Investigative Methods: An Editorial Introduction

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Investigative Methods: An Editorial Introduction

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In our role as editors, in this introduction we draw on and extend the work of the historian Carlo Ginzburg (esp. 1980, 1989, 2013) to set out what we see as some of the main characteristics of investigative methods as a distinctive if heterogeneous field of research practices in their own right and explore their relevance in, to and for the social sciences. With reference to the ten contributions that make up the collection, we identify five such characteristics. As we perceive them, investigative methods have:

- 1. particularity, specificity or concreteness of focus;
- 2. the objects of investigation which provide that focus are typically unavailable to direct observation meaning investigations must take at least part of their lead from 'trace' data as a critical source of evidence that can be repurposed to access and reconstruct them indirectly;
- 3. that trace data acquires significance not on its own but by being linked to other data in bespoke evidentiary chains, catenaries or assemblages worked up as part of the investigation in question;
- 4. where the investigative targets are particularly complex, the process of data gathering, assessment and analysis is typically distributed and collaborative, something which demands its own methods; and
- 5. the ultimate aim is not just to know or understand the objects of investigation better, important as that is, but to intervene, whether by challenging an existing account or by opening up space for action on the issues the investigation has identified (something which itself can take many forms in relation to the contemporary politics of evidence).

Based on this ideal-typical rendering of these practices, we argue the kinds of investigative methods detailed in our ten contributions can offer powerful contributions to contemporary research repertoires in the social sciences by offering a distinctive approach to knowledge making, increasingly through creative work with digital data and technologies that puts them to previously unanticipated ends.

Introduction

Investigative methods are at work all around us and in powerful ways. As a consequence, we do not need to look far to find examples of those methods in action. In 2018, for instance, the Russian political exile Sergei Skripal and his daughter Julia were the target of a botched assassination attempt in Salisbury, UK, involving a deadly Novichok nerve agent administered to the door of their home there. While the Skripals survived the assassination attempt, several other local people were also poisoned after coming into contact either with the Skripals or remnants of the discarded nerve agent. This included Dawn Sturgess who tragically subsequently died, leading to the launch of a murder inquiry into the incident. Security services around the world instigated searches for the perpetrators, but it was investigators at the agency Bellingcat, Radio Svoda and their Russian colleagues at The Insider, who were able to connect the suspects to Russian Military Intelligence using various unconnected photographs and videos posted on the internet. Leading a network of investigative journalists, Bellingcat has subsequently been able to link the chief suspects in the assassination to a range of other illegal activities across Europe, including the bombing of arms depots in Czechia and Bulgaria, again by using public domain data sources to connect up the investigative dots. Nor is this an isolated case. Alongside the Bellingcat investigation, 2021 has also seen a string of equally high-profile investigative revelations from the exposure of the Pegasus spyware and its criminal uses, the documenting of possible war crimes in Ethiopia as part of the ongoing conflict in its Tigray region, through to the release of the fourth financial 'mega-leak' in seven years, the Pandora Papers, following the earlier release of the Offshore Leaks, Panama

Papers and Paradise Papers. In the case of each of these latter disclosures, networks of investigative journalists working collaboratively across the globe have used the leaked financial data to document how wealthy individuals and members of political elites systematically engage in tax avoidance and, in some cases, tax evasion as well as other illegal activities, including asset stripping and the expropriation of public goods. Billed as the "largest investigation in journalism history" due to the scale of the leak, 11.9 million documents constituting 2.9 terabytes of data, the journalists involved in analysing the Pandora Papers, under the umbrella of the International Consortium of Investigative Journalists (ICIJ), have sought to show how, in their own words, this leak "exposes a shadow financial system that benefits the world's most rich and powerful".

Investigative methods, however, feature in our lives in relation to more prosaic matters too. Whenever someone sets out to use public and commercial datasets to reconstruct a family tree (cf. Godfrey this volume), for instance, or establish the provenance and hence value of some item they or their family happens to have, they employ their own kinds of investigative methods to do so. In the UK, more refined versions of these are the subject of two long running and popular primetime television shows: the BBC's Who Do You Think You Are, which works with celebrities to reconstruct their family genealogies, and Fake or Fortune, which connects the owners of art they suspect to be masterworks with experts who help them determine whether that is the case or not. Finally, in terms of this all too brief and selective overview, when confronted with a rare illness or condition, doctors turn investigators (Ginzburg 1980, Rapezi, Ferrari and Branzi 2005), a form of investigative expertise shared by psychologists, psychotherapists, epidemiologists and also with vets, farmers, gardeners and foresters. Indeed, investigative methods in the field of health and medicine have become matters of global public concern since 2019 when we learned painful lessons about the need to establish effective track and trace procedures within and across national boundaries to follow both the spread of the COVID-19 pandemic and the evolution of new variants of the novel SARS-CoV-2 virus which cause it.

The contributions that make up this collection are situated within that broad and open-ended field of investigative practices and together we believe they work to highlight their relevance in, to and for the social sciences. Each of the papers in the collection presents a different investigative method or set of methods and, through case studies, attempts to demonstrate their value. All the contributions, in different ways and for different purposes, seek to reconstruct acts, events, practices, biographies and/or milieux which the researchers in question lack direct access to but which they nonetheless want to get at via the traces those phenomena leave behind, traces themselves often produced as part of the phenomena under investigation. In reconstructing those phenomena, they also seek to contextualise them differently – or challenge their original contextualisations – and in the process say something about those wider contexts from the critical vantage point their investigations have concretely provided.

This particular *Innovation Collection* was initiated after NCRM held a two-day *Innovation Forum* in 2019 called <u>Social Science in the Open</u>. That event brought investigators working in different domains, sectors and on different topics of interest into dialogue with one another around lines of methodological convergence and divergence in their work. This *Innovation Collection* emerges from that event, bringing together a contribution from the investigative journalists at Bellingcat on airstrikes in the conflict in Yemen (Waters), investigations of forest fires in the Amazon and tear gas abuse globally from Amnesty International's Digital Verification Corps at Cambridge University (Lyndon and Nyarko, Lyndon, Tse, Moore and May-Hobbs) and an overview of financial investigations of corporate holdings that has its grounds in a long-standing collaboration with CorporateWatch (Whyte), alongside work involving historians (Bocking-Welch, Godfrey, Huzzey, Miller), sociologists and criminologists (Holder, Elsey, Kolanoski and Mair, Watson et al.), an anthropologist working with a filmmaker turned epidemiologist (Kierans, Glaser), a political

studies scholar (Leston-Bandeira) and a data scientist (Brace) all focused on different phenomena and leveraging disparate forms of evidence in order to trace those phenomena in their contexts. Publishing these contributions as a collection allows us to preserve that breadth and diversity while offering an opportunity to examine the various methodological themes that link the contributions.

While the contributions centre on particular investigative methods, our task here as editors is a different one. Having had the privilege of working with the authors on their contributions, in the space we have, we want to draw out what we see as the links between them and provide grounds for treating investigative methods as a distinctive open-ended domain of research practices in their own right. This is a domain of research practices in which investigators make use, for example, of specific quantitative, qualitative, accounting, text analytic, case study, digital and computational techniques but which is not reducible to any of them. That domain of methods has been an enduring feature within the landscape of the social sciences though often without being particularly remarked as such. It was the historian Carlo Ginzburg (1980, 1989), whose analysis we take up in more detail in the section immediately below, who first began to explore the importance of investigative methods in several fields, arguing, among other things, that history as a discipline is defined by their use. For examples of investigative research in other fields, we would point, for instance, to the work of Diane Vaughan (1996) on the Challenger Shuttle Disaster, an historical study that led NASA to involve her in the inquiry into the causes of the 2003 Columbia Shuttle Disaster, an unusual role for a sociologist (Vaughan 2006). As this collection was being finalised, Matthew Fuller and Eyal Weizman, two of the figures at the head of the award-winning Forensic Architecture, a research centre based in Goldsmiths University which employs natural and social scientific expertise alongside architecture and art to reconstruct human rights violations, state violence and war crimes based on investigative studies, have also set out their approach to what they call "investigative aesthetics" (Fuller and Weizman 2021). Nonetheless, while we would recommend that interested readers consult Fuller and Weizman's work in particular, we take our cue from the work of Ginzburg – our focus next.

Investigative Methods and the Evidential Paradigm

In one of his most celebrated works, 'Freud, Morelli and Sherlock Holmes: Clues and Scientific Method' first translated into English in 1980, Ginzburg relays the following ancient tale:

"Three brothers ... meet a man who has lost a camel ... At once they describe it to him: it's white, and blind in one eye; under the saddle it carries two skins, one full of oil, the other of wine. They must have seen it? No, they haven't seen it. So they're accused of theft and brought to be judged. There follows the triumph of the brothers: they immediately show how from the barest traces they were able to reconstruct the appearance of an animal they'd never set eyes on." (1980: 13)

He draws the following lesson from this tale:

"The three brothers ... are clearly carriers of ... [a] kind of knowledge, ... Its characteristic feature was that it permitted the leap from apparently insignificant facts, which could be observed, to a complex reality which – directly at least – could not. And these facts would be ordered by the observer in such a way as to provide a narrative sequence" (ibid)

This form of knowledge, Ginzburg tells us, is exhibited in the ability to "construct the appearance and movements of ... [the] unseen" by continually working "to sniff [out], to observe, to give meaning and context to the slightest trace" (1980: 12). It is, in a later translation, "oriented towards the analysis of specific cases ... reconstructed ... through traces, symptoms, and clues ... [and communicated through] not ... collections of laws or ordinances but discussions of concrete

examples" (1989: 105). This form of knowledge, which he variously labels the evidential or conjectural paradigm, is on display in the investigative methods employed by hunters, diviners, detectives (fictional and real), clinicians, psychotherapists and – critically for Ginzburg as it is his field – historians, among others, representing an alternate, frequently "subterranean" epistemic tradition, running in contrary directions to the expanding frontiers of the generalising sciences in Europe from the 15th century onwards.

In those disciplines where the evidential paradigm has a particular centrality, Ginzburg notes, practitioners learn to identify telling details, often anomalies, as part of developing investigative trajectories which proceed through the accumulation and interweaving of such details to tell a story and reach conclusions. Details are thus key, and to lose them by abstracting away is to lose, to adapt Harold Garfinkel (2002: 96), the investigative phenomenon itself. The particular cannot therefore be sacrificed in the service of more general concerns without undermining the investigation as a whole, it must instead always be recoverable from it. Equally, however, the particular should not be taken for granted and those trained in such methods learn not just to look but look differently, critically, reflectively and bear in mind the limits of what it is possible to judiciously glean from what they have before them, testing the strength of the links in their chains of evidence as they go. Consequently, even though those who make use of investigative methods may find themselves unable to draw on the intellectual apparatus of generalisation to warrant their practices due to their commitment to the specific, the concrete and the particular, their work is not unprincipled but, rather, differently principled. Contemporary counterparts of the investigative methods Ginzburg discusses and the different ways of knowing they embody are the focus of the contributions which form this collection and, with reference to them, our aim in the rest of this editorial introduction is to say more about what those principles might be.

Characteristics of Investigative Methods

Ginzburg's speculative epistemic history is often more philosophical anthropology than evidenced account. What is more, as contemporary increases in digital record creation and storage and the concomitant possibilities for accessing and sharing digital data have opened up new horizons across research fields, investigative methods, like other methods, are changing as these possibilities are explored (Fuller and Weizman 2021). The field today thus looks different to that Ginzburg surveyed in a number of ways. Nonetheless, Ginzburg's account remains instructive in key respects and we want to extend and elaborate on it here. We do so by outlining what we regard as five shared characteristics of investigative methods, derived from Ginzburg's discussion and informed by reflection on the work presented in this collection, characteristics which connect investigative studies that are otherwise highly distinct in terms of topics, data, analytical frameworks and research aims. We will outline each in turn.

First, investigative methods have a particularity, specificity or concreteness of focus. This is sharply in view in our contributions. Bocking-Welch, Huzzey, Leston-Bandeira and Miller, for instance, investigate specific practices of petitioning, and indeed, specific petitions, in different historico-political contexts. Brace's investigation takes as its starting point the livestreaming of far-right violence via the internet message boards those livestreamed attacks were directed towards and claimed inspiration from. Glaser and Kierans' contribution starts with the emergence of a mysterious form of chronic kidney disease which affects the otherwise young and healthy at epidemic levels in many areas of Latin America and whose aetiology is unknown. Godfrey begins with the details recorded on individual lives at their points of contact with the criminal justice system in the UK between the late 18th and early 20th centuries as made available in the form of digitised data. Holder, Elsey, Kolanoski and Mair examine the small corpus of videos of military operations that have come into the public domain in the last twenty years and what they say about

military practice, particularly regarding attacks on civilians. Lyndon in her collaborations with Nyarko and with Tse, Moore and May-Hobbs sets out to investigate specific examples of the abuse of tear gas by a number of nation states and the online disinformation campaign that accompanied the forest fires in the Amazon in 2019, respectively. Waters' work with Bellingcat deals with the conflict in Yemen, focusing on air strikes against non-military targets and the provenance of the munitions used. Watson, Meehan, Lynch, Nave and Dennis work with how videos of police shootings are handled by courts and Whyte examines the accounting practices of corporations in relation to the Prestige oil spill off the Galician coast in 2002 and tax fraud in relation to the collapse of the UK department store BHS. Even where these concerns are couched initially in more general terms, as with Bocking-Welch, Huzzey, Leston-Bandeira and Miller, Godfrey, Watson, Meehan, Lynch, Nave and Dennis and Whyte, it is clear that the types of methods discussed have to be capable of preserving the details of individual cases while pursuing the analysis of collections of such cases just as Ginzburg stressed.

How researchers come to settle on these specific investigative targets in any given case is often a process with a particular trajectory of its own. In the case of Glaser and Kierans, for instance, Chronic Kidney Disease of unknown or non-traditional origin (CKDu/nt) as it has been labelled was something they encountered in the course of work initially oriented to other issues, 'traditional' CKD in Kierans' case and a filmmaking project on labour exploitation in sugar cane plantations in Glaser's case, and which forced itself on their attention as an unexplained public health crisis displacing their original research concerns. For Holder, Elsey, Kolanoski and Mair and Watson, Meehan, Lynch, Nave and Dennis the process was more quotidian; like others around the world they too had followed the release of shocking videos of military and police violence and the heated debates they had sparked, deciding to investigate these controversial artefacts in their social, cultural, political and organisational contexts and the sense being made of them there. Lyndon and Nyarko, and Lyndon, Tse, Moore and May-Hobbs along with Brace, Waters and Whyte have even clearer investigative rationales. That is, they all set out to cast light on real-world events: the political response to Amazonian forest fires, growing abuses of tear gas in the policing of protests internationally; the mutually supportive links between perpetrators of far-right killings and their social media milieux; the use of arms supplied by the UK, US and other NATO allies in the targeting of non-military targets as part of the Saudi-led Coalition campaign of airstrikes in Yemen; and the use of corporate accounting practices to disguise corporate accountability and wrongdoing in the case of such things as environmental damage and fraud. Bocking-Welch, Huzzey, Leston-Bandeira and Miller, and Godfrey's contributions work slightly differently, examining respectively, as discussed, the processing and fate of individuals via their official points of contact with the British criminal justice system and the practices of petitioning over time. However, as with the other studies, recorded contacts with the system and specific petitions provide a concrete investigative focus. Thus, our contributors work contributes to the construction of knowledge around their investigative objects – and many of our contributors seek to contest claims made with respect to them - and that process involves arriving at new understandings of, for instance, CKDnt, the use of force in armed conflict, far right violence, the lives of convicts, petitioning or fraud.

Second, the objects which provide investigations with their initial *point of focus* are typically unavailable to direct observation meaning investigations must take at least part of their lead from 'trace' data as a critical source of evidence that can be repurposed to access and reconstruct those objects indirectly. That is, although the conclusions of investigations may well be present or future-oriented, the substance of investigations have a retrospective rather than prospective character. All of the contributions here are historical in the sense that they deal with and attempt to make sense of things that have already happened: the petitions have been submitted, the convicts processed, the attacks launched, the fires lit, the crimes committed and the deaths logged. As they have already

happened and so are no longer there to be studied directly, investigators have to devise other ways to study them. It is here, we believe, that the real distinctiveness of investigative methods starts to come to the fore. Instead of constructing indices or relying on interviews after-the-fact, investigative methods make use of the myriad traces events leave behind, increasingly in digital form, to reconstruct them. In many cases the resources used in these reconstructions are official records: parliamentary lists of petitions submitted, coroner's and cause of death reports, court records, photographs and video routinely produced in operational settings, published accounts, government briefings and more. At the same time, and because they are often highly contested, events leave traces outside official records too: in newspapers, prominently for the past few centuries at least, but also in books as well as more transient media, including letters in the past and text, images, video, and more posted on social media platforms today. In contemporary investigative research, much of this trace data is recovered from digital public domain repositories, repositories in which the sources are themselves traceable or 'open'. As a consequence, they are often referred to as 'open source investigations' as a way of flagging the provenance of the trace data they work with (and see the Lyndon and Nyarko and Waters' contributions specifically in this connection).

Traces derived from these sources are not merely data, however, they are typically produced as part of the very thing being investigated. For this reason, trace data has itself to be problematised and accounted for and not simply taken at face value. As Whyte points out, for instance, the very accounting practices by which the activities of corporations are made public are at the same time the practices by which much of their activities are rendered invisible and unaccountable. Similarly, cause of death reporting around CKDnt in Glaser and Kierans' work is not the reporting of fact but an acknowledgement of an inability to specify causes, a problem as related to social, political and economic issues as blindspots within the biomedical field of vision. Indeed, both are related in contexts where diagnostic clarity would have serious political consequences, opening up difficult questions about labour relations and global commodity production under conditions where those in the poorest communities are being worked to death. Godfrey's investigation of court and police records up to the early 20th century offers another variation on this theme. In this case the issue was not just what the records revealed about individuals but about the interest the criminal justice system and wider British state took in them. Insofar as that investigation could arrive at accounts of lives, therefore, it was of individuals within a very particular kind of society which sought to shape those individuals in highly specific ways. Similarly, for Brace, comments posted on far-right discussion boards were both a resource for understanding the activities of the far right and one expression of them (see also Lyndon, Tse, Moore and May-Hobbs). Finally, and perhaps most bluntly, the work of Holder, Elsey, Kolanoski and Mair, Lyndon and Nyarko, and Waters uses official records as trace data but puts those official accounts to the test of public domain evidence to see whether they stand up. In these investigations, official claims about what the evidence shows thus typically appear as a critical foil. Looking differently and reading the evidence "against the grain" (cf. Benjamin 1940) in these ways is not easy since trace data has to be used in ways those who created it did not anticipate, would not have expected, or actively sought to anticipate and block. Nonetheless, it is a mainstay even hallmark of investigative research; an imaginative capacity practitioners must learn to exercise. Exactly that capacity is on display in another of Ginzburg's famous works, The Cheese and the Worms (2013), where he used inquisition trial transcripts to trace collision points between elite ecclesiastical knowledge projects and popular culture in the 16th century, reading against the grain of those records to make them speak to their social, cultural and political context in ways their creators did not intend and could not have foreseen – an approach most closely echoed here in the work of Watson, Meehan, Lynch, Nave and Dennis.

Three, this trace data acquires significance not on its own but by being linked to other data in bespoke *evidentiary chains*, *catenaries* or *assemblages* worked up as part of the investigation in question.

In the tale relayed by Ginzburg, for instance, the three brothers work from the patterned character of the tracks the animal left behind along with other trace data they uncover at the scene. Similarly, within contemporary investigative studies singular pieces of evidence or even single kinds of evidence are usually of limited import unless and until they can be linked methodically to other pieces and kinds of evidence. This is not a matter of triangulation as such, although elements of that can be in play (and in the original geographical sense too as Waters discusses in relation to Bellingcat's work). Rather, it is a matter of methodically following particular kinds of investigative lead as far as possible and then making inferential leaps to other kinds of trace data that could take an investigation further still. By building up these evidentiary chains, the goal is to trace or allow the tracing of chains of associations, leveraged from what is available, in order to develop a progressively sharper picture of the object of investigation. As this is a matter of piecing together such chains, investigations can be judged on the probity, security and strength of the linkages the investigator is seeking to make and investigators take great pains to ensure they can withstand critical scrutiny. While Godfrey's work is at the more formalised end of these practices of data linkage, we see them at work in all the contributions. To take another example from the collection, in Waters' report on Bellingcat's Yemen Project, a critical form of trace data was supplied by all those in Yemen who had filmed or taken pictures of airstrikes as they happened and then uploaded them to the internet. Using satellite maps and other cartographic data, it was possible to pinpoint and thus identify the targets of those strikes from those images and videos and check whether they corresponded with the accounts given by the Saudi-led Coalition of the targets they had sought to strike. Alongside geolocation, however, it was also possible to analyse shadows captured from video stills, via online tools that determine shadow length on different dates and times, to derive further insights into individual airstrikes, including the time attacks were launched and the flight path of munitions, all from images read differently in a creative exercise of investigative lateral thinking (and cf. Fujimura and Chou (1994) for a discussion of this composite approach to knowledge making in the context of epidemiology). Even when the results are impressive, however, those who make use of investigative methods have to remain alive to the limits of what it is possible to say based upon them, a theme Brace, Watson, Meehan, Lynch, Nave and Dennis and Whyte also take up in their contributions. A return to Waters' Bellingcat example is itself telling in this regard: despite the clear evidential chains they were able to construct through their investigations, their legal force in court cases against British arms manufacturers and the UK government in relation to the sale of arms to Saudi Arabia remains by no means a certainty.

Four, where the investigative targets are particularly complex, as is so often the case in contemporary investigative studies, the process of data gathering, assessment and analysis is distributed and collaborative, something which demands its own systems and methodical approaches. Complexity can be produced deliberately, as in Whyte's case of corporate structures or in Brace's case of anonymous social media accounts. Complexity may also emerge because of the kinds of data that have to be leveraged relative to the object. Examples here include having to handle a surfeit of videos, images and social media posts in Lyndon and Nyarko's investigation into tear gas abuse, i.e., the scale of the available data, or the poor resolution of video captured by police bodyworn cameras in Watson, Meehan, Lynch, Nave and Dennis's investigation, i.e., the quality of the available data – with both issues often present together, as in for example Waters' contribution. Many of the contributions describe multidisciplinary teams with various methodological and domain-substantive expertise as a result. In processes of data collection, various kinds of evidentiary expertise are needed; for instance, the capacity to navigate diverse forms of official records and archives, or the capacity to find and download social media content often in several different languages. Furthermore, with regards to data, detection is often concerned with mitigating ephemerality: clues decay. Physical and digital evidence thus needs to be preserved and archived, often in ways specific to the investigation, and made available to different members of the investigative team and potentially others thereafter in a secure way. In the contributions to this

collection, that process frequently takes the form of digitised processes. For example, Waters' account of an attempt to bring together a diverse group of experts to concretise an evidence base in relation to the Saudi-led Coalition's campaign of airstrikes – in the form of a hackathon – demonstrates the importance of details in the setting up of reporting system to help keep track of particular developments across a wide range of events. Analytic processes also require multiple kinds of expertise. Bocking-Welch, Huzzey, Leston-Bandeira and Miller highlight the importance of understanding various aspects of phenomena, in their case, the political, historical and archival dimensions of petitioning. Through processes aimed at verifying evidence, Lyndon and Nyarko and Waters' investigations draw on local experiential knowledge as well as various online tools for chronolocation and geolocation alongside expertise in the deployment of weapons and tactics by military and security forces and expertise in assessing their damage. However, communication and digital tools like internet teleconferencing and file sharing, mean that analysts themselves need not be co-located. Thus, many of the investigations find ways gather, store and interpret disparate forms data across a geographically and methodologically distributed investigative team. In all these ways, investigative methods emerge as the work of many hands.

Finally, five: the ultimate aim is not just to know or understand the objects of investigation better, important as that is, but to intervene, whether by overturning an existing account or by opening up space for action on the issues the investigation has identified, something which itself can take many forms in relation to the contemporary politics of evidence. Brace, for instance, situates his work as an attempt to better understand the links between far-right discourse and far-right violence for the purposes of preventing the latter. Glaser and Kierans, Holder, Elsey, Kolanoski and Mair, Lyndon and Nyarko, Lyndon, Tse, Moore and May-Hobbs, Waters, Watson, Meehan, Lynch, Nave and Dennis and Whyte, by contrast, all advocate for greater forms of political accountability with respect to the direct harms to people and the environment caused by the forms of state and corporate malpractice their work identifies. Bocking-Welch, Huzzey, Leston-Bandeira and Miller. and Godfrey advance a politics of evidence that is different again. For Bocking-Welch, Huzzey, Leston-Bandeira and Miller, foregrounding the important but contested role of petitioning in democratic societies serves as a warning not to reduce politics to its parliamentary expressions. For Godfrey, and the Digital Panopticon Project more broadly, one of the reasons for undertaking this kind of research is to make the information upon which it was based public domain and to knock down the paywalls which had surrounded it in the past. In this way knowledge and action can be seen as intimately connected elements of the investigative approach.

Conclusion

Taking the five points together, we suggest that investigative methods are oriented to narrative reconstructions of biographies, acts, events, practices and networks. Investigations often privilege one form. For instance, Lyndon and Nyarko's work on tear gas reconstructs events: the points at which tear gas is deployed in ways that, when the evidence is assembled, appear to contravene international law; Godfrey's Digital Panopticon project reconstructs biographies of convicts, told through the machineries of state law and punishment; Holder, Elsey, Kolanoski and Mair use video and inquiry testimony to reconstruct the legal use of force in armed conflict, with Watson, Meehan, Lynch, Nave and Dennis reconstructing such reconstructions by courts in relation to the use of lethal force by the police; by contrast, Brace, Whyte, and Lyndon and Nyarko all focus primarily on reconstructing networks, as evidenced through traces on social media or through the practices of corporate accounting. We recognise, of course, that there may be many other ways to divide and discuss these methods, including the different forms of data involved, their subject domain, their politics and so on, but as we see it reconstruction constitutes a particularly useful way to conceptualise their orientations to the phenomena on which they focus, something we again draw

out from Ginzburg's important initial work and see as having a broader relevance within the social sciences.

In this introduction, we have tried to balance a discussion of the methodological characteristics we believe link different kinds of investigative research with an overview of the contributions that make up this *Innovation Collection*. We felt a conceptual and methodological guide that would enable readers to see the connections between the contributions might be a useful introduction to them and we've therefore tried to provide that guide here. Our treatment of investigative methods has been ideal-typical and more or less deliberately so. We have tried to draw distinctions and offer criteria that bring this domain of research practices more sharply into view even though we know things are blurrier in practice. We have done so because we believe the kinds of investigative methods detailed in our ten contributions are indeed distinctive, representing powerful contributions to contemporary research repertoires by offering an alternative approach to knowledge making, and thus sought to paint our outline in bold. We are keenly aware, however, that we have only scratched the surface of the latter in particular, so it is up to readers to decide how well we have done. Happily, however, the contributions stand independently and can be judged on the basis of their own significant merits, something we would urge readers to do for themselves.

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