budget oversight activities (Mungiu-Pippidi, 2014). With their focus on citizens' role in keeping power holders accountable for what they do in this capacity (Fox, 2015), studies related to social accountability also recognise the vital role of civil society actors and social movement organisations, which are relevant insofar as they decide to use their voice to ask the

public administration and other public organisations for information about their activities, critically evaluating that information, and sanctioning them, although informally, in case of misconduct (Brummel, 2021; Peruzzotti, 2012; Bovens, 2007; Peruzzotti & Smulovitz, 2006). Social accountability related to corruption strongly relies on grassroots collective actions, either through institutional tools, like legal actions initiated by civil society organisations, or through the use of non-institutional tools, like street mobilisations and other forms of protest (Smulovitz & Peruzzotti, 2000).

Even more recently, scholars have combined the attention to grassroots efforts against corruption with a focus on the potential of digital media and technologies. For example, many recent works acknowledge the relevance of digital technologies when embraced by civil society organisations (Rose-Ackerman & Palifka, 2016; Rotberg, 2017; Hough, 2017; Mungiu-Pippidi, 2015; Johnston, 2014). Digital media can be a precious ally in increasing social accountability and combating corruption when appropriated by actors like civil society organisations, media companies, their outlets, and popular mobilisations (Siegle, 2014). Some studies provide macro empirical evidence of the negative correlation between Internet adoption and corruption (Elbahnasawy, 2014; Lio et al., 2011; Andersen et al., 2011) and consider the presence of the Internet as relevant to reduce corruption. Recent findings suggest that the progress in controlling corruption at the global level might be linked, amongst other factors, to the increased availability of broadband Internet and the presence of Facebook worldwide (Mungiu-Pippidi & Johnston, 2017). In this regard, evidence suggests that the Internet's presence in a country contributes to increased awareness among its citizens about corruption. As this awareness rises, corruption levels in that country tend to decrease, as measured by corruption perception and experience indices (Goel et al., 2012). Other qualitative explorations of social accountability also consider digital media as empowering tools in the hands of citizens, especially when it comes to citizens' employment of social media platforms, hence exerting their agency towards governments as networked publics (Ojala et al., 2019, Grandvoinnet et al., 2015). Furthermore, citizen engagement with data on corruption is also considered increasingly important: for instance, in multiple African countries people utilise digital media to obtain data on corruption, collect and visualise pertinent data regarding public administration, beyond employing it to mobilise other individuals in the fight against corruption (Mutungi et al., 2021). At the same time, anti-corruption activists often engage in specific forms of data-activism (Odilla & Mattoni, 2023), that involves the collection, analysis, and dissemination of data used as leverage to sustain civic actions that tackle contentious social and political issues, highlighting the potential of data to challenge existing power structures and hold governments accountable.

Scholars have also started to categorise how concerned citizens, civil society organisations, and social movements employ digital media and technologies to reach different scopes within the framework of anti-corruption from the grassroots. For instance, Davies and Fumega (2014) suggest that digital media might support processes of upward transparency, according to which citizens can get information from governments and other public administration bodies. Platforms that allow citizens to report problems they experience in connection to public services, platforms that allow citizens to file Right to Information requests on issues that matter to them, and portals that give free access to governmental datasets on relevant topics all involve the employment of digital media in the attempt to tackle corruption (*ibidem*). Adam and Fazekas (2021) list, amongst others, three types of digital media platforms that are tied to civil society actors' anti-corruption activities: crowdsourcing platforms and websites, whistleblowing platforms and tools, and transparency portals. Kossow (2020) suggests that digital media serves two broad scopes in the framework of anti-corruption initiatives. On the one hand, they support processes of upward transparency, especially thanks to crowdsourcing platforms and whistleblowing platforms, which facilitate citizens in providing information about corruption. On the other hand, they support the mobilisation of citizens against corruption thanks to online news reporting websites that give detailed information about corruption in different realms or social media platforms that allow citizens to connect and organise their discontent towards corruption. Other scholars also note that social media platforms might sustain citizens' mobilisations against corruption and the collaboration among users who find in social media platforms ways to connect, share their experiences, have their voices heard, and publish in nearly real-time information about corruption going beyond the more traditional gatekeepers of information, like the print press (Bertot et al., 2010).

Overall, the fragmented extant literature on how digital media and technologies sustain grassroots efforts against corruption tends to focus on why activists, and concerned citizens, employ them: which are the scopes they want to reach and the reasons they decided to engage with the digital media and technologies. The emphasis is put on the instrumental aspect of digital media and technologies, treating them as tools in the hands of activists, which they use to reach their scopes, and on whether they actually contribute to reduce corruption (or not). However relevant, these are not the only aspects to take into account when evaluating how digital media and technologies intersects with anti-corruption initiatives, especially when dealing with anti-corruption from the grassroots. This chapter (and the whole volume it is part of) suggests there is much more to be understood beyond a pure instrumental perspective of digital media and technologies in grassroots anti-corruption efforts. This is so for at least three reasons.

First, corruption is not a simple rational choice matter and, as such, transcends rational incentives and legal constraints, also encompassing patterns of interactions among a wide range of actors, each having their specific attitudes and perceptions towards corruption. From this perspective, when activists design, create, and employ digital media and technologies to counter corruption, they are also reshaping their interactions with those who are corrupt, those institutional actors that should tackle those who are corrupt, and the potential allies that could sustain them. Embedding digital media and technologies in struggles to increase transparency, integrity, and accountability has a robust performative role not just for activists but in the whole anti-corruption realm. Indeed, digital media and technologies carry with them a plurality of interactions amongst a number of social actors.

Second, activists who decide to embed digital media and technologies in their anti-corruption efforts also deliberately experiment with the appropriation of older or newer technologies, hence experiencing their material constraints and understanding what they can bring with them as opportunities for countering corruption. In other words, they interact with the materiality of the technological elements they employ. While doing this, they select, discard, change, or accept what such elements offer them regarding possibilities for actions. From this perspective, when activists design, create, and employ digital media to counter corruption, they are also embedding in their individual and collective actions a material layer of digital technologies that becomes yet another essential element, when not an actor in itself in some cases, of the broader architecture of their anti-corruption initiatives.

Third, all kinds of digital media and technologies, including those used to counter corruption and promote integrity, come with various imaginaries that go beyond their material dimension. As mentioned above, the technical specifics of each digital technology are undoubtedly crucial for activists, such as those that allow the protection of total anonymity when someone wants to denounce corrupt behaviour. Nevertheless, there is more than that: when activists, often working with software developers, start thinking about designing reliable digital media platforms or applications, they also imagine a different role for citizens in society. By creating or employing digital media and technologies to counter corruption, therefore, activists are also setting in motion a series of interactions to counter corruption. Such interactions redefine what citizens should do to address corruption through digital media and technologies and, extending this beyond individual efforts, how political systems should change to accommodate new forms of participation. From this perspective, the employment of digital media and technologies to counter corruption comes with a strong symbolic dimension related to the imagination of what could be next and a normative aspect of how things should be to decrease corruption.

Taken together, these three points suggest looking at digital media and technologies from a dynamic perspective, so that we can also appreciate how they come into being and how they, while coming into being, set in motion intricate processes that might change anti-corruption activists, the civil society organisations some of them work for, and the overall anti-corruption sector from the grassroots. In so doing, it is possible to recognise that it is never digital media and technologies alone that produces some outcomes related to corruption, but the multifaceted network of interactions that sustain their creation, development, and employment. Producing knowledge on such a network of interactions is the only way to assess how digital media and technologies have an impact on corruption itself. In this regard, there are at least three relevant dimensions that inform anti-corruption seen as a practice in which a wide array of activities intertwine, including those connected to digital media and technologies: a social dimension related to the interactions amongst a wide range of social actors; a material dimension, related to the digital technologies employed to counter corruption and their affordances; a symbolic dimension, connected to the imagination of how a good citizen should counter corruption and what type of institutional arrangements should be in place in political systems to make this possible and practical.

To capture these aspects, this volume puts forward a novel concept that works as a heuristic to grasp the multifaceted dimension of digital media and technologies in the framework of the struggle against corruption. This is the concept of Anti-Corruption Technologies considered as socio-technical assemblages whose ultimate and more abstract scope is to address the corruption issue and whose more immediate and concrete aim is to address various types of corruption and related behaviours, ranging from petty corruption to grand corruption. As will be clearer in the next section, ACTs encompass a variety of elements, including non-human actors like algorithms, and are integrated into diverse anti-corruption activities that also address corruption in more indirect ways. While ACTs can well be created outside the realm of grassroots politics, this chapter and this volume will primarily discuss ACTs that strongly connect with the collective actions of civil society associations and social movement organisations. In what follows, and building on the preliminary reflections presented above, I discuss more at length the three main dimensions of ACTs and their qualities.

THE MATERIAL, SYMBOLIC, AND SOCIAL DIMENSIONS OF ANTI-CORRUPTION TECHNOLOGIES

As socio-technical assemblages, ACTs are not a given. They are ongoing projects that come into existence through interactions among various elements,

which are both human and non-human and are continuously evolving. Indeed, as socio-technical assemblages, ACTs are not just things but an ensemble of various symbolic, material, and social elements that come together when activists decide to embed digital media and technologies in their anti-corruption practices.

First, there are material objects and infrastructures of which ACTs are made. Indeed, while ACTs revolve around a core digital media and technologies, most of the time, other digital media and technologies can come into play, giving rise to a multi-layered technological infrastructure that sustains ACTs. For instance, while some ACTs mainly rely on a whistleblowing platform, there might be other digital media that are attached to that, including a social media platform, to spread the word about whistleblowing activities and instant messaging apps to interact with journalists interested in the leaks. Overall, the type of technological infrastructure that activists and civil society organisations decide to develop to gather, transform, and share information about corruption take many shapes. Some technological infrastructures are highly sophisticated concerning their development while being straightforward regarding how their end-users then engage with them. However, not all technological infrastructures have a noticeable level of sophistication: in some specific cases, low-tech infrastructures are best suited to gather information on corruption and, even more importantly, its effects. In addition, some technological infrastructures are developed by anti-corruption activists and their organisations, who therefore have a high degree of control over the digital media they use. In other cases, the technological infrastructure may be developed by other types of actors, such as well-established companies or emerging start-ups, and thus originate outside anti-corruption activist circles. In this case, anti-corruption activists and their movement organisations have a low degree of control over the digital media and technologies they use. The commercial social media platforms that activists employ to create communities of citizens concerned about corruption are typical examples of this. In this regard, some ACTs value their users' privacy and security to a great extent, like in the case of whistleblowing platforms that allow the anonymous leaking of sensitive information, which involves corruption. Others, instead, hardly grant any security to their users, also because they were not constructed having in mind anti-corruption efforts and similar collective actions in the first place, like for instance commercial social media platforms. Overall, the material layer of ACTs also includes the technological affordances that each specific form of ACTs grants to its users: which actions are enabled, and which are not, for instance, partially influence how activists engage in collective actions against corruption.

Second, there are symbolic elements that have a relevant role in anti-corruption initiatives to which ACTs are tied. In this case, imaginaries connect to both the contentious issue at stake, corruption, how it can be faced,

the means through which it can be faced, that is, various digital (and, sometimes, non-digital) media and technologies, and what citizens can do to counter it. ACTs embed imaginaries related to different forms of corruption – varying according to the type, sector, level, and direction of corruption (Heywood, 2017); they are invented and employed by both governmental institutions and civil society organisations, and work at distinct levels, from the regional to the national and even the transnational. Even more importantly, ACTs combine a general understanding of corruption (its causes, effects, and ways to curb it) with a specific interpretation of what needs to be done about the specific corruption they want to address. In this way, ACTs have a global and a local dimension simultaneously, which also explains why some ACTs were able to spread, albeit with varying fortune, from one continent to another. Regarding digital media and technologies, the imaginaries might also vary and span from the over-enthusiastic embracement of one digital media platform to more sceptical viewpoints on digital media's actual ability to support the struggle against corruption. In short, ACTs, as a socio-technical assemblage, are ordered around and embody in their elements a series of beliefs on what corruption and anti-corruption are, a series of imagined possibilities for anti-corruption actions through the involvement of citizens, and a series of understanding on the potentials of digital media and technologies for the struggle against corruption. The actors involved in designing, creating, and employing ACTs elaborate these beliefs, possibilities, and understandings, which can be further refined and reshaped through the encounters between the human actors and the technologies they use to counter corruption. Far from being homogenous, these imaginaries often result from negotiations amongst actors whose standing within ACTs is very different regarding their beliefs, imagined possibilities for anti-corruption actions, and understandings.

Third, there are social interactions that sustain the creation of ACTs in anti-corruption practices. While the intertwining of symbolic and material elements constitutes ACTs, their coming into being is also interlaced with a broad range of social interactions among several actors, which might be individual or collective, human, and non-human. From this viewpoint, ACTs are constructed through dense yet fluid social interaction that changes over time, hence rendering ACTs an ever-evolving socio-technical assemblage that is not just situated in a specific space (be it local, global, or a combination of the two), but also in a specific time. Anti-corruption activists, software developers, public officials, victims of corruption, and other stakeholders are just a few of the many actors usually involved in creating, maintaining, and using ACTs. For an ACT to be designed, developed, and eventually widely used in societies, social interactions among all these social actors are vital. Furthermore, this is true not just at the ideation stage of any given ACT: to sustain the existence and actual employment of ACTs beyond the short-term is often critical,

especially when the ACTs in point are not simply meant to mobilise people for a specific campaign but to become a more stable anti-corruption tool.

In short, to understand ACTs and their role in the hands of anti-corruption activists and movement organisations, it is vital to appreciate these three types of elements (symbolic, material, and social) as well as their constitutive interconnections in anti-corruption practices. As said above, corruption is a global social problem that can be explained through some recurrent mechanisms and processes worldwide. Similarly, anti-corruption efforts share some traits, especially when employing similar, if not the same, digital media and technologies although being situated in different parts of the world. Nevertheless, it is also true that grassroots anti-corruption collective actions emerge at the interconnection of specific activists' imaginaries, the material aspects of the technologies that they create or employ, and the social interactions of a diverse ensemble of social actors. As such, ACTs are frequently tied to a specific country context, a particular political culture, and come with a series of beliefs, values, and understandings about corruption and how digital media and technologies can help them counter it. Therefore, ACTs can be understood better if their context is also taken into consideration. Despite some attempts at the transnational diffusion of ACTs, it is impossible to speak about the existence of a universal way to employ digital media and technologies to counter corruption from the grassroots. On the contrary, there is a flourishing of many initiatives across the globe that might even resemble one another but are often different in at least some respects. Knowing more about these differences is the first step towards a deeper appreciation of how digital media and technologies support the struggle against corruption, but also to be able to consider the challenges that emerge between the folds of the configurations of the material, symbolic, and social elements that characterise ACTs. These challenges are often essential and not effortless for activists to deal with: they need to be taken into account to develop a realistic understanding of the different facets of ACTs to understand why they reach (or not) their anti-corruption scopes. From this perspective, therefore, ACTs as a heuristic device also allow for a deeper understanding of the instrumental dimension that characterises the employment of digital media and technologies to counter corruption. In the next section, I propose a typology of ACTs that considers the overall objectives of ACTs combining them with the material, symbolic, and social dimensions discussed above.

THREE TYPES OF ANTI-CORRUPTION TECHNOLOGIES

The inclusion of digital media and technologies in anti-corruption efforts from the grassroots might take different roads: activists employ digital media and

technologies for many purposes because corruption is a multifaceted contentious issue that can be tackled at different levels and from different angles. That said, despite the multiple employments of digital media and technologies to counter corruption, it is possible to find three broad scopes that activists seek to reach through the support of digital media: expose corruption in societies, organise mobilisations against corruption, and enhance citizens' participation in the policy-making cycle. While the three might undoubtedly be linked, they are frequently three different endeavours, with the latter seeing activists focused on developing novel digital channels for grassroots participation, the one in the middle targeting public opinion to change their views on corruption and, possibly, mobilise it, and the former seeing activists focused on producing information about corruption that would otherwise remain somehow hidden from the public view.

Table 1.1 singles out the different material, symbolic, and social elements of ACTs. Although the variations within each of these three elements might be many, the table seeks to capture the most relevant ones. When considering the symbolic dimension, ACTs employed to expose corruption and organise mobilisations might come with an understanding of anti-corruption that might be more or less confrontational towards power holders and the corrupted. Likewise, those ACTs employed to sustain participation might be tied to an understanding of anti-corruption that is more or less interventionist: in the case of the former, citizens acquire a central role in proposing change at the policy level; in the case of the latter, instead, citizens mostly engage in imagining novel ideas to counter corruption. Shifting to the material elements, in all three types of ACTs there are many instances of them that are created, in some cases almost from scratch, within the civil society and social movement milieu: these are hence dedicated from the very beginning to the cause for which they have been created. On the contrary, some ACTs heavily revolve around the employment of already existing digital media and technologies that have been invented for other reasons and that anti-corruption activists do not control. This is the case with the ubiquitous social media platforms, which are used across the board to expose corruption, organise anti-corruption protests and mobilisations, and even support the participation of citizens in policy-making to reduce corruption. As for the social elements, the most relevant and quite evident difference is related to the social actors' degree of collectiveness: in all ACTs we indeed find both collective actors, some of which are well-established and resourceful civil society organizations, but also individual actors, and most prominently citizens who are not necessarily tied to any civil society organisation while at the same time being concerned by corruption and hence willing to do their bit in countering it, as individuals.

As already stated above, the configurations of the different elements are undoubtedly many, and Table 1.1 does not aim to capture all of them. It

Table 1.1 *A typology of anti-corruption technologies and their dimensions*

Overall scope	Symbolic Dimension	Material Dimension	Social Dimension
Increase Awareness	<i>Less confrontational</i> anti-corruption as monitoring power holders; digital media as enablers of data gathering; citizens as discoverers of corruption	<i>Dedicated</i> crowdsourced web-based platforms; whistleblowing platforms; algorithms chatbots and other AI-based applications	<i>Collective actors</i> civil society organisations; social movement organisations; informal activist groups; news organisations; journalist collectives
	<i>More confrontational</i> anti-corruption as revealing hidden information; digital media as enablers of leaks; citizens as sources of information	<i>Not dedicated</i> social media platforms	<i>Individual actors</i> software developers; journalists; citizens participating in corruption; citizens witnessing corruption; citizens affected by corruption
Organise Mobilisation	<i>Less confrontational</i> anti-corruption as expressing discontent; digital media as spaces for discussing concerns; citizens as sharers of discontent	<i>Dedicated</i> campaign websites; algorithms, chatbots and other AI-based applications	<i>Collective actors</i> civil society organisations; social movement organisations; informal activist groups; social movement coalitions/networks
	<i>More confrontational</i> anti-corruption as conflicting with power holders; digital media as organisers of discontent; citizens as account-holders	<i>Not dedicated</i> e-petition platforms, social media platforms, instant messaging app	<i>Individual actors</i> software developers; concerned citizens; citizens affected by corruption.
Sustain Participation	<i>Less interventionist</i> anti-corruption as reimagining power structures; digital media as spaces for imagination; citizens as carriers of ideas	<i>Dedicated</i> online deliberation platforms	<i>Collective actors</i> civil society organisations; social movement organisations; informal activist groups; social movement coalition/networks
	<i>More interventionist</i> anti-corruption as participating in policy-making, digital media as spaces for deliberation; citizens as carriers of interests	<i>Not dedicated</i> social media platforms, instant messaging app	<i>Individual actors</i> software developers; concerned citizens

presents the most relevant variations of each of the three dimensions of ACTs and it leaves it to the rest of this volume to bring some potential configurations to life by discussing empirical data collected on various types of ACTs. As will become apparent in the remainder of this volume, outlining such typology and evoking the existence of types of ACTs is not a futile exercise in categorisation. Being able to grasp which material, symbolic, and social elements are at stake in a given ACT, and how they combine with each other, is a necessary precondition to fully understand the frictions that can cross ACTs and the misunderstandings that might arise, also among the social actors that support their creation. Additionally, it helps us comprehend the challenges that anti-corruption activists might have to face beyond the short-term and the overall potential outcomes they might achieve, also at the more general societal level. While I will go back to this discussion in the final chapter of the volume, in the next and final section of this chapter, I present the main contents of this volume which, taken together, impart a multifaceted picture of what ACTs are across the world and reveal their variations considering the combination of the symbolic, material, and social elements that constitute ACTs.

OUTLINE OF THE VOLUME

The volume includes three parts, each emphasising a different aspect of digital media and technologies in the framework of anti-corruption from the grassroots. The first part of the volume considers the situated nature of ACTs. As stressed above, ACTs come with material, symbolic, and social elements. While the material elements are digital technologies that might be widely available in many parts of the globe, the social actors that interact with them are not, and so are not how they consider corruption, imagine anti-corruption, and evaluate the usefulness of digital media and technologies to sustain their struggles. In a nutshell, the chapters included in the first part of the volume explore, hence, the relationship between the broader context, the situation of the anti-corruption initiative, and the ACTs that sustain it in three different countries.

In Chapter 2, Fernanda Odilla evaluates how digital technologies have been used in eight anti-corruption campaigns and initiatives in Brazil from the late 1990s to the mid-2010s. She shows how developing a longitudinal investigation of civil society organisations' employment of digital technologies to counter corruption can deconstruct the idea that there is a linear interconnection between the emergence of newer digital technologies and how activists organise anti-corruption campaigns and initiatives. In short, Fernanda Odilla illustrates how the evolution, across time, of digital technologies and social movement organisations can happen according to three different patterns: at times coevolving and hence even influencing each other, sometimes converg-

ing on certain occasions like the organisation of anti-corruption initiatives, and finally simply coexisting side-by-side with social movement organisations and activists deciding not to take advantage of the available digital technologies. Far from being casual, the coevolution of social movements and digital technologies happens thanks to at least two specific factors that go hand in hand: activists' digital literacy and their openness towards technological innovation. Without these two factors, the other two patterns are more likely.

In Chapter 3, Germán Bidegain discusses anti-corruption from the grassroots in Uruguay, where corruption is not considered a relevant issue and, also as a consequence, civil society organisations that address this social problem are relatively scarce and, undoubtedly, quite small in their size. Germán Bidegain focuses on one of these few civil society organisations, one of the most relevant ones, *Uruguay Transparente*, which does not exploit digital media to foster and sustain its activities. He reflects on how and why civil society and social movement organisations decide not to engage with digital media, assigning them a marginal role. Interestingly, the reason for this is not the need for more Internet availability in the country since Uruguay is one of the best performers in Latin America in this regard. Instead, some social elements of ACTs play a relevant role in determining whether and how civil society organisations would put digital media at centre stage: the type of membership, its organisational structures, and the available resources for the civil society organisation seem to be relevant factors to be taken into consideration. Indeed, the chapter also shows that the only notable engagement with digital media happened when *Uruguay Transparente* collaborated with other social actors that shared their resources, including their technological skills, to develop an interactive website designed to ease the visualisation of electoral finance transactions and, hence, made clear the relationship between political parties in the country and their donors.

Finally, in Chapter 4, Ester Sigillò discusses the role of digital media in broad struggles against corruption in authoritarian regimes through the examples of Algeria and Tunisia. Both countries experienced protests that had the ultimate aim of fostering a process of democratisation while at the same time tackling the corruption of their respective political elites. More specifically, the chapter considers the role that digital media had in supporting the mobilisations as well as the period that immediately followed them, in which a difficult and, at times, fragile transition towards democracy started, also thanks to these mobilisations. In doing so, the chapter illustrates how activists can use digital media to support large-scale protests against the corruption of political elites in authoritarian regimes and how digital media also acquires different roles according to the stage of protest. Indeed, both in Tunisia and Algeria, social media platforms were relevant during the first moments of the mobilisations: they sustained activists' efforts in broadening citizens' participation in the

street demonstrations they organised almost daily. The chapter also shows that, after the initial and unitary moments of protest, the many civil society actors involved took different, when not separate, roads when it came to interpreting the mobilisations themselves, their meaning, and objectives. Digital media made this process of differentiation even more explicit. Finally, the chapter discusses what happens in the aftermath of mobilisations, illustrating how ACTs might follow different trajectories according to how anti-corruption movements evolve.

The second part of the volume presents four anti-corruption initiatives in which civil society organisations designed, developed, and employed different types of ACTs to counter corruption from the grassroots: dynamic websites that allow for the anonymous crowdsourcing of information about corruption in India; online collaborative platforms that allow for the co-creation of policy proposals hence increasing citizens' agency on the input side of politics in Estonia; advanced whistleblowing platforms to leak relevant information about corruption in Italy; and a website to sustain the monitoring of electoral corruption in Colombia. Taken together, the four chapters reveal the diverse paths that civil society organisations might take when it comes to digital media and technologies involvement in the fight against corruption, as well as how these paths are anchored in a diverse range of country contexts. However, they also do something more: when reconstructing how each ACT came into being, the shape it took and what happened once people began to employ it, the chapters also provide insights about how the material, symbolic, and social elements of ACTs combine. In other words, they tell stories of how particular symbolic and social elements weld, sometimes almost imperceptibly, with the more concrete elements of technology to create socio-technical assemblages that might even escape the intentions of their creators.

In Chapter 5, Anwesha Chakraborty explores a web-based platform that allows citizens to report whether or not they paid a tangent to a public servant: this is I Paid a Bribe (IPAB), launched in India in 2010 and soon afterwards greeted with enthusiasm in the anti-corruption sector, even at the international level: in 2017, it won the anti-corruption innovation award of the Rule of Law and Anti-Corruption Centre and received widespread online media coverage. This case study shows how relevant the values of civil society organisations are in shaping ACTs: IPAB seems to rest on a strong technomoral political ethos, according to which the civil society organisation employs digital technologies to do good in societies and asks citizens to do the same by denouncing the payments of bribes. The context in which all this happens matters and gives a further nuance to the web-based platform and its intrinsic moral values. The chapter argues that in a country like India, with rampant corruption that is not always recognised as a malaise and at the same time with a strong history of anti-corruption struggles, the use of digital media according to a technomoral

ethos might bring unexpected results. The dispersed crowd of citizens who decided to denounce that they paid a bribe in a public office frequently did so not simply to prove to themselves that they were conscientious citizens but rather to release their sense of guilt through the public, despite anonymous confession. The chapter hence shows that users are also relevant social actors in the development of ACTs since they interpret the digital technologies they employ in ways which exceed the initial purposes of the civil society organisation.

In Chapter 6, Oksana Huss discusses how digital technologies became central in overcoming a deep political crisis due to a corruption scandal brought to light in 2012 in Estonia, a country usually perceived as lowly corrupted. Such a crisis questioned the social contract between the Estonian citizens, who were also disappointed by how the political elites dealt with the corruption scandal and the State. The chapter shows how such discontent gave rise to a series of protests that ended in the creation of the so-called People's Assembly, which brought to the fore some deliberative and participatory democracy practices that were then incorporated into the process of creating the e-petition platform Estonian Citizens' Initiative Portal (ECIP) *rahvaalgatus.ee*. More specifically, practices like crowdsourced decision-making in the spirit of co-creation and values like inclusivity to reinforce argument-based deliberation were taken into serious account when developing the e-petition platform. They were translated into specific technological affordances for collaboration and deliberation. Overall, the chapter casts light on the combination of material and symbolic elements within this form of ACT, with the latter influencing the former. That said, the chapter also discusses how, once in place, the e-petition platform underwent some changes concerning how citizens could interact with it that resulted from the actual engagement with the e-petition platform. In this case, therefore, the chapter shows that the social elements, i.e., citizen interactions within the platform, had a relevant role in reshaping the material elements of the ACTs.

In Chapter 7, Philip di Salvo presents yet another type of ACT very common in the anti-corruption sector: whistleblowing platforms. Although such online services might be used for other reasons than to fight corruption, they frequently play an essential role in revealing potential corruption scandals thanks to citizens that decide to blow the whistle, that is to say, to unveil some malpractices related to the realm of corrupt behaviours they know about often through the support of the related documentation. Of course, whistleblowers existed in societies well before the diffusion of digital media. However, as the chapter also points out, the availability of digital technologies made whistleblowing practices much more secure than in the past, when they mostly happened in the so-called offline world. The chapter goes in-depth into one specific case study, the development of the *ALAC-Allerta Anticorruzione*

platform in Italy from 2014 onwards, to explain how whistleblowing platforms are created, according to which rationale and criteria, and how the value of security is embedded in the features of such platforms in a scalable and layered manner. While it is always possible for whistleblowers to interact with the platform securely, they also have the opportunity to increase their protection because the platform can be used, for instance, through a Tor browser, which makes it impossible to know the IP address of the whistleblower. At the same time, the whistleblowing platform might become more secure not through the employment of sophisticated digital technologies but through some operational arrangements related to how whistleblowers can interact with the platform. From this perspective, the chapter speaks about the presence of operational security achieved through a simple online form whistleblowers can fill in with relevant information about the context in which the whistleblowing activity is happening to understand better the risks and possible outcomes of the information leak.

In Chapter 8, Manoel Gehrke discusses how the civil society organisation *Mission of Electoral Observation* monitors electoral corruption in Colombia through a twofold strategy that involves offline and online observations of the electoral moment. The chapter explains that electoral corruption is difficult to detect only through observers. While acts of intimidation around the ballot boxes are pretty easy to see, practices like casting a vote in exchange for favours are much more difficult to emerge. For this reason, citizens' support in denouncing what happens before elections is a relevant complementary strategy, especially in Colombia, where electoral corruption and related crimes are quite spread across the country. Recognising this need and taking advantage of the opportunities offered by digital media, the *Mission of Electoral Observation* decided to create a platform allowing citizens to denounce electoral corruption cases. Born as an entirely offline initiative devoted to monitoring elections in Colombia, the civil society organisation enriched its repertoire of contention related to corruption with a novel opportunity for citizen engagement. In 2011, it created the platform *Pilas con el Voto*, which allows citizens to upload multi-media information about irregularities concerning the elections either in a non-anonymous or anonymous manner, the latter being particularly important in those regions of Colombia which are not entirely under the control of the State. The chapter briefly describes the platform and then tackles more at length a relevant topic when it comes to ACTs, which is the effects they produce once they are released and then actually employed by citizens. Indeed, ACTs are dynamic socio-technical assemblages that might alter the material, symbolic, and social elements that sustain them in the first place. In this case, the chapter shows that creating the platform *Pilas con el Voto* had a spillover effect since, in 2013, the Ministry of Interior decided to create a similar platform available to citizens. At the same time, its overall reach of Colombian

citizens is still quite limited also due to the limited reach of the communication campaign to make the platform known to the general public.

The third part of the volume deals with the central role that data has in the struggle against corruption, and it does that considering civil society organisations that decided to employ digital media to focus, in an explicit manner, on the gathering, polishing, curation, and visualisation of data that might hint to corruption or related issues. It is true, of course, that other chapters in this volume also revolve around anti-corruption initiatives that gather data through crowdsourcing information from citizens, as it happens in the case of IPAB, discussed in Chapter 5. However, the chapters in the third part of the volume directly engage with specific issues related to the creation of technological infrastructures for gathering such data and the consequences of such choices at the level of civil society organisations' priorities, objectives, and outcomes.

In Chapter 9, Alice Fubini focuses on the case of *Openpolis*. This Italian civil society organisation designs and develops a good wealth of data-driven web platforms to make existing data on public administration, governmental agencies, and other public bodies available online in a curated and accessible manner. The chapter explains that *Openpolis* does not simply put data curation and visualisation at the centre stage since it is also actively producing its technological infrastructure to smoothly make its data-related practices possible. Therefore, *Openpolis* accomplishes its watchdog function also through the autonomous development of its data-driven technologies. Then, when dealing with data, it employs an approach similar to the journalistic one, even arriving at the point of producing informative reports based on the data it gathers and curates. This happens, the chapter argues, also because simply making data available proved not to be a guarantee to have journalists writing stories based on them. *Openpolis* hence positions itself as a reliable data source for other social actors than journalists, who might be interested in delving into specific issues in the broad realm of corruption. Drawing on these characteristics, the chapter then proposes the concept of informative activism as a heuristic to understand better civil society organisations like *Openpolis*, which is neither only engaged in data activism nor fully engaged with data journalism: it is a combination of the two, and this makes the experience of *Openpolis* a hybrid showing that to counter corruption the employment of digital media and technologies alone is not enough.

In Chapter 10, Dale Mineshima-Lowe presents the multifaceted anti-corruption initiative *Transparency Watch* developed in North Macedonia by the national chapter of *Transparency International* that combines: a platform based on the open source Ushahidi developed to let citizens denounce corruption anonymously; two apps for smartphones to reach the same scope; and the related Facebook group. The chapter focuses on the decision-making process within *Transparency Watch* when considering designing and develop-

ing such a multi-platform strategy that heavily relies on gathering and transforming data about potentially corrupt behaviours in the country. The chapter discusses the anti-corruption initiative from the perspective of data-activism, emphasising not so much the description of the resulting data-related practices, but rather the myriad of choices that have been made along the way of its creation, precisely concerning data. In analysing the case study, the chapter suggests that ACTs that heavily rely on data consider and hence take a decision on at least three relevant aspects: how to gather data on corruption thanks to citizens; how to check the data reliability; and how to visualise data to make the information they carry with them accessible to the broader public. Overall, the initiative illustrates very well that ACTs that are more openly related to data activism, such as *Transparency Watch*, might not heavily revolve around just one type of digital media and technologies since the production, curation and dissemination of data requires the initiative to rely on a variety of technologies, not necessarily all of them digital.

In Chapter 11, Julia Forjan, Nils Köbis, and Christopher Starke tackle an emergent digital technology that governments, scholars, and civil society organisations are experimenting with to counter corruption: Artificial Intelligence (AI). After having defined AI, they illustrate some recent attempts to use it to predict corrupt behaviours at the regional, national, and transnational levels. In so doing, the chapter claims that anti-corruption is becoming increasingly a predictive endeavour rather than a purely reactive matter: mainly thanks to the use of machine learning techniques applied to large amounts of data from public administrations and other relevant bodies, today it is possible to single out specific behavioural patterns that might be interpreted as red flags related to corruption. The chapter then stresses that civil society organisations also experiment with AI to counter corruption and discusses the challenges and opportunities of doing so from the viewpoint of anti-corruption practitioners engaged in or having been involved in these experimentations. From this viewpoint, the chapter offers encompassing reflections on the implications of the material elements that are included in the most high-tech forms of ACTs to date, also discussing at length how the employment of AI-based technologies is deeply tied to the availability of massive amounts of high-quality data to be employed to understand whether corruption happened, or will happen, in a specific sector. The presence of such data seems to be a relevant precondition that civil society organisations have to take into account when thinking of moving their experimentation further with AI in the field of anti-corruption.

The last chapter of the volume seeks to connect the many insights that each of the previous empirical chapters provided about the employment of digital media in grassroots struggles against corruption. It does so through the lens of ACTs and considering, in particular, two main aspects. At the more theoretical level, the chapter discusses how activists, civil society organisations, social

movements, and citizens' employment of digital media to counter corruption bring about a rethinking of what democracy should look like and what it means to be a good citizen who plays their part in seeking to achieve more transparency, better integrity, and broader accountability. At the more empirical level, the chapter considers the main points of attention and the related challenges that ACTs bring with them: from the sustainability of anti-corruption initiatives to the need to acquire and manage new technological skills to deal with digital media, the chapter takes stock of the knowledge produced across the volume and suggests some ways forward to ingrain digital media and technologies in grassroots anti-corruption efforts in a sustainable manner.

NOTE

1. In this volume, the term 'digital media' is employed in an encompassing manner and refers to the whole range of digital devices (i.e., smartphones, tablets), platforms (i.e., social media platforms, whistleblowing platforms), services (i.e., informational websites, open data portals, AI-based chatbots), and applications (i.e., instant messaging applications, video conference applications) currently employed in societies at large.

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